



Metropolitan Transportation Authority

Audit Committee Meeting

January 2019

Committee Members

N. Zuckerman, Chair

C. Moerdler

M. Pally

Audit Committee Meeting

MTA Board Room - 20th Floor

2 Broadway

Tuesday, 1/22/2019

3:30 - 5:00 PM ET

1. PUBLIC COMMENTS

2. APPROVAL OF MINUTES

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3. AUDIT COMMITTEE WORK PLAN

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4. INDEPENDENT ACCOUNTANT'S REVIEW REPORT - 3rd QUARTER 2018

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5. PENSION PLANS

MANAGEMENT REVIEW OF PENSION PLANS

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2017 PENSION PLAN AUDITS

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Draft 2017 - MNCR Company Cash Balance Plan - Page 186

Draft 2017 - MTA Retiree Welfare Benefits Plan - Page 213

Draft 2017 - LIRR Company Plan for Additional Pensions - Page 246

Draft 2017 - MaBSTOA Pension Plan - Page 285

Draft 2017 - MTA Defined Benefit Pension Plan - Page 341

6. AUDIT INNOVATION TOOL (Materials previously distributed)

7. DDCR PERFORMANCE MEASURES UPDATE

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8. 2018 AUDIT PLAN STATUS AND 2019 AUDIT PLAN

2018 Year-End and 2019 Audit Plan - Audit Committee Presentation - Page 400

9. EXECUTIVE SESSION

**MINUTES OF MEETING
AUDIT COMMITTEE OF THE BOARD
WEDNESDAY, DECEMBER 12, 2018 - 8:00 A.M.
RONAN BOARD ROOM – 20TH FLOOR
2 BROADWAY**

The following were present:

Honorable:

**Neal Zuckerman
Mitchell Pally**

**Charles Moerdler
Fernando Ferrer**

**M. Fucilli - MTA
P. Kane - MTA
M. Murray - MTA**

**R. Foran - MTA
B. Kluger - MTAIG**

**M. Fritz - Deloitte
J. Strohmeier - Deloitte
C. Hickmann - Deloitte
D. Patel - Deloitte
P. Zurita - Deloitte**

Also in attendance:

**R. Hakim - MTA
T. Quigley - MTA**

H. Fromm - MTA

1. PUBLIC COMMENTS PERIOD

There were no public speakers.

2. APPROVAL OF MINUTES

The minutes of the July 23, 2018 Audit Committee meeting were approved.

3. AUDIT COMMITTEE WORK PLAN

The Auditor General noted two changes to the Work Plan: (1) the briefing on the “Security of Sensitive Data at the MTA” will now be done twice a year and (2) a new agenda item, a briefing by the MTA Inspector General on the OIG activities, has been added to the July meeting.

This being Neal Zuckerman’s first committee meeting serving as its Chair, Neal expressed his appreciation for the appointment and said he considered it an honor to serve in that capacity. He acknowledged the invaluable work of the internal audit staff, recognized the importance of transparency and efforts of financial management, internal and external auditors in that regard and pledged the committee will continue to remain focused on fulfilling its oversight responsibility, which he read for the record: “to assist and provide guidance to the Board with regards to:

- (a) The conduct of the MTA’s financial reporting process, the application of accounting principles, and the engagement of the MTA’s outside accountants;
- (b) The MTA’s internal controls and risk management systems; and
- (c) General matters relating to legal, regulatory and ethical compliance at the MTA.”

4. REVIEW OF 2nd QUARTER 2018 MTA CONSOLIDATED FINANCIAL STATEMENTS

Mike Fritz (Deloitte) echoed the Chair's remarks saying Deloitte, too, is committed to transparency and "protecting the public interest." He introduced the senior members of the audit team: Jill Strohmeier, Rich Hickmann, Darshan Patel and Patricia Zurita. He then reported that their review of the 2nd Quarter 2018 financial statements resulted in an "unmodified opinion," stating no misstatements, no uncorrected errors nor changes in the accounting policies were noted and that the financial statements reflected the proper representation of the financial activities of the MTA.

Member Pally commented that, while the financial statements are readily available via the website and in printed copies, the financial information and activities reflected in these statements are not being communicated well enough to the public and elected officials in a way that they come to know what the numbers in the financial statements mean. He said that the MTA should explore better means of communicating the financial data in these statements so that the financial condition is clearly understood by the elected officials, particularly those who make decisions affecting the MTA. Member Pally said a separate presentation by the auditors to elected officials in Albany regarding the results of their financial statements audit may be one way of improving communication in this area.

Chair Zuckerman inquired about the audit procedures undertaken to validate the \$3 billion increase in debt. Mike Fritz replied that debt transactions were verified through external sources and debt authorization and monitoring confirmed via Board minutes. Chair Zuckerman also inquired about the components of "Other" which represented 21% of all Capital Assets. Pat Kane replied that "Other Assets" basically consisted of Cash, Restricted and Unrestricted investments and Receivable from State and Regional Taxes.

A motion was made and seconded to accept the 2nd Quarter 2018 financial statements as presented.

5. REVIEW OF MTA INSPECTOR GENERAL'S OFFICE

Mike Fritz (Deloitte) briefed the Committee on the results of their review of the operations and expenses of the MTA Inspector General's Office. He said the review was based on an "agreed-upon procedures" and explained that such a review involved the execution of specific procedures to validate/verify selected expenditures or account balances. He said their review, based on performance of all the "agreed-upon" procedures, noted no exceptions. Chair Zuckerman inquired if this review is being performed annually and if there is a need to change or modify the agreed-upon procedures going forward. Mike Fritz replied that it is done annually and that he would re-visit to see what is being performed at like entities but at the moment he feels no changes are necessary to the current procedures.

A motion was made and seconded to accept Deloitte's review of the MTA IG's office operations and expenses.

6. APPOINTMENT OF EXTERNAL AUDITORS

As part of the external auditor reappointment process, Mike Fritz briefly discussed the most recent Public Company Accounting Oversight Board (PCAOB) report on Deloitte. He said that PCAOB's review covered Deloitte's audit of 55 "public issuer" clients and that PCAOB gave exceptions or comments on 13 clients reviewed. Mike said that none of PCAOB's findings required Deloitte to restate its original audit

opinions or resulted in enforcement actions. Mike further stated that the results of the review stood well against its “Big 4” peers. Chair Zuckerman inquired how, quantitatively, PCAOB’s comments on Deloitte compared with Deloitte’s competitors and Mike Fritz responded that Deloitte, too, fared well in that area. Mike further explained that PCAOB’s review covered public issuers only and a separate peer review on Deloitte’s audit of public entity clients, like the MTA, is performed once every three years. He said Deloitte has done very well in the internal peer reviews. He further said that Deloitte takes the comments from the PCAOB and internal reviews seriously and takes corrective actions timely, including performing root cause analysis and monitoring compliance. Chair Zuckerman inquired if PCAOB’s recent review comments triggered any actions within Deloitte. Mike Fritz said no but the comments did tell them to look at management estimates more closely and with skepticism which he said Deloitte continues to do.

Chair Zuckerman noted this would be the fourth year of Deloitte’s 7- year audit engagement contract with the MTA and made a motion to reappoint Deloitte as the auditor for the 2018 financial statements. The motion to reappoint Deloitte was seconded and carried.

7. AUDIT APPROACH PLAN

In presenting Deloitte’s audit approach plan for their year-end audit of MTA and agency financial statements, Jill Strohmeyer (Deloitte) referred to “Audit Service Plan” booklet that was previously distributed to the Committee and went through the plan booklet, citing: (1) the audit engagement team, (2) the areas of audit focus and the procedures, techniques and audit tools that would be used in covering the identified risks and areas of focus, (3) the audit timeline and the number of reports that would be issued at the planned audit completion date, which is April, (4) the actuarial, technology and subject matter specialists that they would utilize in performing certain audit procedures. She mentioned “management over-ride of controls” as a top focus in the audit and OPEB/Pension Liabilities, Capital Assets, All-agency revenue streams, Grant Appropriation and Tax Revenues as the other areas of focus. She also spoke about the leading-edge tools and processes that they would integrate in their audit approach. Lastly, Jill spoke about the peer review conducted of Deloitte on its public entity clients in which Deloitte received the highest possible rating from the reviewer and the GASB standards that the MTA would be required to adopt for the incoming years.

Member Moerdler inquired if Deloitte’s test of pension liabilities included a comparison of MTA’s unfunded pension liabilities to those of its peers. Jill responded that actuaries’ valuations and management’s assumptions go into the determination of pension liabilities but no peer-to-peer comparison is made with respect to the unfunded liabilities. Bob Foran (MTA Chief Financial Officer) noted that the MTA does fund the unfunded liabilities at the actuarially-determined funding level and believed that the MTA is just right at the average when compared to its peers. Pat Kane (MTAHQ Comptroller) said that, overall, MTA’s manage pension plans are 75% funded and that funding level fared better than the average when compared with other governmental entities.

Member Moerdler brought up fare evasion and inquired if audit tests are conducted in this area. Deloitte responded that recorded revenues are tested, but testing or reviewing fare evasion data is not part of the financial statement audit. There were discussions about the extent and depth of fare evasion MTA-wide and work needed to prove the accuracy of the estimates and to demonstrate to the public that the MTA is doing something about fare evasion overall. The Auditor General said that some aspects of fare evasion were reviewed in the past and that it has been included for review in the 2019 Audit Plan. Chair Zuckerman said that this will be discussed further at the January meeting when the Audit Plan is submitted for approval.

Chair Zuckerman asked Deloitte how “management over-ride of controls” was identified as the highest risk for this year’s audit and the comparable risk last year. Jill Strohmeier responded that it was determined through a comprehensive risk assessment performed by the audit team and that it was also the top risk identified in last year’s audit.

Chair Zuckerman wanted to know more about the new innovative audit tools and requested that Deloitte make a separate presentation about it in the next committee meeting.

At Bob Foran’s request, Pat Kane spoke about GASB# 87, a new accounting standard which requires a more expanded accounting and financial reporting of leases for governmental entities. Pat said that for the MTA to comply with the requirement and meet the first reporting date, which for the MTA is the first quarter of 2020, it will require additional resources to do it due to the thousands of capital and operating leases that need to be accounted for MTA-wide. Bob Foran expressed his concern that due to the current budget crisis and hiring restrictions, MTA would not be able add the staff needed to do the work to fully comply with GASB# 87. Member Moerdler suggested that it be placed on record that, in conjunction with the external auditors, the MTA is doing everything possible, given the current circumstances, to comply with the requirement.


8. ANNUAL AUDIT COMMITTEE ACTIVITY REPORT

Chair Zuckerman moved that the Annual Audit Activity report, which contained the committee’s activities during the past year, be approved for submission to the Board. The move was seconded and the report was approved for submission to the Board.

9. MOTION TO ADJOURN

A motion was made and seconded to adjourn the meeting.

Respectfully submitted,


Michael J. Fucilli
Auditor General

2019 AUDIT COMMITTEE WORK PLAN

I. RECURRING AGENDA ITEMS

Responsibility

Approval of Minutes
Audit Work Plan
Pre-Approval of Audit/Non-Audit Activities
Follow-Up Items
Status of Audit Activities

Committee Chair & Members
Committee Chair & Members
Committee Chair & Members
Committee Chair & Members
Auditor General/Chief Compliance Officer/
Chief Financial Officers/MTAIG
Controllers/External Auditor
As Appropriate

Executive Sessions

II. SPECIFIC AGENDA ITEMS

January 2019

Quarterly Financial Statements – 3rd Quarter 2018
Pension Plans
Audit Innovation Tool
DDCR Performance Measures
MTAAS 2018/2019 Audit Plans
Security of Sensitive Data

External Auditor/CFOs
Comptroller/External Auditor
External Auditor
Chief Diversity Officer
Auditor General
Chief Information Security Officer

May 2019

Review of Consolidated Financial Statements
2018 Audited Financial Statements
Financial Interest Reports
ERM Update & Internal Control Guidelines
Compliance with Internal Control Act
Information Technology Report
Open Audit Recommendations
Contingent Liabilities/Third Party Lawsuits

Comptroller
External Auditor/CFOs/Controllers
Chief Compliance Officer
Chief Compliance Officer
Chief Compliance Officer/Agency ICOs
Chief Information Security Officer
Agency ICOs/Chief Compliance Officer
General Counsels/External Auditor

July 2019

Quarterly Financial Statements – 1 st Quarter 2019	External Auditor/CFOs
Single Audit Report	External Auditor/CFOs
Investment Compliance Report	External Auditor
Management Letter Reports	External Auditor/CFOs/Controllers
ERM Update, Ethics and Compliance Program	Chief Compliance Officer
MTAAS 2019 Audit Plan Status Report	Auditor General
Security of Sensitive Data	Chief Information Security Officer
MTA/IG Presentation	Inspector General
DDCR Performance Measures	Chief Diversity Officer

October 2019

Quarterly Financial Statements – 2 nd Quarter 2019	External Auditor/CFOs
Appointment of External Auditors	Committee Chair & Members
Deloitte Audit Approach Plans	External Auditor
Review of MTA/IG's Office	External Auditor/IG
Review of Audit Committee Charter	CCO and Committee Chair
Annual Audit Committee Report	Committee Chair

2019 AUDIT COMMITTEE WORK PLAN

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

JANUARY 2019

Quarterly Financial Statements - 3rd Quarter 2018

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 2018.

Pension Plans

i Management's Review of MTA-Managed/Controlled Pension Plan Financial Statements

The MTA Comptroller will present a management's review of the 2017 MTA-managed and controlled Pension Plan financial statements, including changes in the plan's net position, the required supplementary information and any new GASB statements or statutory regulations affecting the financial statements.

ii Audit of the Pension Plans Financial Statements

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

DDCR Performance Measures

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

MTAAS 2018/2019 Audit Plans

i. 2018 Audit Plan Status

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 in 2018.

ii 2019 Audit Plan

A discussion by Audit Services of the areas scheduled to be reviewed in 2019 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.

Security of Sensitive Data

The MTA Chief Security Information Officer will make a presentation to the Committee on the security of sensitive data at the MTA.

MAY 2019

Management's Review of MTA Consolidated Financial Statements

The MTA Comptroller will present a management's review of the 2018 MTA consolidated financial statements, including changes in capital, net assets, other assets and operating revenues and expenses.

2018 Audited Financial Statements

The MTA public accounting firm will review the results and conclusions of their examination of the 2018 Financial Statements. 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.

Financial Interest Reports

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

Enterprise Risk Management Update and Internal Control Guidelines

These MTA-wide guidelines, which were adopted by the Board in 2011 pursuant to Public Authority Law Section 2931, are required to be reviewed by the Committee annually. The MTA Chief Compliance Officer will brief the Committee on the agency compliance with these guidelines and answer any questions and offer additional comments, as appropriate. The MTA Chief Compliance Officer will also brief the Committee on the status of agency compliance with the ERM guidelines and any new or emerging risk.

Compliance with 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.

Information Technology Report

The MTA Chief Information Security 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.

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.

Contingent Liabilities and Status of Third Party Lawsuits

The General Counsels from each agency, along with representatives from the independent accounting firm, 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.

JULY 2019

Quarterly Financial Statements – 1st Quarter 2019

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 2019.

Single Audit Report

Representatives of MTA's public accounting firm will provide the results of their Federal- and State-mandated single audits of MTA and NYC Transit.

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.

ERM Update and Ethics & Compliance Program

The MTA Chief Compliance Officer will brief the Committee (i) on the status of agency compliance with the ERM guidelines and any new or emerging risk and (ii) selected aspects of the MTA Ethics and Compliance Program.

MTAAS 2019 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.

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.

MTA/IG Presentation

The Inspector General will make a presentation to the Committee on the OIG activities and coordination with MTA Audit Services.

DDCR Performance Measures

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

OCTOBER 2019

Quarterly Financial Statements - 2nd Quarter 2019

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 2019.

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.

Audit Approach Plans/Coordination with External Auditors

Representatives of MTA's public accounting firm will review their audit approach for the 2019 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.

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.

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. The review will also show if the Committee's performance in 2019 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).

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 2019. 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.

Metropolitan Transportation Authority

(A Component Unit of the State of New York)

Independent Auditors' Review Report

Consolidated Interim Financial Statements as of and
for the Nine-Month Period Ended September 30, 2018

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INDEPENDENT AUDITORS' REVIEW REPORT

To the Members of the Board of
Metropolitan Transportation Authority

Report on the Consolidated Interim Financial Information

We have reviewed the accompanying consolidated interim statement of net position of the Metropolitan Transportation Authority (the "MTA"), a component unit of the State of New York, as of September 30, 2018, and the related consolidated interim statements of revenues, expenses and changes in net position and consolidated cash flows for the nine-month periods ended September 30, 2018 and 2017 (the "consolidated interim financial information").

Management's Responsibility for the Consolidated Interim Financial Information

MTA management is responsible for the preparation and fair presentation of the consolidated interim financial information in accordance with accounting principles generally accepted in the United States of America; this responsibility includes the design, implementation, and maintenance of internal control sufficient to provide a reasonable basis for the preparation and fair presentation of the consolidated interim financial information in accordance with accounting principles generally accepted in the United States of America.

Auditors' Responsibility

Our responsibility is to conduct our reviews in accordance with auditing standards generally accepted in the United States of America applicable to reviews of interim financial information. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with auditing standards generally accepted in the United States of America, the objective of which is the expression of an opinion regarding the financial information. Accordingly, we do not express such an opinion.

Conclusion

Based on our reviews, we are not aware of any material modifications that should be made to the consolidated interim financial information referred to above for it to be in accordance with the accounting principles generally accepted in the United States of America.

Emphasis of a Matter

As discussed in the notes to the consolidated interim financial information, the MTA is a component unit of the State of New York. The MTA requires significant subsidies from and has material transactions with the City of New York, the State of New York, and the State of Connecticut, and depends on certain tax revenues that are economically sensitive. The accompanying interim financial information does not include any adjustments that might result from the outcome of this uncertainty.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedule of Changes in the MTA's Net Pension Liability and Related Ratios for the Single Employer

Pension Plans, the Schedule of the MTA's Proportionate Share of Net Pension Liabilities of Cost-Sharing Multiple-Employer Pension Plans, the Schedule of the MTA's Contributions for All Pension Plans, and the Schedule of Funding Progress for the MTA Postemployment Benefit Plan, as listed in the table of contents, be presented to supplement the consolidated interim financial information. Such information, although not a part of the consolidated interim financial information, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the consolidated interim financial information in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, applicable to reviews of interim financial information, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the consolidated interim financial information, and other knowledge we obtained during our reviews of the consolidated interim financial information. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our reviews were conducted for the purpose of expressing limited assurance, as described under the Conclusion section above, on the MTA's consolidated interim financial information. The Schedule of Consolidated Reconciliation Between Financial Plan and Financial Statements, Schedule of Consolidated Subsidy Accrual Reconciliation Between Financial Plan and Financial Statements, and Schedule of Financial Plan to Financial Statements Reconciliation are presented for the purposes of additional analysis and are not a required part of the consolidated interim financial information.

The Schedule of Consolidated Reconciliation Between Financial Plan and Financial Statements, Schedule of Consolidated Subsidy Accrual Reconciliation Between Financial Plan and Financial Statements, and Schedule of Financial Plan to Financial Statements Reconciliation are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the consolidated interim financial information. Such information has been subjected to the analytical procedures and inquiries applied in the reviews of the basic consolidated interim financial information and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated interim financial information or to the consolidated interim financial information themselves, and other additional procedures and we are not aware of any material modifications that should be made thereto in order for such information to be in conformity with accounting principles generally accepted in the United States of America when considered in relation to the basic consolidated interim financial information taken as a whole.

Report on Consolidated Statement of Net Position as of December 31, 2017

We have previously audited, in accordance with auditing standards generally accepted in the United States of America, the consolidated statement of net position of the MTA as of December 31, 2017, and the related consolidated statement of revenues, expenses and changes in net position and cash flows for the year then ended (not presented herein); and we expressed an unmodified audit opinion on those audited consolidated financial statements in our report dated April 25, 2018, which contains an explanatory paragraph that the MTA requires significant subsidies from other governmental entities. In our opinion, the accompanying consolidated statement of net position of the MTA as of December 31, 2017, is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

January 22, 2019

(A Component Unit of the State of New York)**MANAGEMENT'S DISCUSSION AND ANALYSIS
AS OF SEPTEMBER 30, 2018 AND DECEMBER 31, 2017 AND
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017****(\$ In Millions, except as noted)**

OVERVIEW OF THE CONSOLIDATED INTERIM FINANCIAL STATEMENTS***Introduction***

This report consists of five parts: Management's Discussion and Analysis ("MD&A"), Consolidated Interim Financial Statements, Notes to the Consolidated Interim Financial Statements, Required Supplementary Information, and Supplementary Information.

Management's Discussion and Analysis

This MD&A provides a narrative overview and analysis of the financial activities of the Metropolitan Transportation Authority and its consolidated subsidiaries and affiliates (the "MTA" or "MTA Group") as of September 30, 2018 and December 31, 2017 and for the nine-month periods ended September 30, 2018 and 2017. For financial reporting purposes, the subsidiaries and affiliates of the MTA are blended component units. This management discussion and analysis is intended to serve as an introduction to the MTA Group's consolidated interim financial statements. It provides an assessment of how the MTA Group's position has improved or deteriorated and identifies the factors that, in management's view, significantly affected the MTA Group's overall financial position. It may contain opinions, assumptions, or conclusions by the MTA Group's management that must be read in conjunction with, and should not be considered a replacement for, the consolidated interim financial statements.

The Consolidated Interim Financial Statements

The Consolidated Interim Statements of Net Position, which provide information about the nature and amounts of resources with present service capacity that the MTA Group presently controls (assets), consumption of net assets by the MTA Group that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the MTA Group has little or no discretion to avoid (liabilities), and acquisition of net assets by the MTA Group that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position.

The Consolidated Interim Statements of Revenues, Expenses and Changes in Net Position, which provide information about the MTA's changes in net position for the period then ended and accounts for all of the period's revenues and expenses, measures the success of the MTA Group's operations during the year and can be used to determine how the MTA has funded its costs.

The Consolidated Interim Statements of Cash Flows, which provide information about the MTA Group's cash receipts, cash payments and net changes in cash resulting from operations, noncapital financing, capital and related financing, and investing activities.

Notes to the Consolidated Interim Financial Statements

The notes provide information that is essential to understanding the consolidated interim financial statements, such as the MTA Group's accounting methods and policies, details of cash and investments, employee benefits, long-term debt, lease transactions, future commitments and contingencies of the MTA Group, and information about other events or developing situations that could materially affect the MTA Group's financial position.

Required Supplementary Information

The required supplementary information provides information about the changes in the net pension liability, employer contributions, actuarial assumptions used to calculate the net pension liability, historical trends, and other required supplementary information related to the MTA Group's cost-sharing multiple-employer and single-employer defined benefit pension plans as required by provisions for pensions under GASB Statement No. 68.

The Schedule of Funding Progress provides information concerning the MTA Group's progress in funding its obligation to provide pension benefits and postemployment benefits to its employees.

Supplementary Information

The supplementary information provides a series of reconciliations between the MTA Group's financial plan and the consolidated interim statements of revenues, expenses and changes in net position.

FINANCIAL REPORTING ENTITY

The Metropolitan Transportation Authority ("MTA" or "MTA Group") was established under the New York Public Authorities Law and is a public benefit corporation and a component unit of the State of New York whose mission is to continue, develop, and improve public transportation and to develop and implement a unified public transportation policy in the New York metropolitan area. The financial reporting entity consists of subsidiaries and affiliates, considered component units of the MTA, because the Board of the MTA serves as the overall governing body of these related entities.

MTA Related Groups

The following entities, listed by their legal names, are subsidiaries (component units) of the MTA:

- Metropolitan Transportation Authority Headquarters ("MTAHQ") provides support in budget, cash management, finance, legal, real estate, treasury, risk and insurance management, and other services to the related groups listed below.
- The Long Island Rail Road Company ("MTA Long Island Rail Road") provides passenger transportation between New York City ("NYC") and Long Island.
- Metro-North Commuter Railroad Company ("MTA Metro-North Railroad") provides passenger transportation between NYC and the suburban communities in Westchester, Dutchess, Putnam, Orange, and Rockland counties in New York State ("NYS") and New Haven and Fairfield counties in Connecticut.
- Staten Island Rapid Transit Operating Authority ("MTA Staten Island Railway") provides passenger transportation on Staten Island.
- First Mutual Transportation Assurance Company ("FMTAC") provides primary insurance coverage for certain losses, some of which are reinsured, and assumes reinsurance coverage for certain other losses.
- MTA Capital Construction Company ("MTA Capital Construction") provides oversight for the planning, design and construction of current and future major MTA system-wide expansion projects.
- MTA Bus Company ("MTA Bus") operates certain bus routes in areas previously served by private bus operators pursuant to franchises granted by the City of New York.
- MTAHQ, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Staten Island Railway, FMTAC, MTA Capital Construction, and MTA Bus, collectively are referred to herein as MTA. MTA Long Island Rail Road and MTA Metro-North Railroad are referred to collectively as the Commuter Railroads.

The following entities, listed by their legal names, are affiliates (component units) of the MTA:

- New York City Transit Authority ("MTA New York City Transit") and its subsidiary, Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA"), provide subway and public bus service within the five boroughs of New York City.
- Triborough Bridge and Tunnel Authority ("MTA Bridges and Tunnels") operates seven toll bridges, two tunnels, and the Battery Parking Garage, all within the five boroughs of New York City.

CONDENSED CONSOLIDATED FINANCIAL INFORMATION AND CONDENSED CONSOLIDATED INTERIM FINANCIAL INFORMATION

The following sections discuss the significant changes in the MTA Group's financial position as of September 30, 2018 and December 31, 2017 and for the nine-month periods ended September 30, 2018 and 2017. An analysis of major economic factors and industry trends that have contributed to these changes is provided. It should be noted that for purposes of the MD&A, the information contained within the summaries of the consolidated interim financial statements and the various exhibits presented were derived from the MTA Group's consolidated interim financial statements.

Total Assets and Deferred Outflows of Resources, Distinguishing Between Capital Assets, Other Assets and Deferred Outflows of Resources

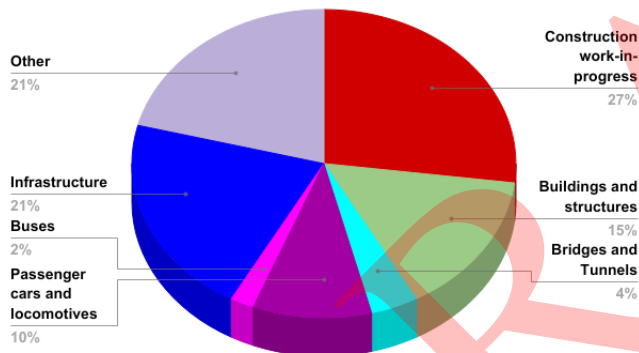
Capital assets include, but are not limited to: bridges, structures, tunnels, construction of buildings and the acquisition of buses, equipment, passenger cars, and locomotives.

Other assets include, but are not limited to: cash, restricted and unrestricted investments, State and regional mass transit taxes receivables, and receivables from New York State.

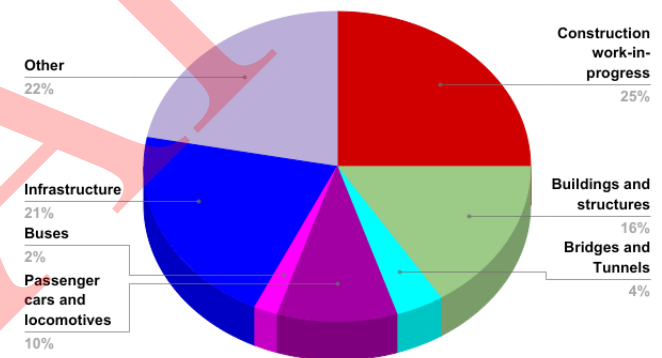
Deferred outflows of resources reflect: changes in fair market values of hedging derivative instruments that are determined to be effective, unamortized loss on refunding, and deferred outflows from pension activities.

(In millions)	September 30, 2018 (Unaudited)	December 31, 2017	Increase / (Decrease)
Capital assets — net (see Note 6)	\$ 70,992	\$ 68,060	\$ 2,932
Other assets	9,461	8,533	928
Total Assets	80,453	76,593	3,860
Deferred outflows of resources	3,472	3,687	(215)
Total assets and deferred outflows of resources	\$ 83,925	\$ 80,280	\$ 3,645

**Capital Assets, Net - September 30, 2018
(Unaudited)**



Capital Assets, Net - December 31, 2017



Significant Changes in Assets and Deferred Outflows of Resources Include: September 30, 2018 versus December 31, 2017

- Net capital assets increased at September 30, 2018 by \$2,932 or 4.3%. There was an increase in construction work-in-progress of \$2,165, an increase in other capital assets of \$1,112, an increase in infrastructure of \$732, an increase in bridges and tunnels of \$372, an increase in passenger cars and locomotives of \$213, an increase in buildings and structures of \$100, and an increase in buses of \$139. This was offset by a net increase in accumulated depreciation of \$1,901. See Note 6 to the MTA's Consolidated Interim Financial Statements for further information. Some of the more significant projects contributing to the net increase included:
 - Continued progress on the East Side Access, Second Avenue Subway and Number 7 Extension Project.
 - Infrastructure work including:
 - Repairs and improvements of all MTA Bridge and Tunnels' facilities.
 - Improvements to MTA Long Island Railroad's road-assets, replacement of signal power lines, various right-of-way enhancements and upgrades of radio communications.
 - Continued improvements to MTA Metro-North Railroad stations, tracks and structures, power rehabilitation of substations, and security.
 - Subway and bus real-time customer information and communications systems.
 - Continued structural rehabilitation and repairs of the ventilation system at various facilities.

- Continued improvements made to the East River Tunnel Fire and Life Safety project for 1st Avenue, Long Island City and construction of three Montauk bridges.
- Continued passenger station rehabilitations for Penn Station and East Side Access Passenger station.
- Ongoing work by MTA New York City Transit to make stations fully accessible and structurally reconfigured in accordance with the Americans with Disability Act (“ADA”) standards.
- Other assets increased by \$928 or 10.9%. The major items contributing to this change include:
 - An increase in current and non-current receivables of \$1,042 primarily due to an increase from State and regional mass transit tax of \$968, an increase in State and local operating assistance of \$103, a decrease Station Maintenance receivable of \$43, a decrease in Mortgage Recording tax of \$4, an increase in New York City operating recovery subsidy to the MTA New York City Transit, MTA Staten Island Railway, and MTA Bus of \$59, and an increase in Federal and State grants for capital projects of \$36. This was offset by a net decrease in other current and non-current receivables of \$77.
 - An increase in cash of \$225 from net cash flow activities.
 - A decrease in investments of \$322 mainly due to the use of funds for capital and operating purposes.
 - A net decrease in various other current and noncurrent assets of \$17.
- Deferred outflows of resources decreased by \$215 or 5.8%. This decrease was primarily due to change in the fair value of derivative instruments of \$126, a decrease in deferred outflows for unamortized losses on refundings of \$72, and a decrease in deferred outflows related to pensions of \$17.

Total Liabilities and Deferred Inflows of Resources, Distinguishing Between Current Liabilities, Non-Current Liabilities and Deferred Inflows of Resources

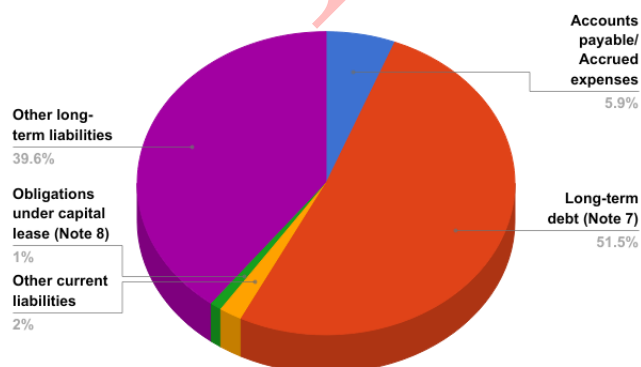
Current liabilities include: accounts payable, accrued expenses, current portions of long-term debt, capital lease obligations, pollution remediation liabilities, unredeemed fares and tolls, and other current liabilities.

Non-current liabilities include: long-term debt, capital lease obligations, claims for injuries to persons, post-employment benefits and other non-current liabilities.

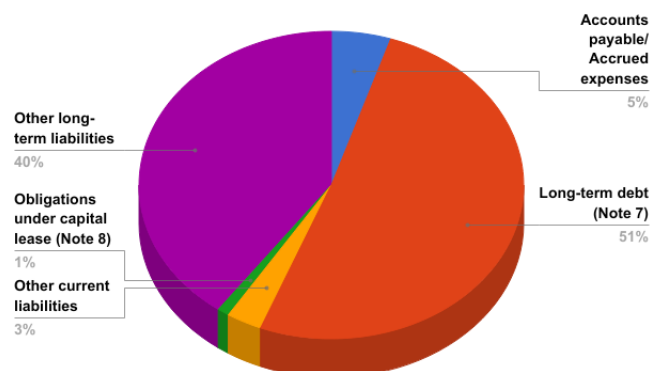
Deferred inflows of resources reflect unamortized gains on refunding and pension related deferred inflows.

(In millions)	September 30, 2018	December 31, 2017	Increase / (Decrease)
	(Unaudited)		
Current liabilities	\$ 6,226	\$ 6,246	\$ (20)
Non-current liabilities	72,448	68,304	4,144
Total liabilities	78,674	74,550	4,124
Deferred inflows of resources	503	506	(3)
Total liabilities and deferred inflows of resources	\$ 79,177	\$ 75,056	\$ 4,121

**Total Liabilities - September 30, 2018
(Unaudited)**



Total Liabilities - December 31, 2017



Significant Changes in Liabilities and Deferred Inflows of Resources Include:

September 30, 2018 versus December 31, 2017

- Current liabilities decreased by \$20 or 0.3%. The net decrease in current liabilities was primarily due to a decrease in the current portion of long-term debt of \$776 due to the maturity of Bond Anticipation Notes and debt service payments. In addition, there was an increase in accrued expenses of \$828 due to increases in capital accruals of \$37, an increase in employee related accruals of \$108, an increase in interest of \$424, and other accrued expenses of \$259. Accounts payable due to vendors decreased by \$62 and unearned revenues decreased by \$7, largely due to unused fare cards and school fare subsidies. There was a net decrease in other various current liabilities of \$3.
- Non-current liabilities increased by \$4,144 or 6.1%. This increase was mainly due to:
 - An increase in the non-current portion of long-term debt of \$2,844 primarily due to 2018 bond issuances (See Note 7).
 - An increase in postemployment benefits other than pension liability ("OPEB") of \$1,110 resulting from estimates of actuarial calculations as required by GASB Statement No. 45 (See Note 5).
 - An increase in estimated liability arising from injuries to persons (Note 10) of \$264 due to revised calculations of the workers' compensation reserve.
 - A decrease in derivative liabilities of \$114 resulting from changes in market valuation and a reduction in the notional amount of derivative contracts.
 - A net increase in other various non-current liabilities of \$40.
- Deferred inflows of resources decreased by \$3 or 0.6%, due to gain on refunding of debt of \$3.

Total Net Position, Distinguishing Between Net Investment in Capital Assets, Restricted Amounts, and Unrestricted Amounts

(In millions)	September 30, 2018	December 31, 2017	Increase / (Decrease)
	(Unaudited)		
Net investment in capital assets	\$ 29,017	\$ 28,250	\$ 767
Restricted for debt service	1,577	516	1,061
Restricted for claims	181	182	(1)
Restricted for other purposes	978	983	(5)
Unrestricted	(27,005)	(24,707)	(2,298)
Total Net Position	<u>\$ 4,748</u>	<u>\$ 5,224</u>	<u>\$ (476)</u>

Significant Changes in Net Position Include:

September 30, 2018 versus December 31, 2017

At September 30, 2018, total net position decreased by \$476 or 9.1%, when compared with December 31, 2017. This change is a result of net non-operating revenues of \$4,882 and appropriations, grants and other receipts externally restricted for capital projects of \$1,204 offset by operating losses of \$6,562.

The net investment in capital assets increased by \$767 or 2.7%. Funds restricted for debt service, claims and other purposes increased by \$1,055 or 62.8% in the aggregate, mainly due to scheduled debt service payments. Unrestricted net position decreased by \$2,298 or 9.3%.

Condensed Consolidated Interim Statement of Revenues, Expenses and Changes in Net Position

(In millions)	Nine-Month Period Ended September 30,		Increase / (Decrease)
	2018 (Unaudited)	2017 (Unaudited)	
Operating revenues			
Passenger and tolls	\$ 6,059	\$ 6,020	\$ 39
Other	431	437	(6)
Total operating revenues	6,490	6,457	33
Non-operating revenues			
Grants, appropriations and taxes	5,389	4,763	626
Other	593	646	(53)
Total non-operating revenues	5,982	5,409	573
Total revenues	12,472	11,866	606
Operating expenses			
Salaries and wages	4,651	4,378	273
Retirement and other employee benefits	2,236	2,234	2
Postemployment benefits other than pensions	1,585	1,610	(25)
Depreciation and amortization	2,010	1,852	158
Other expenses	2,570	2,307	263
Total operating expenses	13,052	12,381	671
Non-operating expenses			
Interest on long-term debt	1,097	1,201	(104)
Other net non-operating expenses	3	3	-
Total non-operating expenses	1,100	1,204	(104)
Total expenses	14,152	13,585	567
Loss before appropriations, grants and other receipts			
externally restricted for capital projects	(1,680)	(1,719)	39
Appropriations, grants and other receipts			
externally restricted for capital projects	1,204	1,795	(591)
Change in net position	(476)	76	(552)
Net position, beginning of period	5,224	5,607	(383)
Net position, end of period	\$ 4,748	\$ 5,683	\$ (935)

Revenues and Expenses, by Major Source:**Period ended September 30, 2018 versus 2017**

- Total operating revenues increased by \$33 or 0.5%. This increase was mainly due to an increase in fare and toll revenue of \$39 primarily due to an increase in vehicle crossings for the period ended September 30, 2018, when compared to the period ended September 30, 2017. The decrease in Other operating revenues of \$6 was due to lower advertising revenues collected on behalf of all agencies.
- Total non-operating revenues increased by \$573 or 10.6%.
 - Total grants, appropriations, and taxes increased by \$626. This was due to an increase in New York State and New York City Subway Action Plan of \$411, an increase in Payroll Mobility Tax of \$46, an increase in Urban Tax of \$109, an increase in Mass Transportation Trust Fund of \$22, an increase in Aid Trust Account from New York State of \$3, an increase in Operating assistance of \$32, an increase in Mass Transportation Operating assistance of \$19, and an increase in Build America subsidy of \$1. The increase was offset by a decrease in Mortgage Recording Tax subsidies of \$15 and a decrease in New York State Service Contract subsidy of \$2.
 - Other non-operating revenues decreased by \$53 primarily due to a decrease in subsidies from New York City of \$13 for MTA Bus and MTA Staten Island Railway and a decrease in other net non-operating revenue of \$56. This was offset by an increase in subsidies from the Connecticut Department of Transportation for the MTA Metro-North Railroad of \$14 and an increase in station maintenance, operation and use assessments of \$2.
- Labor costs increased by \$250 or 3%. The major changes within this category are:
 - Salaries, wages and overtime increased by \$273 primarily due to increases in MTA New York City Transit to support the Subway Action Plan and various maintenance and weather-related requirements.
 - Postemployment benefits other than pensions decreased by \$25 based on changes in the actuarial estimates.
 - Retirement and employee benefits increased by \$2.
- Non-labor operating costs increased by \$421 or 10.1%. The variance was primarily due to:
 - An increase in depreciation of \$158 primarily due to more assets placed in service in the current year.
 - An increase in maintenance and other contracts by \$11 and professional service contracts of \$121 due to changes in consulting services requirements.
 - An increase in material and supplies by \$43, mainly due to revised maintenance and repairs requirements for transit and commuter systems.
 - An increase in electric power of \$29 and fuel of \$31 due to changes in rates and consumption.
 - An increase in paratransit service contracts of \$40 primarily due to higher paratransit taxi expenses.
 - A decrease in insurance of \$9 primarily due to fewer policies added in 2018.
 - A decrease in claims arising from injuries to persons of \$15 based on the most recent actuarial valuations.
 - A net increase in other various expenses of \$12 mainly due to higher operating expenses.
- Total net non-operating expenses decreased by \$104 or 8.6% due to decreases in interest on long-term debt of \$104.
- Appropriations, grants and other receipts externally restricted for capital projects decreased by \$591 or 32.9% mainly due timing of requisitioning for Federal and State grants.

OVERALL FINANCIAL POSITION AND RESULTS OF OPERATIONS AND IMPORTANT ECONOMIC CONDITIONS

Economic Conditions

Metropolitan New York is the most transit-intensive region in the United States, and a financially sound and reliable transportation system is critical to the region's economic well-being. The MTA consists of urban subway and bus systems, suburban rail systems, and bridge and tunnel facilities, all of which are affected by many different economic forces. In order to achieve maximum efficiency and success in its operations, the MTA must identify economic trends and continually implement strategies to adapt to changing economic conditions.

Preliminary MTA system-wide utilization through the third quarter of 2018 decreased relative to 2017, with ridership down by 67.3 million trips (3.4%). The decrease was driven by Subway ridership, which declined by 41.4 million trips (3.2%), and MTA New York City Transit Bus ridership, which declined by 24.7 million trips (5.5%). In addition, MTA Bus ridership declined by 1.0 million trips (1.1%), MTA Long Island Rail Road declined by 101 thousand trips (0.2%), MTA Metro-North Railroad declined by 124 thousand trips (0.2%) and MTA Staten Island Railway ridership declined by 17 thousand trips (0.5%). The decline in bus ridership is consistent with a trend that began in 2009 and has been observed nationally, while declining subway ridership is a more recent trend, beginning in the third quarter of 2016; recent bus and subway ridership trends have been attributed to increased fare evasion, planned subway service changes to accommodate construction and maintenance/repair work, increase in use of for-hire vehicle services, and increases in telecommuting and the use of e-commerce. Vehicle traffic at MTA Bridges and Tunnels facilities through the third quarter increased by 9.2 million crossings (4.0%) compared with 2017 levels.

Seasonally adjusted non-agricultural employment in New York City for the third quarter was higher in 2018 than in 2017 by 55.8 thousand jobs (1.3%). On a quarter-to-quarter basis, New York City employment has increased in each of the last thirty-two quarters – the last decline occurred in the third quarter of 2010 – and is higher than at any time since 1950, when non-agricultural employment levels for New York City were first recorded by the Bureau of Labor Statistics.

National economic growth, as measured by Real Gross Domestic Product (“RGDP”), expanded at an annualized rate of 3.5% in the third quarter of 2018, according to the most recent advance estimate released by the Bureau of Economic Analysis. The increase in RGDP reflected positive contributions from personal consumption expenditures, private industry investment, nonresidential fixed investment, federal government spending, and state and local government spending. Partially offsetting these favorable impacts were negative contributions from exports and residential fixed investment. Imports, which are a subtraction in the RGDP calculation, increased. The deceleration in RGDP growth, over the second quarter's revised 4.2% growth rate, reflected a downturn in exports, a deceleration in nonresidential fixed investment, and an increase in imports after they had decreased in the second quarter. These movements were partially offset by an upturn in private inventory investment.

The New York City metropolitan area's price inflation, as measured by the Consumer Price Index for All Urban Consumers (“CPI-U”), was lower than the national average in the third quarter of 2018, with the metropolitan area index increasing 2.13% while the national index increased 2.64%, when compared with the third quarter of 2017. Increases in both the regional and national price of energy products (9.80% for the region, and 8.98% nationally) impacted overall inflation; in the metropolitan area, the CPI-U exclusive of energy products increased by 1.61%, while nationally, inflation exclusive of energy prices increased 2.12%. Increasing more steeply than overall energy prices, the spot price for New York Harbor conventional gasoline rose by 22.0%, from an average price of \$1.71 per gallon to an average price of \$2.08 per gallon between the third quarters of 2017 and 2018.

The Federal Open Market Committee (“FOMC”) raised rates three times in 2017, with the target range set at 0.75% to 1% in March, 1% to 1.25% in June and 1.25% to 1.5% in December. During the first half of 2018, the Federal Funds rate was raised twice, to a target level of 1.5% to 1.75% in March 2018, and then to a target level of 1.75% to 2.0% in June 2018. In September 2018, the Federal Funds rate was raised to its current target level of 2% to 2.25%. The September increase was in view of continued labor market strength, and strong growth of household spending and business fixed investment, while overall inflation and inflation for items other than food and energy remained close to 2 percent and indicators of longer-term inflation expectations were little changed. The FOMC expects that the economic expansion will be sustained, labor market conditions will remain strong, and inflation will remain near the 2 percent objective over the medium term. Further gradual increases in the Federal Funds rate can be expected, with the FOMC determining the timing and size of future adjustments based on assessments of realized and expected economic conditions relative to maximum employment and symmetric 2 percent inflation objectives. Risks to the economic outlook appear roughly balanced.

The influence of the Federal Reserve monetary policy on the mortgage market is a matter of interest to the MTA, since variability of mortgage rates can affect the number of real estate transactions and thereby impact receipts from the Mortgage Recording Tax (“MRT”) and Urban Tax, two important sources of MTA revenue. Mortgage Recording

Tax collections for the third quarter of 2018 were lower than the third quarter of 2017 by \$5.6 (4.5%); receipts in the third quarter of 2018 were \$9.9 (9.1%) higher than receipts from the second quarter of 2018. Despite the gradual overall recovery of MRT receipts that began in 2012, average monthly receipts in the third quarter of 2018 remain \$26.8 (42.1%) lower than the monthly average for 2006, just prior to the steep decline in Mortgage Recording Tax revenues. MTA's Urban Tax receipts – which are based on commercial real estate transactions and mortgage recording activity within New York City, and can vary significantly from quarter to quarter based on the timing of exceptionally high-priced transactions – were \$39.6 (30.5%) higher in the third quarter of 2018 than receipts for the third quarter of 2017; receipts in the third quarter of 2018 were \$19.5 (10.3%) lower than receipts from the second quarter of 2018. Average monthly receipts in the third quarter of 2018 were \$18.2 (24.7%) lower than the monthly average for 2007, just prior to the steep decline in Urban Tax revenues.

Results of Operations

MTA Bridges and Tunnels - For the period ended September 30, 2018, operating revenue increased by \$44 compared to the nine months ended September 30, 2017. Paid traffic for the first three quarters of 2018 totaled 240.5 million crossings, which was 9.2 million, or 4.0% higher than the same period in 2017. The increase is primarily due to improvements in the regional economy, stable gas prices and improved mobility achieved through cashless tolling. Toll revenue through September 2018 totaled \$1.471 billion, which was \$41, or 2.9% greater than the same period in 2017. The additional revenue was due to the higher traffic and a full year's impact of the toll increase implemented on March 19, 2017.

The E-ZPass electronic toll collection system experienced year-to-year increases in market share. The total average market share as of September 30, 2018 was 94.2% compared to 89.2% as of September 30, 2017. The average weekday market share for passenger and commercial vehicles were 94.9% and 90.5% for the first three quarters of 2018 and 2017, respectively.

MTA New York City Transit - For the period ended September 30, 2018, revenue from fares was \$3,319, a decrease of \$20, or 0.6%, compared to September 30, 2017. For the same comparative period, total operating expenses were higher by \$433 or 5.4%, totaling \$8,501 for the nine months ended September 30, 2018.

MTA Long Island Rail Road – Total operating revenue for the period ended September 30, 2018 was \$581, which was slightly lower by \$1 or 0.1%, compared to September 30, 2017. For the same comparative period, operating expenses were higher by \$100 or 7.2%, totaling \$1,492 for the nine months ended September 30, 2018.

MTA Metro-North Railroad – For the nine months ended September 30, 2018, operating revenues totaled \$584, a decrease of \$1 or 0.2%, compared to September 30, 2017. During the same period, operating expenses increased by \$41 or 3.5% to \$1,206. For the nine months ended September 30, 2018, fare revenue increased by 1.0% to \$548 compared to September 30, 2017. Passenger fares accounted for 93.8% and 92.7% of operating revenues in 2018 and 2017, respectively. The remaining revenue represents collection of rental income from stores in and around passenger stations and revenue generated from advertising.

The MTA receives the equivalent of four quarters of Metropolitan Mass Transportation Operating Assistance (“MMTOA”) receipts each year, with the state advancing the first quarter of each succeeding calendar year's receipts in the fourth quarter of the current year. This results in little or no Metropolitan Mass Transportation Operating Assistance receipts being received during the first quarter of each calendar year. The MTA has made other provisions to provide for cash liquidity during this period. During March 2016, the State appropriated \$1.6 billion in MMTOA funds. There has been no change in the timing of the State's payment of, or MTA's receipt of, Dedicated Mass Transportation Trust Fund (“MTTF”) receipts, which MTA anticipates will be sufficient to make monthly principal and interest deposits into the Debt Service Fund for the Dedicated Tax Fund Bonds. The total MRT for the period ended September 30, 2018 was \$327 compared to \$342 at September 30, 2017.

Capital Programs

At September 30, 2018, \$17,560 had been committed and \$6,219 had been expended for the combined 2015-2019 MTA Capital Programs and the 2015-2019 MTA Bridges and Tunnels Capital Program, and \$27,631 had been committed and \$21,816 had been expended for the combined 2010-2014 MTA Capital Programs and the 2010-2014 MTA Bridges and Tunnels Capital Program, and \$24,073 had been committed and \$23,644 had been expended for the combined 2005-2009 MTA Capital Programs and the 2005-2009 MTA Bridges and Tunnels Capital Program.

The MTA Group has ongoing capital programs, which except for MTA Bridges and Tunnels are subject to the approval of the Metropolitan Transportation Authority Capital Program Review Board (“CPRB”), and are designed to improve public transportation in the New York Metropolitan area.

2015-2019 Capital Program — Capital programs covering the years 2015-2019 for: (1) the commuter railroad operations of the MTA conducted by MTA Long Island Rail Road and MTA Metro-North Railroad (the “2015–2019 Commuter Capital Program”), (2) the transit system operated by MTA New York City Transit and its subsidiary, MaBSTOA, the MTA Bus Company, and the rail system operated by MTA Staten Island Railway (the “2015–2019 Transit Capital Program”) were originally approved by the MTA Board in September 2014. The capital programs were subsequently submitted to the Capital Program Review Board (“CPRB”) in October 2014. This plan was disapproved by the CPRB, without prejudice, in October 2014. The capital program for the toll bridges and tunnels operated by MTA Bridges and Tunnels (the “2015–2019 MTA Bridges and Tunnels Capital Program”) was approved by the MTA Board in September 2014 and was not subject to CPRB approval.

On April 20, 2016, the MTA Board approved revised capital programs for the years covering 2015-2019. The revised capital programs provided for \$29,456 in capital expenditures. On May 23, 2016, the CPRB deemed approved the revised 2015-2019 Capital Programs for the Transit and Commuter systems as submitted. The revised 2015-2019 MTA Bridges and Tunnels Capital Program, was approved by the MTA Board on April 20, 2016.

On February 23, 2017, the MTA Board approved a revision to the CPRB portion of the capital programs for the years covering 2015-2019, adding \$119 transferred from prior capital programs to support additional investment projects. On March 30, 2017, the CPRB deemed approved the revised 2015-2019 Capital Programs for the Transit and Commuter systems as submitted. On May 24, 2017, the MTA Board approved a full amendment to the 2015-2019 Capital Programs to reflect updated project estimates and rebalanced programs to address budgetary and funding needs of priority projects that include Second Avenue Subway Phase 2, MTA Long Island Rail Road regional mobility, station enhancement work, investments at Penn Station, and new Open Road Tolling at MTA Bridges and Tunnels. On July 31, 2017, the CPRB deemed approved the revised 2015-2019 Capital Programs for the Transit and Commuter systems totaling \$29,517, as submitted. The revised 2015-2019 MTA Bridges and Tunnels Capital Program totaling \$2,940, as approved by the MTA Board in May 2017, was not subject to CPRB approval. On December 13, 2017, the MTA Board approved an amendment adding \$349 to the 2015-2019 Capital Program for the Transit system in support of the NYC Subway Action Plan. On April 25, 2018, the MTA Board approved a full amendment to increase the 2015-2019 Capital Programs to \$33,270 reflecting updated project cost estimates, emerging new needs across the agencies, and reallocation of funds within the East Side Access and Regional Investment programs, among others. On June 1, 2018, the CPRB deemed approved the revised 2015-2019 Capital Programs for the Transit and Commuter systems totaling \$30,334, as submitted. The revised 2015-2019 MTA Bridges and Tunnels Capital Program totaling \$2,936, as approved by the MTA Board in April 2018, was not subject to CPRB approval.

By September 30, 2018, the revised 2015-2019 Capital Programs provided \$33,273 in capital expenditures, of which \$16,742 relates to ongoing repairs of, and replacements to, the transit system operated by MTA New York City Transit and MaBSTOA and the rail system operated by MTA Staten Island Railway; \$5,324 relates to ongoing repairs of, and replacements to, the commuter system operated by MTA Long Island Rail Road and MTA Metro-North Railroad; \$7,652 relates to the expansion of existing rail networks for both the transit and commuter systems to be managed by MTA Capital Construction; \$243 relates to Planning and Customer Service; \$376 relates to MTA Bus Company initiatives; and \$2,936 in capital expenditures for ongoing repairs of, and replacements to, MTA Bridges and Tunnels facilities.

The combined funding sources for the revised 2015–2019 MTA Capital Programs and the 2015-2019 MTA Bridges and Tunnels Capital Program, include \$7,968 in MTA Bonds, \$2,936 in MTA Bridges and Tunnels dedicated funds, \$8,640 in funding from the State of New York, \$7,308 in Federal Funds, \$2,666 from City Capital Funds, \$2,145 in pay-as-you-go (“PAYGO”) capital, \$1,018 from asset sale/leases, and \$592 from Other Sources.

2010-2014 Capital Program — Capital programs covering the years 2010-2014 for: (1) the commuter railroad operations of the MTA conducted by MTA Long Island Rail Road and MTA Metro-North Railroad (the “2010–2014 Commuter Capital Program”), (2) the transit system operated by MTA New York City Transit and its subsidiary, MaBSTOA, the MTA Bus Company, and the rail system operated by MTA Staten Island Railway (the “2010–2014 Transit Capital Program”) were originally approved by the MTA Board in September 2009. The capital programs were subsequently submitted to the CPRB in October 2009. This plan was disapproved by the CPRB, without prejudice, in December 2009 allowing the State Legislature to review funding issues in their 2010 session. The capital program for the toll bridges and tunnels operated by MTA Bridges and Tunnels (the “2010–2014 MTA Bridges and Tunnels Capital Program”) was approved by the MTA Board in September 2009 and was not subject to CPRB approval. The MTA Board approved the revised plan for the Transit and Commuter systems on April 28, 2010 and CPRB approval of the five-year program of projects was obtained on June 1, 2010. The approved CPRB program fully funded only

the first two years (2010 and 2011) of the plan, with a commitment to come back to CPRB with a funding proposal for the last three years for the Transit and Commuter Programs. On December 21, 2011, the MTA Board approved an amendment to the 2010-2014 Capital Program for the Transit, Commuter, and Bridges and Tunnels systems that fund the last three years of the program through a combination of self-help (efficiency improvements and real estate initiatives), participation by our funding partners, and innovative and pragmatic financing arrangements. On March 27, 2012, the CPRB deemed approved the amended 2010-2014 Capital Programs for the Transit and Commuter systems as submitted.

On December 19, 2012, the MTA Board approved an amendment to the 2010-2014 Capital Programs for the Transit, Commuter, and Bridges and Tunnels systems to add projects for the repair/restoration of MTA agency assets damaged as a result of Superstorm Sandy, which struck the region on October 29, 2012. On January 22, 2013, the CPRB deemed approved the amended 2010-2014 Capital Programs for the Transit and Commuter systems as submitted. On July 22, 2013, the MTA Board approved a further amendment to the 2010-2014 Capital Programs for the Transit, Commuter, and Bridges and Tunnels systems to include specific revisions to planned projects and to include new resilience/mitigation initiatives in response to Superstorm Sandy. On August 27, 2013, the CPRB deemed approved those amended 2010-2014 Capital Programs for the Transit and Commuter systems as submitted. On July 28, 2014, the MTA Board approved an amendment to select elements of the Disaster Recovery (Sandy) and MTA New York City Transit portions of the 2010-2014 Capital Programs, and a change in the funding plan. On September 3, 2014, the CPRB deemed approved the amended 2010-2014 Capital Programs for the Transit and Commuter systems as submitted.

In May 2017, the MTA Board approved an amendment to the 2010-2014 Capital Programs to reflect scope transfers and consolidation between the approved capital programs, and to reflect reductions to the MTA Superstorm Sandy capital projects to match current funding assumptions. This amendment, which provided \$29,237 in capital expenditures for the Transit and Commuter systems, was deemed approved by the CPRB as submitted on July 31, 2017. The amended 2010-2014 MTA Bridges and Tunnels Capital Program, which provided \$2,784 in capital expenditures, was not subject to CPRB approval. By September 30, 2018, the 2010-2014 MTA Capital Programs reflected an overall decrease of \$432 primarily due to reallocation of funds within the East Side Access and Regional Investment programs. Of the \$31,589 in capital expenditures, \$11,365 relates to ongoing repairs of, and replacements to, the transit system operated by MTA New York City Transit and MaBSTOA and the rail system operated by MTA Staten Island Railway; \$3,882 relates to ongoing repairs of, and replacements to, the commuter system operated by MTA Long Island Rail Road and MTA Metro-North Railroad; \$5,912 relates to the expansion of existing rail networks for both the transit and commuter systems to be managed by MTA Capital Construction; \$337 relates to a multi-faceted security program including MTA Police Department; \$223 relates to MTA Interagency; \$297 relates to MTA Bus Company initiatives; \$2,022 relates to the ongoing repairs of, and replacements to, MTA Bridges and Tunnels facilities; and \$7,551 relates to Superstorm Sandy recovery/mitigation capital expenditures.

The combined funding sources for the CPRB-approved 2010–2014 MTA Capital Programs and 2010–2014 MTA Bridges and Tunnels Capital Program include \$11,483 in MTA Bonds, \$2,025 in MTA Bridges and Tunnels dedicated funds, \$7,594 in Federal Funds, \$132 in MTA Bus Federal and City Match, \$719 from City Capital Funds, and \$1,314 from other sources. Also included is \$770 in State Assistance funds added to re-establish a traditional funding partnership. The funding strategy for Superstorm Sandy repair and restoration assumes the receipt of \$6,329 in insurance and federal reimbursement proceeds (including interim borrowing by MTA to cover delays in the receipt of such proceeds), \$235 in pay-as-you-go capital, supplemented, to the extent necessary, by external borrowing of up to \$988 in additional MTA and MTA Bridges and Tunnels bonds.

2005-2009 Capital Program — Capital programs covering the years 2005-2009 for: (1) the commuter railroad operations of the MTA conducted by MTA Long Island Rail Road and MTA Metro-North Railroad (the “2005–2009 Commuter Capital Program”), (2) the transit system operated by MTA New York City Transit and its subsidiary, MaBSTOA, the MTA Bus Company, and the rail system operated by MTA Staten Island Railway (the “2005–2009 Transit Capital Program”) were originally approved by the MTA Board in April 2005 and subsequently by the CPRB in July 2005. The capital program for the toll bridges and tunnels operated by MTA Bridges and Tunnels (the “2005–2009 MTA Bridges and Tunnels Capital Program”) was approved by the MTA Board in April 2005 and was not subject to CPRB approval. The 2005–2009 amended Commuter Capital Program and the 2005–2009 Transit Capital program (collectively, the “2005–2009 MTA Capital Programs”) were last amended by the MTA Board in July 2008. This latest 2005-2009 MTA Capital Program amendment was resubmitted to the CPRB for approval in July 2008, and was approved in August 2009.

As last amended by the MTA Board, the 2005–2009 MTA Capital Programs and the 2005–2009 MTA Bridges and Tunnels Capital Program, provided for \$23,717 in capital expenditures. By September 30, 2018, the 2005–2009 MTA Capital Programs budget increased by \$684 primarily due to the receipt of new American Recovery and Reinvestment Act (“ARRA”) funds and additional New York City Capital funds for MTA Capital Construction work still underway. Of the \$24,401 now provided in capital expenditures, \$11,519 relates to ongoing repairs of, and replacements to the transit system operated by MTA New York City Transit and MaBSTOA and the rail system operated by MTA Staten Island Railway; \$3,716 relates to ongoing repairs of, and replacements to, the commuter system operated by MTA Long Island Rail Road and MTA Metro-North Railroad; \$168 relates to certain interagency projects; \$7,719 relates generally to the expansion of existing rail networks for both the transit and commuter systems to be managed by the MTA Capital Construction Company (including the East Side Access, Second Avenue Subway and No. 7 subway line) and a security program throughout MTA’s transit network; \$1,127 relates to the ongoing repairs of, and replacements to, bridge and tunnel facilities operated by MTA Bridges and Tunnels; and \$152 relates to capital projects for the MTA Bus.

The combined funding sources for the MTA Board-approved 2005–2009 MTA Capital Programs and 2005–2009 MTA Bridges and Tunnels Capital Program include \$9,698 in MTA and MTA Bridges and Tunnels Bonds (including funds for LaGuardia Airport initiative), \$1,450 in New York State general obligation bonds approved by the voters in the November 2005 election, \$9,093 in Federal Funds, \$2,838 in City Capital Funds, and \$1,322 from other sources.

CURRENTLY KNOWN FACTS, DECISIONS, OR CONDITIONS

The 2018 MTA July Financial Plan

The 2018 MTA July Financial Plan (the “July Plan” or “Plan”), which includes the 2018 Mid-Year Forecast, the 2019 Preliminary Budget and a Financial Plan for the years 2019–2022, updates the February Financial Plan. The July Plan includes significant additional investments to address maintenance and operational requirements. Despite projected biennial fare and toll increases that generate a four percent net increase in farebox and toll revenue, increased savings targets and favorable re-estimates, the Plan continues to project significant out-year deficits. The MTA continues to require a new source of sustainable revenue to cover operating and capital costs.

The July Plan continues to follow the approach reflected in earlier plans and contains many noteworthy items, including investments of \$1.5 billion to improve Agency service and reliability: (1) the July Plan provides for targeted investments of \$1 billion over the Plan period to address Agency-specific concerns in a comprehensive manner, (2) another \$208 over the Plan period will be invested in additional maintenance and operating needs, (3) over the Plan period, \$183 is allocated to implement, maintain and replace critical IT systems.

The July Plan also continues to project net 4% biennial fare/toll increases (the equivalent of 2% per year). Consistent with recent Plans, a March 1st implementation is assumed for both the 2019 and 2021 increases.

The MTA 2018 Adopted Budget and February Financial Plan 2018–2021 (collectively, the “February Plan”) was presented to the MTA Board at its February 20, 2018 meeting. The purpose of the February Plan was to incorporate adjustments approved by the MTA Board that were captured “below-the-line” and on a consolidated basis in the November Plan into MTA agencies’ financial plan baseline budgets and forecasts. The February Plan also reflected certain technical adjustments to MTA and Agency forecasts and captures baseline changes that were not included in the November Plan.

Tropical Storm Sandy Update

The total allocation of emergency relief funding from the Federal Transit Administration (“FTA”) to MTA in connection with Superstorm Sandy to date is \$5.83 billion, including \$1.599 billion allocated on September 22, 2014, through a competitive resiliency program. FTA Emergency Relief Grants totaling \$4.803 billion have been executed, including six grants in the amounts of \$194, \$886, \$685, \$344, \$788, and \$1,090, respectively, for repair/local priority resiliency and fourteen grants for competitive resiliency totaling \$816. As of September 30, 2018, MTA has drawn down a total of \$1.965 billion in grant reimbursement for eligible operating and capital expenses. The balance of funds to be drawn down from all twenty grants is available to MTA for reimbursement of eligible expenses as requisitions are submitted by MTA and approved by FTA. Additional requisitions are in process. At MTA and Amtrak’s request, in April 2018, FTA transferred \$14 of MTA’s emergency relief allocation to the Federal Railroad Administration (“FRA”), to allow Amtrak to execute a portion of MTA Long Island Rail Road’s Competitive Resilience scope. MTA expects to submit grant requests for the remainder of its FTA emergency relief allocation, \$1.01 billion in Federal Fiscal Year 2019.

Labor Update

During the third quarter of 2018, labor unions representing employees at various MTA agencies reached new agreements. The following summarizes the status of collective bargaining at each MTA agency through the end of the third quarter of 2018.

MTA Long Island Rail Road – As of September 30, 2018, MTA Long Island Rail Road had approximately 7,657 employees. Approximately 6,720 of the MTA Long Island Rail Road employees were represented by 11 different unions in 19 bargaining units. MTA Long Island Rail Road has reached agreement with all its unions. Significantly, the agreements all contain general wage increases that conform to those present in the pattern-setting TWU Local 100 agreement with MTA New York City Transit; and, consistent with MTA's Financial Plan, they were all designed to result in net going-out costs that match the costs of the TWU agreement.

MTA Metro-North Railroad – As of September 30, 2018, MTA Metro-North Railroad had reached agreements with nine bargaining units covering approximately 43% of its 5,595 represented employees. Included in this number are two new agreements: in September, Metro-North reached a 29.5 month agreement, running from March 16, 2017 to August 31, 2019, with approximately 775 members of the International Brotherhood of Electrical Workers ("IBEW"). Also in September, the railroad reached agreement with approximately 20 members of the Association of Commuter Rail Employees Division 37 ("ACRE 37"), a 28.5 month agreement that will cover the period from January 16, 2017 to May 31, 2019. These agreements, like all the others with MTA Metro-North Railroad's unions, are consistent with the railroad wage pattern established at MTA Long Island Rail Road. MTA Metro-North Railroad's remaining represented population is covered by agreements that, while now considered "amendable" under the Railway Labor Act, remain in effect. The railroad is engaged in collective bargaining with these remaining units and it is expected that settlements will be reached that will also conform to the established railroad wage pattern.

MTA Headquarters – During the third quarter, most of MTA Headquarters represented employees were under labor agreements that had not yet terminated. One notable exception is the clerical/administrative workforce at MTA Police represented by IBT Local 808: their most recent contract expired on August 31, 2016, and the parties were engaged in negotiations for a successor agreement. Meanwhile, collective bargaining agreements were in effect for the 723 MTA Police employees covered by the Police Benevolent Association ("PBA"), and for the 30 commanding officers, represented by the Commanding Officers Association ("COA"). However, both contracts were set to expire early in the fourth quarter (on October 14, 2018).

In June 2018, MTA Headquarters Business Service Center had 293 employees, approximately 229 of whom are represented by several clerical/administrative unions. The largest such union, representing approximately 219 employees, is the Transportation Communications Union ("TCU"), Local 643 whose contract covers the period from April 1, 2015 through March 31, 2020.

In January 2014, the Information Technology Department consolidated all agency IT functions and positions under MTA Headquarters. As of June 2018, the department had 985 employees, approximately 453 of whom are represented. The two predominant unions are the TCU Local 982 and TWU Local 100, which together account for more than 90% of the IT Department's represented workforce. MTA had a prevailing agreement with the TCU in the third quarter of 2018, and it will expire December 31, 2019. In many respects, it is similar to the BSC agreement, including 401(k) plan eligibility as opposed to a defined benefit pension plan for new hires. An agreement with TWU Local 100 that is consistent with the established bargaining pattern was also in effect through the third quarter, and it expires July 13, 2019.

MTA Headquarters' thirty-eight month collective bargaining agreement with TCU employees in the Procurement Department will remain in effect until March 30, 2020. The agreement is similar to those reached with TCU's employees in the IT Department and at the Business Service Center.

MTA New York City Transit Authority/Manhattan and Bronx Surface Transit Operating Authority – Effective January 16, 2017, MTA New York City Transit and MaBSTOA entered into a 28-month labor contract agreement with TWU Local 100. This agreement, which has been ratified by the TWU membership and approved by the MTA Board, has an expiration date of May 15, 2019. At the time of the agreement, there were an estimated 35,243 active employees represented by TWU Local 100, of which MTA New York City Transit had 29,643 and MaBSTOA had 5,600. Also effective on January 16, 2017, MTA New York City Transit entered into separate 28 month labor contract agreements with Amalgamated Transit Union ("ATU") Locals 1056 and 726. This agreement, which was ratified by the ATU membership and approved by the MTA Board, also has an expiration of May 15, 2019. The ATU Locals 1056 and 726 represent 3,456 employees. In September 2017, MTA New York City Transit also reached agreement with TWU Local 100 Computer and Telecommunications employees together with Career & Salary Employees who had been formerly represented by TWU Local 106 ("TSO"). Together, 508 hourly employees are represented by these two groups. The agreements are very similar in structure to the earlier TWU Local 100 agreement, and the going-out cost for both groups together match the expectations of the Financial Plan.

MTA Bus Company – As of September 30, 2018, MTA Bus Company had 4,250 employees (full and part time), approximately 3,828 of whom are represented by five different unions. TWU Local 100, by far the largest of them, with 2,264 represented employees, bargained together with TWU Local 100 at MTA New York City Transit and MaBSTOA to reach an agreement that will be effective through May 15, 2019.

After intensive negotiations between MTA Bus Company and employees represented by ATU 1179, an arbitration award was issued that will cover approximately 814 employees from the period from May 22, 2012 through October 31, 2019 – essentially, the same length of time covered by MTA New York City Transit’s current agreement with TWU Local 100 and its previous 5 year agreement with that union. Overall, the provisions of the decision are similar to those of the two TWU agreements; however, the impasse award also decided certain outstanding issues regarding ATU 1179’s employee pension benefits and their funding.

Subsequent to the May impasse arbitration with ATU Local 1179, MTA Bus Company reached agreement with a second ATU unit—Local 1181— which represents approximately 254 hourly employees. As with ATU Local 1179, the 88-month ATU Local 1181 agreement, which expires October 31, 2019, covers an equal length of time as the two most recent labor agreements between MTA New York City Transit and TWU Local 100; and it is consistent with the cost pattern established by those agreements. The agreement also contains essentially the same pension modifications and means of funding these changes that were laid out in the impasse arbitration with ATU Local 1179.

MTA Bridges and Tunnels – As of September 30, 2018, MTA Bridges and Tunnels had 1,394 employees, 953 of whom were represented by four different unions. On May 22, 2014 MTA Bridges and Tunnels entered into a Memorandum of Understanding (“DC 37 Local 1931 MOU”) with DC 37 Local 1931 representing 334 maintenance employees. That agreement ran from October 15, 2009 through October 14, 2012 and was consistent with MTA’s bargaining pattern as expressed in the 2009-2012 TWU Local 100 collective bargaining agreement. Through the third quarter of 2018, negotiations for a new agreement continued.

On July 17, 2014, an Interest Arbitration Award was issued for the Bridge and Tunnel Officers Benevolent Association representing 513 officers. The term of this award is for the May 18, 2009 through May 17, 2012 bargaining round and was consistent with the TWU Local 100 2009-2012 pattern. Negotiations for a new agreement continued through the third quarter of 2018.

On January 30, 2015, MTA Bridges and Tunnels entered into a Memorandum of Agreement (“MOA”) with the Superior Officers Benevolent Association (“SOBA”) representing 156 supervisory officers. This MOA was ratified by SOBA and was approved by the MTA Board on February 25, 2015. The agreement ran from March 15, 2009 through March 14, 2012 and was consistent with MTA’s bargaining pattern as expressed in the 2009-2012 TWU Local 100 collective bargaining agreement. Negotiations for a new agreement continued through the third quarter of 2018.

On March 17, 2015, a seven year and four-month agreement, March 3, 2010 through July 2, 2017, was reached with DC 37 Local 1655, which represents approximately 27 clerical employees. The agreement is consistent with the pattern set by the DC 37 Citywide agreement for the same period.

MTA Staten Island Railway - As of September 30, 2018, MTA Staten Island Railway had 324 employees, approximately 293 of whom were represented by four different unions. At the end of the third quarter of 2018, MTA Staten Island Railway had reached agreement with one of these unions, the TCU, covering approximately 23 station cleaners, station agents, clerks and stock workers. The 28-month agreement, spanning the period from December 17, 2017 through April 16, 2019, matches the pattern-setting agreement reached between MTA New York City Transit and TWU Local 100, and it is consistent with MTA Staten Island Railway’s Financial Plan for the period. Meanwhile, contracts with MTA Staten Island Railway’s other three unions have all expired. Its contract with the Sheet Metal, Air, Rail and Transportation Workers International Association (“SMART”) Local 1440 (formerly the United Transportation Union), covering approximately 241 employees, expired on February 15, 2017; MTA Staten Island Railway’s agreement with the American Train Dispatchers Association (“ADTA”) covering 13 represented employees expired on December 16, 2016; and the agreement with Subway Surface Supervisors Association (“SSSA”), covering 16 represented employees, expired on February 15, 2017. Negotiations for successor agreements were underway throughout the second quarter.

SSSA has petitioned to represent MTA Staten Island Railway employees in the title of Supervisor Maintenance, Supervisor Car Equipment (mechanical), Supervisor Electrical Maintenance, Supervisor Electronic Maintenance, Supervisor Power/Signals, Supervisor Timekeeping, and Supervisor Operational Support. New York State Public Employment Relations Board (“PERB”) has certified SSSA as the exclusive negotiating agent for this unit of 11 employees. An initial collective bargaining agreement was reached on February 25, 2017. Negotiations for a successor agreement are forthcoming.

(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENT OF NET POSITION AS OF SEPTEMBER 30, 2018
AND CONSOLIDATED STATEMENT OF NET POSITION AS OF DECEMBER 31, 2017**

(\$ In millions)

	September 30, 2018 (Unaudited)	December 31, 2017
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES		
CURRENT ASSETS:		
Cash (Note 3)	\$ 508	\$ 283
Unrestricted investments (Note 3)	2,289	3,689
Restricted investments (Note 3)	2,843	1,783
Restricted investments held under capital lease obligations (Notes 3 and 8)	4	4
Receivables:		
Station maintenance, operation, and use assessments	76	119
State and regional mass transit taxes	1,108	140
Mortgage Recording Tax receivable	32	36
State and local operating assistance	113	10
Other receivable from New York City and New York State	246	187
Due from Build America Bonds	3	1
Capital project receivable from federal and state government	157	121
Other	419	425
Less allowance for doubtful accounts	(127)	(62)
Total receivables — net	2,027	977
Materials and supplies	643	608
Prepaid expenses and other current assets (Note 2)	107	170
Total current assets	8,421	7,514
NON-CURRENT ASSETS:		
Capital assets (Note 6):		
Land and construction work-in-progress	19,360	17,195
Other capital assets (net of accumulated depreciation)	51,632	50,865
Unrestricted investments (Note 3)	39	55
Restricted investments (Note 3)	512	485
Restricted investments held under capital lease obligations (Notes 3 and 8)	379	372
Other non-current receivables	71	46
Receivable from New York State	10	43
Other non-current assets	29	18
Total non-current assets	72,032	69,079
TOTAL ASSETS	80,453	76,593
DEFERRED OUTFLOWS OF RESOURCES:		
Accumulated decreases in fair value of derivative instruments (Note 7)	282	408
Loss on debt refunding (Note 7)	1,163	1,235
Deferred outflows related to pensions (Note 4)	2,027	2,044
TOTAL DEFERRED OUTFLOWS OF RESOURCES	3,472	3,687
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ 83,925	\$ 80,280

See Independent Auditors' Review Report and
notes to the consolidated interim financial statements.

(Continued)

(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENT OF NET POSITION AS OF SEPTEMBER 30, 2018
AND CONSOLIDATED STATEMENT OF NET POSITION AS OF DECEMBER 31, 2017**

(\$ In millions)

	September 30, 2018 (Unaudited)	December 31, 2017
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION		
CURRENT LIABILITIES:		
Accounts payable	\$ 545	\$ 607
Accrued expenses:		
Interest	628	204
Salaries, wages and payroll taxes	354	307
Vacation and sick pay benefits	1,016	988
Current portion — retirement and death benefits	36	14
Current portion — estimated liability from injuries to persons (Note 10)	426	415
Capital accruals	449	412
Other	1,120	861
Total accrued expenses	4,029	3,201
Current portion — loan payable (Note 7)	12	14
Current portion — long-term debt (Note 7)	1,030	1,806
Current portion — obligations under capital lease (Note 8)	4	4
Current portion — pollution remediation projects (Note 12)	19	20
Unearned revenues	587	594
Total current liabilities	6,226	6,246
NON-CURRENT LIABILITIES:		
Net pension liability (Note 4)	8,105	8,105
Estimated liability arising from injuries to persons (Note 10)	3,700	3,436
Post employment benefits other than pensions (Note 5)	17,841	16,731
Loan payable (Note 7)	98	100
Long-term debt (Note 7)	41,136	38,292
Obligations under capital leases (Note 8)	437	436
Pollution remediation projects (Note 12)	60	59
Contract retainage payable	409	376
Derivative liabilities (Note 7)	308	422
Other long-term liabilities	354	347
Total non-current liabilities	72,448	68,304
TOTAL LIABILITIES	78,674	74,550
DEFERRED INFLOWS OF RESOURCES:		
Gain on debt refunding	23	26
Deferred Inflows related to pensions (Note 4)	480	480
TOTAL DEFERRED INFLOWS OF RESOURCES	503	506
NET POSITION:		
Net investment in capital assets	29,017	28,250
Restricted for debt service	1,577	516
Restricted for claims	181	182
Restricted for other purposes (Note 2)	978	983
Unrestricted	(27,005)	(24,707)
TOTAL NET POSITION	4,748	5,224
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	\$ 83,925	\$ 80,280

See Independent Auditors' Review Report and
notes to the consolidated interim financial statements.

(Concluded)

(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION**

NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017

(\$ In millions)

	September 30, 2018 (Unaudited)	September 30, 2017 (Unaudited)
OPERATING REVENUES:		
Fare revenue	\$ 4,588	\$ 4,590
Vehicle toll revenue	1,471	1,430
Rents, freight, and other revenue	431	437
Total operating revenues	6,490	6,457
OPERATING EXPENSES:		
Salaries and wages	4,651	4,378
Retirement and other employee benefits	2,236	2,234
Postemployment benefits other than pensions (Note 5)	1,585	1,610
Electric power	357	328
Fuel	140	109
Insurance	(7)	2
Claims	282	297
Paratransit service contracts	332	292
Maintenance and other operating contracts	456	445
Professional service contracts	369	248
Pollution remediation projects (Note 12)	4	2
Materials and supplies	478	435
Depreciation (Note 2)	2,010	1,852
Other	159	149
Total operating expenses	13,052	12,381
OPERATING LOSS	(6,562)	(5,924)
NON-OPERATING REVENUES (EXPENSES):		
Grants, appropriations and taxes:		
Tax-supported subsidies — NYS:		
Mass Transportation Trust Fund subsidies	475	453
Metropolitan Mass Transportation Operating Assistance subsidies	1,687	1,668
Payroll Mobility Tax subsidies	1,304	1,258
MTA Aid Trust Account subsidies	227	224
Tax-supported subsidies — NYC and Local:		
Mortgage Recording Tax subsidies	327	342
Urban Tax subsidies	502	393
Other subsidies:		
New York State Service Contract subsidy	1	3
Operating Assistance - 18-B program	408	376
Build America Bond subsidy	47	46
NYS/NYC Subway Action Plan	411	-
Subtotal grants, appropriations and taxes	\$ 5,389	\$ 4,763

See Independent Auditors' Review Report and
notes to the consolidated interim financial statements.

(Continued)

(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION**

NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017

(\$ In millions)

	September 30, 2018 (Unaudited)	September 30, 2017 (Unaudited)
NON-OPERATING REVENUES (EXPENSES):		
Connecticut Department of Transportation	\$ 95	\$ 81
Subsidies paid to Dutchess, Orange, and Rockland Counties	(4)	(4)
Interest on long-term debt (Note 2)	(1,097)	(1,201)
Station maintenance, operation and use assessments	126	124
Operating subsidies recoverable from NYC	358	371
Other net non-operating expenses	15	71
Net non-operating revenues	4,882	4,205
LOSS BEFORE APPROPRIATIONS, GRANTS AND OTHER RECEIPTS EXTERNALLY RESTRICTED FOR CAPITAL PROJECTS	(1,680)	(1,719)
APPROPRIATIONS, GRANTS AND OTHER RECEIPTS EXTERNALLY RESTRICTED FOR CAPITAL PROJECTS	1,204	1,795
CHANGE IN NET POSITION	(476)	76
NET POSITION— Beginning of period	5,224	5,607
NET POSITION — End of period	\$ 4,748	\$ 5,683
See Independent Auditors' Review Report and notes to the consolidated interim financial statements.		(Concluded)

(A Component Unit of the State of New York)

CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS

NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017

(\$ In millions)

	September 30, 2018 (Unaudited)	September 30, 2017 (Unaudited)
CASH FLOWS FROM OPERATING ACTIVITIES:		
Passenger receipts/tolls	\$ 6,085	\$ 6,047
Rents and other receipts	565	526
Payroll and related fringe benefits	(7,188)	(6,928)
Other operating expenses	(2,575)	(2,572)
Net cash used by operating activities	(3,113)	(2,927)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:		
Grants, appropriations, and taxes	4,922	4,253
Operating subsidies from CDOT	88	87
Subsidies paid to Dutchess, Orange, and Rockland Counties	(8)	(7)
Net cash provided by noncapital financing activities	5,002	4,333
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
MTA bond proceeds	1,353	2,650
MTA Bridges and Tunnels bond proceeds	1,169	1,427
MTA bonds refunded/reissued	(828)	(1,663)
MTA Bridges and Tunnels bonds refunded/reissued	(497)	(1,080)
MTA anticipation notes proceeds	2,233	1,210
MTA anticipation notes redeemed	(512)	(1,424)
MTA credit facility proceeds	4	204
MTA credit facility refunded	-	(200)
Capital lease payments and terminations	(1)	(1)
Grants and appropriations	527	2,356
Payment for capital assets	(4,881)	(3,930)
Debt service payments	(1,223)	(1,126)
Net cash used by capital and related financing activities	(2,656)	(1,577)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of long-term securities	(5,270)	(5,998)
Sales or maturities of long-term securities	5,132	6,406
Net sales (purchases) or maturities of short-term securities	1,056	(822)
Earnings on investments	74	42
Net cash provided by (used by) investing activities	992	(372)
NET INCREASE (DECREASE) IN CASH	225	(543)
CASH — Beginning of period	283	732
CASH — End of period	\$ 508	\$ 189

See Independent Auditors' Review Report and
notes to the consolidated interim financial statements.

(Continued)

(A Component Unit of the State of New York)

CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS

NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017

(\$ In millions)

	September 30, 2018 (Unaudited)	September 30, 2017 (Unaudited)
RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY		
OPERATING ACTIVITIES:		
Operating loss (Note 2)	\$ (6,562)	\$ (5,924)
Adjustments to reconcile to net cash used in operating activities:		
Depreciation and amortization	2,010	1,852
Net increase in payables, accrued expenses, and other liabilities	1,513	1,205
Net decrease in receivables	(161)	(53)
Net decrease in materials and supplies and prepaid expenses	87	(7)
NET CASH USED BY OPERATING ACTIVITIES	<u>\$ (3,113)</u>	<u>\$ (2,927)</u>
NONCASH INVESTING, CAPITAL AND RELATED FINANCING ACTIVITIES:		
Noncash investing activities:		
Interest expense includes amortization of net (premium) / discount (Note 2)	\$ 73	\$ 339
Interest expense which was capitalized	37	26
Total Noncash investing activities	<u>110</u>	<u>365</u>
Noncash capital and related financing activities:		
Capital assets related liabilities	449	565
Capital leases related liabilities	441	434
Total Noncash capital and related financing activities	<u>890</u>	<u>999</u>
TOTAL NONCASH INVESTING, CAPITAL AND RELATED FINANCING ACTIVITIES	<u>\$ 1,000</u>	<u>\$ 1,364</u>
See Independent Auditors' Review Report and notes to the consolidated interim financial statements.		(Concluded)

METROPOLITAN TRANSPORTATION AUTHORITY

(A Component Unit of the State of New York)

NOTES TO CONSOLIDATED INTERIM FINANCIAL STATEMENTS AS OF SEPTEMBER 30, 2018 AND DECEMBER 31, 2017 AND FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017

(\$ In millions, except as noted)

1. BASIS OF PRESENTATION

Reporting Entity — The Metropolitan Transportation Authority (“MTA”) was established in 1965, under Section 1263 of the New York Public Authorities Law, and is a public benefit corporation and a component unit of the State of New York (“NYS”) whose mission is to continue, develop and improve public transportation and to develop and implement a unified public transportation policy in the New York metropolitan area.

These consolidated interim financial statements are of the Metropolitan Transportation Authority (“MTA”), including its related groups (collectively, the “MTA Group”) as follows:

Metropolitan Transportation Authority and Related Groups (Component Units)

- Metropolitan Transportation Authority Headquarters (“MTAHQ”) provides support in budget, cash management, finance, legal, real estate, treasury, risk and insurance management, and other services to the related groups listed below.
- The Long Island Rail Road Company (“MTA Long Island Rail Road”) provides passenger transportation between New York City (“NYC”) and Long Island.
- Metro-North Commuter Railroad Company (“MTA Metro-North Railroad”) provides passenger transportation between NYC and the suburban communities in Westchester, Dutchess, Putnam, Orange, and Rockland counties in NY and New Haven and Fairfield counties in Connecticut.
- Staten Island Rapid Transit Operating Authority (“MTA Staten Island Railway”) provides passenger transportation on Staten Island.
- First Mutual Transportation Assurance Company (“FMTAC”) provides primary insurance coverage for certain losses, some of which are reinsured, and assumes reinsurance coverage for certain other losses.
- MTA Capital Construction Company (“MTA Capital Construction”) provides oversight for the planning, design and construction of current and future major MTA system-wide expansion projects.
- MTA Bus Company (“MTA Bus”) operates certain bus routes in areas previously served by private bus operators pursuant to franchises granted by the City of New York.
- MTAHQ, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Staten Island Railway, FMTAC, MTA Capital Construction, and MTA Bus, collectively are referred to herein as MTA. MTA Long Island Rail Road and MTA Metro-North Railroad are referred to collectively as the Commuter Railroads.
- New York City Transit Authority (“MTA New York City Transit”) and its subsidiary, Manhattan and Bronx Surface Transit Operating Authority (“MaBSTOA”), provide subway and public bus service within the five boroughs of New York City.
- Triborough Bridge and Tunnel Authority (“MTA Bridges and Tunnels”) operates seven toll bridges, two tunnels, and the Battery Parking Garage, all within the five boroughs of New York City.

The subsidiaries and affiliates, considered component units of the MTA, are operationally and legally independent of the MTA. These related groups enjoy certain rights typically associated with separate legal status including, in some cases, the ability to issue debt. However, they are included in the MTA’s consolidated interim financial statements as blended component units because of the MTA’s financial accountability for these entities and they are under the direction of the MTA Board (a reference to “MTA Board” means the board of MTAHQ and/or the boards of the other MTA Group entities that apply in the specific context, all of which are comprised of the same persons). Under accounting principles generally accepted in the United States of America (“GAAP”), the MTA is required to include these related groups in its financial statements. While certain units are separate legal entities, they do have legal capital requirements and the revenues of all of the related groups of the MTA are used to support the organizations as a whole. The components do not constitute a separate accounting entity (fund) since there is no legal requirement to account for the activities of the components as discrete accounting

entities. Therefore, the MTA financial statements are presented on a consolidated basis with segment disclosure for each distinct operating activity. All of the component units publish separate annual financial statements, which are available by writing to the MTA Comptroller, 2 Broadway, 16th Floor, New York, New York 10004.

Although the MTA Group collects fares for the transit and commuter service, they provide and receive revenues from other sources, such as the leasing out of real property assets, and the licensing of advertising. Such revenues, including forecast-increased revenues from fare increases, are not sufficient to cover all operating expenses associated with such services. Therefore, to maintain a balanced budget, the members of the MTA Group providing transit and commuter service rely on operating surpluses transferred from MTA Bridges and Tunnels, operating subsidies provided by NYS and certain local governmental entities in the MTA commuter district, and service reimbursements from certain local governmental entities in the MTA commuter district and from the State of Connecticut. Non-operating subsidies to the MTA Group for transit and commuter service for the period ended September 30, 2018 and 2017 totaled \$5.4 billion and \$4.8 billion, respectively.

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting — The accompanying consolidated interim financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

The MTA applies Governmental Accounting Standards Board (“GASB”) Codification of Governmental Accounting and Financial Reporting Standards (“GASB Codification”) Section P80, Proprietary Accounting and Financial Reporting.

New Accounting Standards Adopted

GASB Statement No. 85, *Omnibus 2017*, addresses various practice issues identified during the implementation and application of certain GASB statements. The provisions of this Statement amend and clarify guidance under a variety of topics with the intent to enhance consistency in the application of accounting and reporting requirements. This Statement specifically addresses the following topics:

- **Blending component units:** For a primary government that is a business-type activity and uses a single column for financial statement presentation of its business-type activities, a component unit may be blended only if it meets the blending criterion described in GASB Statement No. 14, *The Financial Reporting Entity*, as amended.
- **Goodwill:** For acquisitions that occurred prior to the effective date of GASB Statement No. 69, *Government Combinations and Disposals of Government Operations*, (a) GASB Statement No. 69 should be applied for circumstances in which consideration provided exceeded the net position acquired and (b) “negative” goodwill should not be reported.
- **Fair Value Measurement and Application:** (1) Each unit of account of real estate held by insurance entities should be classified as an investment or as a capital asset, based on whether the unit of account meets the definition of an investment as described in GASB Statement No. 72, *Fair Value Measurement and Application*, and (2) Money-market investments and participating interest-earning investment contracts described in GASB Statement No. 72 may be measured at amortized cost.
- **Pensions and Other Postemployment Benefits (“OPEB”):** This standard addresses the following issues related to postemployment benefits: (1) Timing of the measurement of pension or OPEB liabilities and expenditures recognized in financial statements prepared using the current financial resources measurement focus; (2) Recognition and measurement of on-behalf payments for pensions or OPEB in employer financial statements; (3) Presentation of payroll-related measures in required supplementary information for purposes of reporting by OPEB plans and employers that provide OPEB; (4) Classification of employer-paid member contributions for OPEB; (5) Simplifying certain aspects of the alternative measurement method for OPEB; and (6) Accounting and financial reporting for OPEB provided through certain multiple-employer defined benefit OPEB plans.

The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. The Statement allows for application of the standard by individual topics to the extent that all requirements associated with a single topic are implemented simultaneously. Given the discrete nature of the individual topics addressed in this Statement, the MTA has opted to partially adopt this Statement for the individual topics of blending component units, goodwill and fair value measurement and application. The adoption of these topics had no impact on the MTA’s financial statements. The MTA will implement the OPEB related topic of this Statement simultaneously with the implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which the MTA is required to adopt at the end of 2018.

GASB Statement No. 86, *Certain Debt Extinguishment Issues*, establishes standards of accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources – resources other than the proceeds of refunding debt – are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to the financial statements for debt that is defeased in substance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. The adoption of this Statement had no impact on the MTA's financial statements.

Accounting Standards Issued but Not Yet Adopted

GASB has issued the following pronouncements that may affect the future financial position, results of operations, cash flows, or financial presentation of the MTA upon implementation. Management has not yet evaluated the effect of implementation of these standards.

GASB Statement No.	GASB Accounting Standard	MTA Required Year of Adoption
75	<i>Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions</i>	2018
83	<i>Certain Asset Retirement Obligations</i>	2019
84	<i>Fiduciary Activities</i>	2019
85	<i>Omnibus 2017 (Pensions and Other Postemployment Benefits topic)</i>	2018
87	<i>Leases</i>	2020
88	<i>Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements</i>	2019
89	<i>Accounting for Interest Cost Incurred Before the End of a Construction Period</i>	2020
90	<i>Majority Equity Interests – An Amendment of GASB Statements No. 14 and No. 61</i>	2019

Use of Management Estimates — The preparation of the consolidated interim financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the consolidated interim financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant estimates include the fair value of investments, allowances for doubtful accounts, valuation of derivative instruments, arbitrage rebate liability, accrued expenses and other liabilities, depreciable lives of capital assets, estimated liability arising from injuries to persons, pension benefits and other postemployment benefits. Actual results could differ significantly from those estimates.

Principles of Consolidation — The consolidated interim financial statements consist of MTAHQ, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Staten Island Railway, FMTAC, MTA Bus, MTA Capital Construction, MTA New York City Transit (including its subsidiary MaBSTOA), and MTA Bridges and Tunnels for years presented in the financial statements. All related group transactions have been eliminated for consolidation purposes.

Net Position – Restricted for Other Purposes – This category is classified within net position and includes net investments restricted for capital leases and MTA Bridges and Tunnels necessary reconstruction reserve.

Investments — The MTA Group's investment policies comply with the New York State Comptroller's guidelines for such operating and capital policies. Those policies permit investments in, among others, obligations of the U.S. Treasury, its agencies and instrumentalities, and repurchase agreements secured by such obligations. FMTAC's investment policies comply with New York State Comptroller guidelines and New York State Department of Insurance guidelines.

Investments expected to be utilized within a year of September 30th have been classified as current assets in the consolidated interim financial statements.

In accordance with the provisions of GASB Statement No. 72, *Fair Value Measurement and Application*, investments are recorded on the consolidated statement of net position at fair value, except for commercial paper, certificates of deposit, and repurchase agreements, which are recorded at amortized cost or contract value. All investment income, including changes in the fair value of investments, is reported as revenue on the consolidated statement of revenues, expenses and changes in net position. Fair values have been determined using quoted market values at September 30, 2018 and December 31, 2017.

Investment derivative contracts are reported at fair value using the income approach.

Materials and Supplies — Materials and supplies are valued principally at the lower of average cost or market value, net of obsolescence reserve at September 30, 2018 and December 31, 2017 of \$169 and \$166, respectively.

Prepaid Expenses and Other Current Assets — Prepaid expenses and other current assets reflect advance payment of insurance premiums as well as farecard media related with ticket machines, WebTickets and AirTrain tickets.

Capital Assets — Properties and equipment are carried at cost and are depreciated on a straight-line basis over their estimated useful lives. Expenses for maintenance and repairs are charged to operations as incurred. Capital assets and improvements include all land, buildings, equipment, and infrastructure of the MTA having a minimum useful life of two years and having a cost of more than \$25 thousand. Capital assets are stated at historical cost, or at estimated historical cost based on appraisals, or on other acceptable methods when historical cost is not available. Capital leases are classified as capital assets in amounts equal to the lesser of the fair market value or the present value of net minimum lease payments at the inception of the lease. Accumulated depreciation and amortization are reported as reductions of capital assets. Depreciation is computed using the straight-line method based upon estimated useful lives of 25 to 50 years for buildings, 2 to 40 years for equipment, and 25 to 100 years for infrastructure. Capital lease assets and leasehold improvements are amortized over the term of the lease or the life of the asset whichever is less.

Pollution remediation projects — Pollution remediation costs have been expensed in accordance with the provisions of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* (See Note 12). An operating expense provision and corresponding liability measured at current value using the expected cash flow method has been recognized for certain pollution remediation obligations, which previously may not have been required to be recognized, have been recognized earlier than in the past or are no longer able to be capitalized as a component of a capital project. Pollution remediation obligations occur when any one of the following obligating events takes place: the MTA is in violation of a pollution prevention-related permit or license; an imminent threat to public health due to pollution exists; the MTA is named by a regulator as a responsible or potentially responsible party to participate in remediation; the MTA voluntarily commences or legally obligates itself to commence remediation efforts; or the MTA is named or there is evidence to indicate that it will be named in a lawsuit that compels participation in remediation activities.

Operating Revenues — **Passenger Revenue and Tolls** — Revenues from the sale of tickets, tokens, electronic toll collection system, and farecards are recognized as income when tickets or farecards are used. Tickets are assumed to be used in the month of purchase, with the exception of advance purchases of monthly and weekly tickets. When the farecards expire, revenue is recorded for the unused value of the farecards.

MTA Bridges and Tunnel has two toll rebate programs at the Verrazano-Narrows Bridge: the Staten Island Resident (“SIR”) Rebate Program, available for residents of Staten Island participating in the SIR E-ZPass toll discount plan, and the Verrazano-Narrows Bridge Commercial Rebate Program (“VNB Commercial Rebate Program”), available for commercial vehicles making more than ten trips per month using the same New York Customer Service Center (“NYCSC”) E-ZPass account. The VNB Commercial Rebate Program and SIR Rebate Program are funded by the State and MTA.

Capital Financing — The MTA has ongoing programs on behalf of its subsidiaries and affiliates, subject to approval by the New York State Metropolitan Transportation Authority Capital Program Review Board (the “State Review Board”), which are intended to improve public transportation in the New York Metropolitan area.

The federal government has a contingent equity interest in assets acquired by the MTA with federal funds and upon disposal of such assets, the federal government may have a right to its share of the proceeds from the sale. This provision has not been a substantial impediment to the MTA’s operations.

Non-operating Revenues

Operating Assistance — The MTA Group receives, subject to annual appropriation, NYS operating assistance funds that are recognized as revenue after the NYS budget is approved and adopted. Generally, funds received under the NYS operating assistance program are fully matched by contributions from NYC and the seven other counties within the MTA's service area.

Mortgage Recording Taxes ("MRT") — Under NYS law, the MTA receives capital and operating assistance through a Mortgage Recording Tax ("MRT-1"). MRT-1 is collected by NYC and the seven other counties within the MTA's service area, at the rate of 0.25% of the debt secured by certain real estate mortgages. Effective September 2005, the rate was increased from 25 cents per 100 dollars of recorded mortgage to 30 cents per 100 dollars of recorded mortgage. The MTA also receives an additional Mortgage Recording Tax ("MRT-2") of 0.25% of certain mortgages secured by real estate improved or to be improved by structures containing one to nine dwelling units in the MTA's service area. MRT-1 and MRT-2 taxes are recognized as revenue based upon reported amounts of taxes collected.

- MRT-1 proceeds are initially used to pay MTAHQ's operating expenses. Remaining funds, if any, are allocated 55% to certain transit operations and 45% to the commuter railroads operations. The commuter railroad portion is first used to fund the NYS Suburban Highway Transportation Fund in an amount not to exceed \$20 annually (subject to the monies being returned under the conditions set forth in the governing statute if the Commuter Railroads are operating at a deficit).
- The first \$5 of the MRT-2 proceeds is transferred to the MTA Dutchess, Orange, and Rockland ("DOR") Fund (\$1.5 each for Dutchess and Orange Counties and \$2 for Rockland County). Additionally, the MTA must transfer to each County's fund an amount equal to the product of (i) the percentage by which each respective County's mortgage recording tax payments (both MRT-1 and MRT-2) to the MTA increased over such payments in 1989 and (ii) the base amount received by each county as described above. The counties do not receive any portion of the September 1, 2005 increase in MRT-1 from 25 cents per \$100 of recorded mortgage to 30 cents. As of September 30, 2018, the MTA paid to Dutchess, Orange and Rockland Counties the 2017 excess amounts of MRT-1 and MRT-2 totaling \$4.4.
- In addition, MTA New York City Transit receives operating assistance directly from NYC through a mortgage recording tax at the rate of 0.625% of the debt secured by certain real estate mortgages and through a property transfer tax at the rate of one percent of the assessed value (collectively referred to as "Urban Tax Subsidies") of certain properties.

Mobility Tax — In June of 2009, Chapter 25 of the NYS Laws of 2009 added Article 23, which establishes the Metropolitan Commuter Transportation Mobility Tax ("MCTMT"). The proceeds of this tax, administered by the New York State Tax Department, are to be distributed to the Metropolitan Transportation Authority. This tax is imposed on certain employers and self-employed individuals engaging in business within the metropolitan commuter transportation district which includes New York City, and the counties of Rockland, Nassau, Suffolk, Orange, Putnam, Dutchess, and Westchester. This Tax is imposed on certain employers that have payroll expenses within the Metropolitan Commuter Transportation District, to pay at a rate of 0.34% of an employer's payroll expenses for all covered employees for each calendar quarter. The employer is prohibited from deducting from wages or compensation of an employee any amount that represents all or any portion of the MCTMT. The effective date of this tax was March 1, 2009 for employers other than public school district; September 1, 2009 for Public school districts and January 1, 2009 for individuals.

Supplemental Aid — In 2009, several amendments to the existing tax law provided the MTA supplemental revenues to be deposited into the AID Trust Account of the Metropolitan Transportation Authority Financial Assistance Fund established pursuant to Section 92 of the State Finance law. These supplemental revenues relate to: 1) supplemental learner permit/license fee in the Metropolitan Commuter Transportation District, 2) supplemental registration fee, 3) supplemental tax on every taxicab owner per taxicab ride on every ride that originated in the City of New York and terminates anywhere within the territorial boundaries of the Metropolitan Commuter Transportation District, and 4) supplemental tax on passenger car rental. This Supplemental Aid Tax is provided to the MTA in conjunction with the Mobility Tax.

Dedicated Taxes — Under NYS law, subject to annual appropriation, the MTA receives operating assistance through a portion of the Dedicated Mass Transportation Trust Fund ("MTTF") and Metropolitan Mass Transportation Operating Assistance Fund ("MMTOA"). The MTTF receipts consist of a portion of the revenues derived from certain business privilege taxes imposed by the State on petroleum businesses, a portion of the motor fuel tax on gasoline and diesel fuel, and a portion of certain motor vehicle fees, including registration and non-registration fees. Effective October 1, 2005, the State increased the amount of motor vehicle fees

deposited into the MTTF for the benefit of the MTA. MTTF receipts are applied first to meet certain debt service requirements or obligations and second to the Transit System (defined as MTA New York City Transit and MaBSTOA), MTA Staten Island Railway and the Commuter Railroads to pay operating and capital costs. The MMTOA receipts are comprised of 0.375% regional sales tax, regional franchise tax surcharge, a portion of taxes on certain transportation and transmission companies, and an additional portion of the business privilege tax imposed on petroleum businesses. MMTOA receipts, to the extent that MTTF receipts are not sufficient to meet debt service requirements, will also be applied to certain debt service obligations, and secondly to operating and capital costs of the Transit System, and the Commuter Railroads.

The State Legislature enacts in an annual budget bill for each state fiscal year an appropriation to the MTA Dedicated Tax Fund for the then-current state fiscal year and an appropriation of the amounts projected by the Director of the Budget of the State to be deposited in the MTA Dedicated Tax Fund for the next succeeding state fiscal year. The assistance deposited into the MTTF is required by law to be allocated, after provision for debt service on Dedicated Tax Fund Bonds (See Note 7), 85% to certain transit operations (not including MTA Bus) and 15% to the commuter railroads operations. Revenues from this funding source are recognized based upon amounts of tax reported as collected by NYS, to the extent of the appropriation.

Build America Bond Subsidy — The MTA is receiving cash subsidy payments from the United States Treasury equal to 35% of the interest payable on the Series of Bonds issued as “Build America Bonds” and authorized by the Recovery Act. The Internal Revenue Code of 1986 imposes requirements that MTA must meet and continue to meet after the issuance in order to receive the cash subsidy payments. The interest on these bonds is fully subject to Federal income taxation to the bondholder.

Operating Subsidies Recoverable from Connecticut Department of Transportation (“CDOT”) — A portion of the deficit from operations relating to MTA Metro-North Railroad’s New Haven line is recoverable from CDOT. Under the terms of a renewed Service Agreement, which began on January 1, 2015, and the 1998 resolution of an arbitration proceeding initiated by the State of Connecticut, CDOT pays 100.0% of the net operating deficit of MTA Metro-North Railroad’s branch lines in Connecticut (New Canaan, Danbury, and Waterbury), 65.0% of the New Haven mainline operating deficit, and 54.3% of the Grand Central Terminal (“GCT”) operating deficit. The New Haven line’s share of the net operating deficit for the use of GCT is comprised of a fixed fee, calculated using several years as a base, with annual increases for inflation, and the actual cost of operating GCT’s North End Access beginning in 1999. The Service Agreement also provides that CDOT pay 100% of the cost of non-movable capital assets located in Connecticut, 100% of movable capital assets to be used primarily on the branch lines and 65% of the cost of other movable capital assets allocated to the New Haven line. Remaining funding for New Haven line capital assets is provided by the MTA. The Service Agreement provides for automatic five-year renewals unless a notice of termination has been provided. The Service Agreement has been automatically extended for an additional five years beginning January 1, 2015 subject to the right of CDOT or MTA to terminate the agreement on eighteen month’s written notice. Capital assets completely funded by CDOT are not reflected in these financial statements, as ownership is retained by CDOT. The Service Agreement provides that final billings for each year be subject to audit by CDOT. The audits of 2016 and 2017 billings are still open.

Reimbursement of Expenses — The cost of operating and maintaining the passenger stations of the Commuter Railroads in NYS is assessable by the MTA to NYC and the other counties in which such stations are located for each NYS fiscal year ending December 31, under provisions of the NYS Public Authorities Law. This funding is recognized as revenue based upon an amount, fixed by statute, for the costs to operate and maintain passenger stations and is revised annually by the increase or decrease of the regional Consumer Price Index.

In 1995, New York City ceased reimbursing the Authority for the full costs of the free/reduced fare program for students. Beginning in 1996, the State and New York City each began paying \$45 per annum to MTA New York City Transit toward the cost of the program. In 2009, the State reduced their \$45 reimbursement to \$6.3. Beginning in 2010, the State increased their annual commitment to \$25.3 while New York City’s annual commitment remained at \$45. These commitments have been met by both the State and New York City for both 2016 and 2017.

Prior to April 1995, New York City was obligated to reimburse MTA New York City Transit for the transit police force. As a result of the April 1995 merger of the transit police force into the New York City Police Department, New York City no longer reimburses MTA New York City Transit for the costs of policing the Transit System on an ongoing basis since policing of the Transit System is being carried out by the New York City Police Department at New York City’s expense. MTA New York City Transit continues to be responsible for certain capital costs and support services related to such police activities, a portion of which is reimbursed by New York City. MTA New York City Transit received approximately \$0 in the nine months ended September 30, 2018 and \$6.2 in the nine months ended September 30, 2017 from New York City for the reimbursement of transit police costs.

MTAHQ bills MTA Metro-North Railroad through its consolidated services for MTA police costs in the New Haven line of which MTA Metro-North Railroad recovers approximately 65% from Connecticut Department of Transportation. The amounts billed for the periods ended September 30, 2018 and 2017 were \$17.1 and \$16.6, respectively. The amounts recovered for the periods ended September 30, 2018 and 2017 were approximately \$11.1 and \$10.8, respectively.

Federal law and regulations require a paratransit system for passengers who are not able to ride the buses and trains because of their disabilities. Pursuant to an agreement between New York City and the MTA, MTA New York City Transit, effective July 1, 1993, assumed operating responsibility for all paratransit service required by the Americans with Disability Act of 1990. Services are provided by private vendors under contract with MTA New York City Transit. New York City reimburses MTA New York City Transit for the lesser of 33% of net paratransit operating expenses defined as labor, transportation, and administrative costs less fare revenues and 6% of gross urban tax proceeds as described above or, an amount that is 20% greater than the amount paid by New York City for the preceding calendar year. Fare revenues and New York City's reimbursement aggregated approximately \$163.6 for the nine months ended September 30, 2018 and \$145.7 for the nine months ended September 30, 2017.

Grants and Appropriations — Grants and appropriations for capital projects are recorded when requests are submitted to the funding agencies for reimbursement of capital expenditures meeting eligibility requirements. These amounts are reported separately after Net Non-operating Revenues in the Statements of Revenues, Expenses, and Changes in Net Position.

Operating and Non-operating Expenses — Operating and non-operating expenses are recognized in the accounting period in which the liability is incurred. All expenses related to operating the MTA (e.g. salaries, insurance, depreciation, etc.) are reported as operating expenses. All other expenses (e.g. interest on long-term debt, subsidies paid to counties, etc.) are reported as non-operating expenses.

Liability Insurance — FMTAC, an insurance captive subsidiary of MTA, operates a liability insurance program ("ELF") that insures certain claims in excess of the self-insured retention limits of the agencies on both a retrospective (claims arising from incidents that occurred before October 31, 2003) and prospective (claims arising from incidents that occurred on or after October 31, 2003) basis. For claims arising from incidents that occurred on or after November 1, 2006, but before November 1, 2009, the self-insured retention limits are: \$8 for MTA New York City Transit, MaBSTOA, MTA Bus, MTA Long Island Rail Road, and MTA Metro-North Railroad; \$2.3 for MTA Long Island Bus and MTA Staten Island Railway; and \$1.6 for MTAHQ and MTA Bridges and Tunnels. For claims arising from incidents that occurred on or after November 1, 2009, but before November 1, 2012, the self-insured retention limits are: \$9 for MTA New York City Transit, MaBSTOA, MTA Bus, MTA Long Island Rail Road and MTA Metro-North Railroad; \$2.6 for MTA Long Island Bus and MTA Staten Island Railway; and \$1.9 for MTAHQ and MTA Bridges and Tunnels. Effective October 31, 2015, the self-insured retention limits for ELF were increased to the following amounts: \$11 for MTA New York City Transit, MaBSTOA, MTA Bus, MTA Long Island Rail Road and MTA Metro-North Railroad; \$3.2 for MTA Staten Island Railway, MTAHQ and MTA Bridges and Tunnels. The maximum amount of claims arising out of any one occurrence is the total assets of the program available for claims, but in no event greater than \$50. The retrospective portion contains the same insurance agreements, participant retentions, and limits as existed under the ELF program for occurrences happening on or before October 30, 2003. On a prospective basis, FMTAC issues insurance policies indemnifying the other MTA Group entities above their specifically assigned self-insured retention with a limit of \$50 per occurrence with a \$50 annual aggregate. FMTAC charges appropriate annual premiums based on loss experience and exposure analysis to maintain the fiscal viability of the program. On September 30, 2018, the balance of the assets in this program was \$139.7.

MTA also maintains an All-Agency Excess Liability Insurance Policy that affords the MTA Group additional coverage limits of \$350 for a total limit of \$400 (\$350 excess of \$50). In certain circumstances, when the assets in the program described in the preceding paragraph are exhausted due to payment of claims, the All-Agency Excess Liability Insurance will assume the coverage position of \$50.

On March 1, 2018, the "nonrevenue fleet" automobile liability policy program was renewed. This program provides third-party auto liability insurance protection for the MTA Group with the exception of MTA New York City Transit, MTA Bus and MTA Bridges and Tunnels. The policy provides \$11 per occurrence limit with a \$0.5 per occurrence deductible for MTA Long Island Rail Road, MTA Staten Island Railway, MTA Police, MTA Metro-North Railroad, MTA Inspector General and MTA Headquarters. FMTAC renewed its deductible buy back policy, where it assumes the liability of the agencies for their deductible.

On March 1, 2018, the "Access-A-Ride" automobile liability policy program was renewed. This program

provides third-party auto liability insurance protection for the MTA New York City Transit's Access-A-Ride program, including the contracted operators. This policy provides a \$3 per occurrence limit with a \$1 per occurrence deductible.

On December 15, 2017, FMTAC renewed the primary coverage on the Station Liability and Force Account liability policies \$11 per occurrence loss for MTA Metro-North Railroad and MTA Long Island Rail Road.

Property Insurance — Effective May 1, 2018, FMTAC renewed the all-agency property insurance program. For the annual period commencing May 1, 2018, FMTAC directly insures property damage claims of the Related Entities in excess of a \$25 per occurrence deductible, subject to an annual \$75 aggregate deductible. The total program annual limit is \$800 per occurrence and in the annual aggregate for Flood and Earthquake covering property of the Related Entities collectively. FMTAC is reinsured in the domestic, Asian, London, European and Bermuda reinsurance markets for this coverage. Losses occurring after exhaustion of the deductible aggregate are subject to a deductible of \$7.5 per occurrence. The property insurance policy provides replacement cost coverage for all risks (including Earthquake, Flood and Wind) of direct physical loss or damage to all real and personal property, with minor exceptions. The policy also provides extra expense and business interruption coverage.

FMTAC's property insurance program has been expanded to include \$125 of fully collateralized earthquake coverage for an event of a certain index value and for storm surge coverage for losses from storm surges that surpass specified trigger levels in the New York Harbor or Long Island Sound and are associated with named storms that occur at any point in the three year period from May 23, 2017 to April 30, 2020. The expanded protection is reinsured by MetroCat Re Ltd. 2017-1, a Bermuda special purpose insurer independent from the MTA and formed to provide FMTAC with capital markets based property reinsurance. The MetroCat Re Ltd. 2017-1 reinsurance policy is fully collateralized by a Regulation 114 trust invested in U.S. Treasury Money Market Funds. The additional coverage provided is parametric and available for storm surge losses resulting from a storm that causes water levels that reach the specified index values, and also for an earthquake event of a certain index value.

With respect to acts of terrorism, FMTAC provides direct coverage that is reinsured by the United States Government for 82% of "certified" losses in 2018, 81% of "certified" losses in 2019 and 80% of "certified" losses in 2020, as covered by the Terrorism Risk Insurance Program Reauthorization Act ("TRIPRA") of 2015. The remaining 18% (2018), 19% (2019) and 20% (2020) of the Related Entities' losses arising from an act of terrorism would be covered under the additional terrorism policy described below. No federal compensation will be paid unless the aggregate industry insured losses exceed a trigger of \$160 in 2018, \$180 in 2019 and \$200 in 2020. The United States government's reinsurance is in place through December 31, 2020.

To supplement the reinsurance to FMTAC through the TRIPRA, MTA obtained an additional commercial reinsurance policy with various reinsurance carriers in the domestic, London and European marketplaces. That policy provides coverage for (1) 18% of any "certified" act of terrorism up to a maximum recovery of \$193.5 for any one occurrence and in the annual aggregate during 2018, 19% of any "certified" act of terrorism up to a maximum recovery of \$204.3 for any one occurrence and in the annual aggregate during 2019 and 20% of any "certified" act of terrorism up to a maximum recovery of \$215 for any one occurrence and in the annual aggregate during 2020 (2) the TRIPRA FMTAC captive deductible (per occurrence and on an aggregated basis) that applies when recovering under the "certified" acts of terrorism insurance or (3) 100% of any "certified" terrorism loss which exceeds \$5 and less than the \$160 TRIPRA trigger up to a maximum recovery of \$160 for any occurrence and in the annual aggregate during 2018, or 100% of any "certified" terrorism loss which exceeds \$5 and less than the \$180 TRIPRA trigger up to a maximum recovery of \$180 for any occurrence and in the annual aggregate during 2019 or 100% of any "certified" terrorism loss which exceeds \$5 and less than the \$200 TRIPRA trigger up to a maximum recovery of \$200 for any occurrence and in the annual aggregate during 2020.

Additionally, MTA purchases coverage for acts of terrorism which are not certified under TRIPRA to a maximum of \$193.5 in 2018, \$204.3 in 2019 and \$215 in 2020. Recovery under the terrorism policy is subject to a deductible of \$25 per occurrence and \$75 in the annual aggregate in the event of multiple losses during the policy year. Should the Related Entities' deductible in any one year exceed \$75 future losses in that policy year are subject to a deductible of \$7.5. The terrorism coverages expire at midnight on May 1, 2020.

Pension Plans — In accordance with the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, the MTA recognizes a net pension liability for each qualified pension plan in which it participates, which represents the excess of the total pension liability over the fiduciary net position of the qualified pension plan, or the MTA's proportionate share thereof in the case of a cost-sharing multiple-employer plan, measured as of the measurement date of each of the qualified pension plans. Changes in the net pension liability during the year are recorded as pension expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the year incurred. Those changes in net pension liability that are recorded as deferred inflows of resources or deferred outflows of resources that arise from changes in actuarial assumptions or other inputs and differences between expected or actual experience are amortized over the weighted average remaining service life of all participants in the respective qualified pension plan and recorded as a component of pension expense beginning with the year in which they are incurred. Projected earnings on qualified pension plan investments are recognized as a component of pension expense. Differences between projected and actual investment earnings are reported as deferred inflows of resources or deferred outflows of resources and amortized as a component of pension expense on a closed basis over a five-year period beginning with the year in which the difference occurred.

The GASB has not issued guidance on how to account for pension liabilities and related deferrals for interim financial reporting. The MTA has elected to record as pension expense the applicable first nine months of 2017 employer contributions made to the pension plans subsequent to the measurement of the net pension liability, which were recorded as deferred outflows for the year-ended December 31, 2017. In turn, any contributions made in the first nine months of 2018 were recorded as deferred outflows.

Postemployment Benefits Other Than Pensions — In June 2004, GASB issued Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This Statement established standards for the measurement, recognition, and display of OPEB expense/expenditures and related liabilities (assets), note disclosures, and if applicable, required supplementary information ("RSI") in the financial reports of state and local governmental employers. In June 2005, GASB issued Statement No. 47, *Accounting for Termination Benefits*. This statement established accounting standards for termination benefits. For termination benefits provided through an existing defined benefit OPEB plan, the provisions of this Statement should be implemented simultaneously with the requirements of GASB Statement No. 45. The MTA has adopted these standards for its Postemployment Benefits Other Than Pensions.

Premium Discount Amortization — During 2017, MTA Bridges and Tunnels changed its method of amortizing bond premiums and discounts to the constant yield method, which is a more preferable accounting principle than the principle used in previous years. The constant yield method of amortization is commonly used by state and local governments and public authorities and is the suggested method of amortization under GASB Codification 130, *Interest Costs-Imputation*. This change in method is accounted for on a prospective basis.

3. CASH AND INVESTMENTS

Cash - The Bank balances are insured up to \$250 thousand in the aggregate by the Federal Deposit Insurance Corporation ("FDIC") for each bank in which funds are deposited. Cash, including deposits in transit, consists of the following at September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018		December 31, 2017	
	Carrying Amount	Bank Balance	Carrying Amount	Bank Balance
	(Unaudited)			
FDIC insured or collateralized deposits	\$ 62	\$ 62	\$ 88	\$ 87
Uninsured and not collateralized	446	389	195	143
Total Balance	\$ 508	\$ 451	\$ 283	\$ 230

All collateralized deposits are held by the MTA or its agent in the MTA's name.

The MTA, on behalf of itself, its affiliates and subsidiaries, invests funds which are not immediately required for the MTA's operations in securities permitted by the New York State Public Authorities Law, including repurchase agreements collateralized by U.S. Treasury securities, U.S. Treasury notes, and U.S. Treasury zero coupon bonds.

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the MTA will not be able to recover the value of its deposits. While the MTA does not have a formal deposit policy for custodial credit risk, New York State statutes govern the MTA's investment policies. The MTA's uninsured and uncollateralized deposits are primarily held by commercial banks in the metropolitan New York area and are subject to the credit risks of those institutions.

Investments - MTA holds most of its investments at a custodian bank. The custodian must meet certain banking institution criteria enumerated in MTA's Investment Guidelines. The Investment Guidelines also require the Treasury Division to hold at least \$100 of its portfolio with a separate emergency custodian bank. The purpose of this deposit is in the event that the MTA's main custodian cannot execute transactions due to an emergency outside of the custodian's control, the MTA has an immediate alternate source of liquidity.

The MTA categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The MTA had the following recurring fair value measurements as of September 30, 2018 and December 31, 2017 (in millions):

Investments by fair value level	September 30, 2018	Fair Value Measurements		December 31, 2017	Fair Value Measurements	
		Level 1	Level 2		Level 1	Level 2
	(Unaudited)	(Unaudited)				
Debt Securities:						
U.S. treasury securities	\$ 3,642	\$ 3,072	\$ 570	\$ 4,333	\$ 4,053	\$ 280
U.S. government agency	587	236	351	387	144	243
Commercial paper	1,100	199	901	877	-	877
Asset-backed securities	41	-	41	39	-	39
Commercial mortgage-backed securities	60	-	60	30	-	30
Foreign bonds	4	4	-	9	9	-
Corporate bonds	132	132	-	149	149	-
Tax Benefit Lease Investments:						
U.S. treasury securities	174	174	-	177	177	-
U.S. government agency	107	-	107	114	-	114
Repurchase agreements	92	92	-	122	122	-
Money Market Funds	6	-	6	6	-	6
Total debt securities	5,945	3,909	2,036	6,243	4,654	1,589
Equity securities	-	-	-	25	25	-
Total investments by fair value level	5,945	\$ 3,909	\$ 2,036	6,268	\$ 4,679	\$ 1,589
Other	121			120		
Total Investments	\$ 6,066			\$ 6,388		

Investments classified as Level 1 of the fair value hierarchy, totaling \$3,909 and \$4,679 as of September 30, 2018 and December 31, 2017, respectively, are valued using quoted prices in active markets. Fair values include accrued interest to the extent that interest is included in the carrying amounts. Accrued interest on investments other than Treasury bills and coupons is included in other receivables on the statement of net position. The MTA's investment policy states that securities underlying repurchase agreements must have a fair value at least equal to the cost of the investment.

U.S. Government agency securities totaling \$458 and \$357, U.S. treasury securities totaling \$570 and \$280, commercial paper totaling \$901 and \$877, asset-backed securities totaling \$41 and \$39, commercial mortgage-backed securities totaling \$60 and \$30, and money market instruments totaling \$6 and \$6, as of September 30, 2018 and December 31, 2017, respectively, classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by a third party pricing service. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices and indices. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from a third party pricing service or our custodian bank.

In connection with certain lease transactions described in Note 8, the MTA has purchased securities or entered into payment undertaking, letter of credit, or similar type agreements or instruments (guaranteed investment contracts) with financial institutions, which generate sufficient proceeds to make basic rent and purchase option payments under the terms of the leases. If the obligors do not perform, the MTA may have an obligation to make the related rent payments.

All investments, other than the investments restricted for capital lease obligations, are either insured or registered and held by the MTA or its agent in the MTA's name. Investments restricted for capital lease obligations are either held by MTA or its agent in the MTA's name or held by a custodian as collateral for MTA's obligation to make rent payments under capital lease obligations. Investments had weighted average yields of 1.67% and 1.18% for the nine months ended September 30, 2018 and year ended December 31, 2017, respectively.

Credit Risk — At September 30, 2018 and December 31, 2017, the following credit quality rating has been assigned to MTA investments by a nationally recognized rating organization (in millions):

Quality Rating Standard & Poor's	September 30, 2018 (Unaudited)	Percent of Portfolio	December 31, 2017	Percent of Portfolio
A-1+	\$ 484	8%	\$ 336	5%
A-1	1,100	19%	869	14%
AAA	205	3%	101	2%
AA+	49	1%	53	1%
AA	11	0%	24	1%
A	77	1%	91	1%
BB	-	-	1	-
BBB	46	1%	43	1%
Not rated	98	2%	154	2%
U.S. Government	3,875	65%	4,571	73%
Total	5,945	100%	6,243	100%
Equities and capital leases	121		145	
Total investment	\$ 6,066		\$ 6,388	

Interest Rate Risk — Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice versa. Duration is an indicator of bond price's sensitivity to a 100 basis point change in interest rates.

(In millions)	September 30, 2018 (Unaudited)		December 31, 2017	
	Fair Value	Duration (in years)	Fair Value	Duration (in years)
U.S. Treasuries	\$ 3,642	2.93	\$ 4,333	2.19
Federal Agencies	587	5.53	387	4.15
Tax benefits lease investments	281	8.10	291	9.12
Repurchase agreement	92	-	122	-
Certificate of deposits	6	-	6	-
Commercial paper	1,100	-	877	0.04
Asset-backed securities ⁽¹⁾	41	1.81	39	1.08
Commercial mortgage-backed securities ⁽¹⁾	60	5.04	30	5.63
Foreign bonds ⁽¹⁾	4	6.80	9	-
Corporates ⁽¹⁾	132	4.45	149	5.27
Total fair value	5,945		6,243	
Modified duration		2.89		2.37
Equities ⁽¹⁾	-		25	
Total	5,945		6,268	
Investments with no duration reported	121		120	
Total investments	\$ 6,066		\$ 6,388	

⁽¹⁾These securities are only included in the FMTAC portfolio.

MTA is a public benefit corporation established under the New York Public Authorities Law. MTA's Treasury Division is responsible for the investment management of the funds of the component units. The investment activity covers all operating and capital funds, including bond proceeds, and the activity is governed by State statutes, bond resolutions and the Board-adopted investment guidelines (the "Investment Guidelines"). The MTA Act currently permits the Related Entities to invest in the following general types of obligations:

- obligations of the State or the United States Government;
- obligations of which the principal and interest are guaranteed by the State or the United States government;
- obligations issued or guaranteed by certain Federal agencies;
- repurchase agreements fully collateralized by the obligations of the foregoing United States Government and Federal agencies;
- certain certificates of deposit of banks or trust companies in the State;
- certain banker's acceptances with a maturity of 90 days or less;
- certain commercial paper;
- certain municipal obligations; and
- certain mutual funds up to \$10 in the aggregate.

MTA adopted NYS Statutory Requirements with respect to credit risk of its investments, which include, but are not limited to the following sections:

- Public Authorities Law Sections 1265(4) (MTA), 1204(19) (MTA New York City Transit Authority) and 553(21) (MTA Bridges and Tunnels);
- Public Authorities Law Section 2925 Investment of funds by public authorities and public benefit corporations; general provisions; and
- State Finance Law Article 15 – EXCELSIOR LINKED DEPOSIT ACT.

MTA Investment Guidelines limit the dollar amount invested in banker acceptances, commercial paper, and obligations issued or guaranteed by certain Federal agencies to \$250 at cost. There are no dollar limits on the purchase of obligations of the United States government, the State or obligations the principal and interest of which are guaranteed by the State or the United States government. Investments in collateralized repurchase agreements are limited by dealer or bank's capital. MTA can invest no greater than \$300 with a bank or dealer rated in Tier 1 (i.e. \$1 billion or more of capital).

FMTAC is created as a MTA subsidiary and is licensed as a captive direct insurer and reinsurer by the New York State Department of Insurance. As such, FMTAC is responsible for the investment management of its funds. The investment activity is governed by State statutes and the FMTAC Board adopted investment guidelines. The minimum surplus to policyholders and reserve instruments are invested in the following investments:

- obligations of the United States or any agency thereof provided such agency obligations are guaranteed as to principal and interest by the United States;
- direct obligations of the State or of any county, district or municipality thereof;
- any state, territory, possession or any other governmental unit of the United States;
- certain bonds of agencies or instrumentalities of any state, territory, possession or any other governmental unit of the United States;
- the obligations of a solvent American institution which are rated investment grade or higher (or the equivalent thereto) by a securities rating agency; and
- certain mortgage backed securities in amounts no greater than five percent of FMTAC's admitted assets.

FMTAC may also invest non-reserve instruments in a broader range of investments including the following general types of obligations:

- certain equities; and
- certain mutual funds.

FMTAC is prohibited from making the following investments:

- investment in an insolvent entity;
- any investment as a general partner; and
- any investment found to be against public policy.

FMTAC investment guidelines do include other investments, but FMTAC has limited itself to the above permissible investments at this time.

4. EMPLOYEE BENEFITS

Pensions — The MTA Related Groups sponsor and participate in several defined benefit pension plans for their employees, the Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan"), the Manhattan and Bronx Surface Transit Operating Authority Pension Plan (the "MaBSTOA Plan"), the Metro-North Commuter Railroad Company Cash Balance Plan (the "MNR Cash Balance Plan"), the Metropolitan Transportation Authority Defined Benefit Plan (the "MTA Defined Benefit Plan"), the New York City Employees' Retirement System ("NYCERS"), and the New York State and Local Employees' Retirement System ("NYSLERS"). A brief description of each of these pension plans follows:

Plan Descriptions

1. Additional Plan —

The Additional Plan is a single-employer defined benefit pension plan that provides retirement, disability and survivor benefits to members and beneficiaries. The Additional Plan covers MTA Long Island Rail Road employees hired effective July 1, 1971 and prior to January 1, 1988. The Additional Plan's activities, including establishing and amending contributions and benefits are administered by the Board of Managers of Pensions. The Additional Plan is a governmental plan and accordingly, is not subject to the funding and other requirements of the Employee Retirement Income Security Act of 1974 ("ERISA"). The Additional Plan is a closed plan.

The Board of Managers of Pensions is comprised of the Chairman of the MTA, MTA Chief Financial Officer, MTA Director of Labor Relations and the agency head of each participating Employer or the designee of a member of the Board of Managers. The Additional Plan for Additional Pensions may be amended by action of the MTA Board.

The pension plan has a separately issued financial statement that is publicly available and contains required descriptions and supplemental information regarding the employee benefit plan. The financial statements may be obtained at www.mta.info or by writing to, Long Island Rail Road, Controller, 93-02 Sutphin Boulevard – mail code 1421, Jamaica, New York 11435.

2. MaBSTOA Plan —

The MaBSTOA Plan is a single-employer defined benefit governmental retirement plan administered by MTA New York City Transit covering MaBSTOA employees, who are specifically excluded from NYCERS. The Plan provides retirement as well as death, accident and disability benefits. Effective January 1, 1999, in order to afford managerial and non-represented MaBSTOA employees the same pension rights as like title employees in MTA New York City Transit Authority, membership in the MaBSTOA Plan is optional.

The Board of Administration, established in 1963, determines the eligibility of employees and beneficiaries for retirement and death benefits. The MaBSTOA Plan assigns authority to the MaBSTOA Board to modify, amend or restrict the MaBSTOA Plan or to discontinue it altogether, subject, however, to the obligations under its collective bargaining agreements. The Board is composed of five members: two representatives from the Transport Workers Union, Local 100 (“TWU”) and three employer representatives.

The pension plan issues a publicly available financial report that includes financial statements and required supplementary information. This report may be obtained by writing to MTA Comptroller, 2 Broadway, 16th Floor, New York, New York, 10004 or at www.mta.info.

3. MNR Cash Balance Plan —

The MNR Cash Balance Plan is a single employer, defined benefit pension plan administered by MTA Metro-North Railroad. The MNR Cash Balance Plan covers non-collectively bargained employees, formerly employed by Conrail, who joined MTA Metro-North Railroad as management employees between January 1 and June 30, 1983, and were still employed as of December 31, 1988. Effective January 1, 1989, these management employees became covered under the Metro-North Commuter Railroad Defined Contribution Plan for Management Employees (the “Management Plan”) and the MNR Cash Balance Plan was closed to new participants. The assets of the Management Plan were merged with the Metropolitan Transportation Authority Defined Benefit Plan for Non-Represented Employees (now titled as the Metropolitan Transportation Authority Defined Benefit Pension Plan) as of the asset transfer date of July 14, 1995. The MNR Cash Balance Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) and 501(a) of the Internal Revenue Code. Accordingly, the MNR Cash Balance Plan is tax-exempt and is not subject to the provisions of ERISA.

The MTA Board of Trustees appoints a Board of Managers of Pensions consisting of five individuals who may, but need not, be officers or employees of the company. The Board of Managers control and manage the operation and administration of the MNR Cash Balance Plan’s activities, including establishing and amending contributions and benefits.

Further information about the MNR Cash Balance Plan is more fully described in the separately issued financial statements that can be obtained by writing to MTA Comptroller, 2 Broadway, 16th Floor, New York, New York, 10004. These statements are also available at www.mta.info.

4. MTA Defined Benefit Plan —

The MTA Defined Benefit Pension Plan (the “MTA Plan” or the “Plan”) is a cost sharing, multiple-employer defined benefit pension plan. The Plan covers certain MTA Long Island Rail Road non-represented employees hired after December 31, 1987, MTA Metro-North Railroad non-represented employees, certain employees of the former MTA Long Island Bus hired prior to January 23, 1983, MTA Police, MTA Long Island Rail Road represented employees hired after December 31, 1987, certain MTA Metro-North Railroad represented employees, MTA Staten Island Railway represented and non-represented employees and certain employees of the MTA Bus Company (“MTA Bus”). The MTA, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Staten Island Railway and MTA Bus contribute to the MTA Plan, which offers distinct retirement, disability retirement, and death benefit programs for their covered employees and beneficiaries.

The MTA Defined Benefit Plan is administered by the Board of Managers of Pensions. The MTA Plan, including benefits and contributions, may be amended by action of the MTA Board.

The pension plan issues a publicly available financial report that includes financial statements and required supplementary information. This report may be obtained by writing to the MTA Comptroller, 2 Broadway, 16th Floor, New York, New York, 10004 or at www.mta.info.

5. NYCERS —

NYCERS is a cost-sharing, multiple-employer retirement system for employees of The City of New York (“The City”) and certain other governmental units whose employees are not otherwise members of The City’s four other pension systems. NYCERS administers the New York City Employees Retirement System qualified pension plan.

NYCERS was established by an act of the Legislature of the State of New York under Chapter 427 of the Laws of 1920. NYCERS functions in accordance with the governing statutes contained in the New York State Retirement and Social Security Law (“RSSL”), and the Administrative Code of the City of New York (“ACNY”), which are the basis by which benefit terms and employer and member contribution requirements are established and amended. The head of the retirement system is the Board of Trustees.

NYCERS issues a publicly available comprehensive annual financial. This report may be obtained by writing to the New York City Employees’ Retirement System at 335 Adams Street, Suite 2300, Brooklyn, NY 11201-3724 or at www.nycers.org.

All employees of the Related Group holding permanent civil service positions in the competitive or labor class are required to become members of NYCERS six months after their date of appointment, but may voluntarily elect to join NYCERS prior to their mandated membership date. All other eligible employees have the option of joining NYCERS upon appointment or anytime thereafter. NYCERS members are assigned to a “tier” depending on the date of their membership.

- | | |
|--------|--|
| Tier 1 | All members who joined prior to July 1, 1973. |
| Tier 2 | All members who joined on or after July 1, 1973 and before July 27, 1976. |
| Tier 3 | Only certain members who joined on or after July 27, 1976 and prior to April 1, 2012 |
| Tier 4 | All members (with certain member exceptions) who joined on or after July 27, 1976 but prior to April 1, 2012. Members who joined on or after July 27, 1976 but prior to September 1, 1983 retain all rights and benefits of Tier 3 membership. |
| Tier 6 | Members who joined on or after April 1, 2012 |

6. NYSLERS —

NYSLERS is a cost-sharing, multiple-employer defined benefit retirement system. The New York State Comptroller’s Office administers the NYSLERS. The net position of NYSLERS is held in the New York State Common Retirement Fund (the “Fund”), which was established to hold all assets and record changes in fiduciary net position allocated to the plan. The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of NYSLERS. NYSLERS’ benefits are established under the provisions of the New York State RSSL. Once a public employer elects to participate in NYSLERS, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute.

NYSLERS is included in New York State’s financial report as a pension trust fund. This report may be found at www.osc.state.ny.us/retire/publications/index.php or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, NY 12244.

Pension legislation enacted in 1973, 1976, 1983, 2009 and 2012 established distinct classes of tier membership.

Tier 1	All members who joined prior to July 1, 1973.
Tier 2	All members who joined on or after July 1, 1973 and before July 27, 1976.
Tier 3	Generally, certain members who joined on or after July 27, 1976 but before January 1, 2010 and all other members who joined on or after July 27, 1976, but before September 1, 1983.
Tier 4	Generally, members (with certain member exceptions) who joined on or after September 1, 1983, but before January 1, 2010.
Tier 5	Members who joined on or after January 1, 2010, but before April 1, 2012.
Tier 6	Members who joined on or after April 1, 2012.

Benefits Provided

1. Additional Plan —

Pension Benefits — An employee who retires under the Additional Plan, either: (a) after completing at least 20 years of credited service, or (b) after both attaining age 65 while in service and completing at least five years of credited service, or in the case of those who were active employees on January 1, 1988, after completing at least 10 years of credited service, is entitled to an annual retirement benefit, payable monthly for life. Payments commence to an employee referred to in: (a) only after attaining age 50, or (b) only after attaining age 65.

Benefit and contribution provisions, which are based on the point in time at which participants last entered qualifying service and their length of credited service, are established by, and may only be amended by the MTA Long Island Rail Road, subject to the obligations of the MTA Long Island Rail Road under its collective bargaining agreements.

The Additional Plan has both contributory and non-contributory requirements, with retirement ages varying from 50 to 65 depending upon a participant's length of credited service. Pension benefits payable to age 65, where eligible, are calculated as 2% of the employee's applicable final average earnings for each year of qualifying service up to 25 years plus 1.5% of applicable final average earnings for each year of qualifying service in excess of 25 years. For pension benefits payable at and after age 65, regardless of whether benefits commenced before or after the employee attained age 65, benefits are calculated in the same manner as pension benefits payable prior to age 65 except that the amount so determined is reduced by a percentage of the employee's annuity (not including any supplemental annuity) value at age 65 under the Federal Railroad Retirement Act.

Participants who entered qualifying service before July 1, 1978 are not required to contribute. Participants who entered qualifying service on or after July 1, 1978, are required to contribute 3% of their wages. The MTA Long Island Rail Road contributes additional amounts based on actuarially determined amounts that are designed to accumulate sufficient assets to pay benefits when due.

Death and Disability Benefits — Participants who become disabled after accumulating 10 years of credited service and who meet the requirements as described in the Additional Plan receive a disability benefit. Disability pension benefits are calculated based on the participant's qualifying service and a percentage of final average compensation reduced by the full amount of benefit under the Federal Railroad Retirement Act. Survivorship benefits are paid to the participant's spouse when a survivorship option is elected or when an active participant has not divested his or her spouse of benefits. The survivorship benefit is payable at the time of death or when the vested participant would have attained an eligible age. The amount payable is in the form of an annuity. A lump sum death benefit no greater than five thousand dollars is payable upon death on behalf of a non-vested participant or vested participant whose pension rights were waived.

Retirement benefits establishment and changes for representative employees are collectively bargained and must be ratified by the respective union and the MTA Board. For non represented employees, amendments must be approved by the MTA Board.

2. *MaBSTOA Plan* —

The MaBSTOA Plan provides retirement as well as death, accident, and disability benefits. The benefits provided by the MaBSTOA Plan are generally similar to the benefits provided to MTA New York City Transit participants in NYCERS. Benefits vest after either 5, 10, or 20 years of credited service, depending on the date of membership.

In 2008, NYCERS had determined that Tier 4 employees are and have been eligible for a post retirement death benefit retroactive to 1986. In June 2012, the MTA Board approved an amendment to the MaBSTOA Plan to provide for incorporation of this benefit.

Tier 1 —

Eligibility and Benefit Calculation: Tier 1 members must be at least age 50 with the completion of 20 years of service to be eligible to collect a service retirement benefit. Generally, the benefit is 1.50% for service before March 1, 1962, plus 2.0% for service from March 1, 1962 to June 30, 1970, plus 2.5% for service after June 30, 1970. The accumulated percentage, up to a maximum of 50%, is multiplied by the member's compensation, which is the greater of earned salary during the year prior to retirement. Once the accumulated reaches 50%, the percentage for each further year of service reverts back to 1.5%. The percentage in excess of 50% is multiplied by the final compensation, which is the highest average earnings over five consecutive years.

Ordinary Disability Benefits — Generally, ordinary disability benefits, are provided to eligible Tier 1 members after ten years of service with the benefit equal to the greater of the service retirement percentages or 25% multiplied by final compensation.

Accidental Disability Benefits — The accidental disability benefit to eligible Tier 1 members is equal to 75% of final compensation reduced by 100% of any worker's compensation payments.

Ordinary Death Benefits — For Tier 1 members the amount of the death benefit is a lump sum equal to six months' pay for members with less than 10 years of service; a lump sum equal to a 12 months of pay for members with more than 10 but less than 20 years of service, and a lump sum equal to two times 12 months of pay for members with more than 20 years of service.

Tier 2 —

Eligibility and Benefit Calculation: Tier 2 members must be at least age 55 with the completion of 25 years of service to be eligible to collect a service retirement benefit. Generally, the benefit equals 50% of final 3-year average compensation, defined as the highest average earnings over three consecutive years, plus 1% of final 5-year average compensation, defined as the highest average earnings over five consecutive years, per year of credited service in excess of 20 years. For early retirement, members must be at least age 50 with the completion of at least 20 years of service. The benefit is determined in the same manner as the service retirement but not greater than 2.0% of final 3-year average compensation per year of service.

Ordinary Disability Benefits — Generally, ordinary disability benefits, are provided to eligible Tier 2 members after ten years of service with the benefit equal to the greater of the service retirement percentages or 25% multiplied by the final 5-year average compensation.

Accidental Disability Benefits — The accidental disability benefit to eligible Tier 2 members is equal to 75% of the final 5-year average compensation reduced by any worker's compensation payments.

Ordinary Death Benefits — Tier 2 members require the completion of 90 days of service to receive a lump sum equal to 3 times salary, raised to the next multiple of \$1,000 dollars.

Tiers 3, 4 —

Eligibility and Benefit Calculation: Tier 3 and 4 members in the Regular 62 and 5 Plan must be at least age 62 with the completion of at least 5 years of service to be eligible to collect a service retirement benefit. Generally, the benefit for members with at least 20 years of service, is equal to 2.0% of Final Average Compensation ("FAC") for the first 30 years of service plus 1.5% of FAC for years of service in excess of 30. FAC is defined as the highest average earnings over three consecutive years, of which earnings in a year cannot exceed 110% of the average of the two preceding years. If the member completes less than 20 years of credited service, the benefit equals 1- 2/3% of FAC multiplied by years of service. For early retirement, members must be at least age 55 with the completion of at least 5 years of service. The benefit equals the service retirement benefit reduced by 6% for each of the first two years prior to age 62, and by 3% for years prior to age 60.

Tier 3 and 4 members in the basic 55/25 Plan must be at least age 55 with the completion of at least 25 years of service, or be at least age 62 with the completion of at least 5 years of service, to be eligible to collect a service retirement benefit. Generally, the benefit for members with at least 25 years of service, is equal to 2.0% of FAC for the first 30 years of service plus 1.5% of FAC for years of service in excess of 30. If the member completes less than 25 years of credited service, the benefit equals 1- 2/3% of FAC multiplied by years of service.

Tier 4 members in the 57/5 Plan must be at least age 57 with the completion of at least 5 years of service to be eligible to collect a service retirement benefit. Generally, the benefit for members with at least 20 years of service, is equal to 2.0% of FAC for the first 30 years of service plus 1.5% of FAC for years of service in excess of 30. If the member completes less than 20 years of credited service, the benefit equals 1- 2/3% of FAC multiplied by years of service.

Ordinary and Accidental Disability Benefits — For eligible members of the Regular 62/5 Plan, 57/25 Plan and 57/5 Plan, ordinary and accidental disability benefits, are provided after 10 years of service for ordinary and no service required for accidental disability benefit. The benefit equals the greater of 1-2/3% of FAC per year of service and 1/3 of FAC.

Ordinary Death Benefits — For eligible members of the Regular 62/5 Plan, 55/25 Plan, 57/5 Plan, the pre-retirement ordinary death benefit is equal to a lump sum of annual salary times the lesser of completed years of service and 3. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest and one-half of accumulated additional member contributions with interest are also payable. Upon retirement, the post-retirement benefit is reduced by 50% and reduced an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.

Tier 6 —

Eligibility and Benefit Calculation: Tier 6 members in the 55/25 Special Plan must be at least age 55 with the completion of at least 25 years, or at least age 63 with the completion of at least 10 years of service, to be eligible to collect a service retirement benefit. Generally, the benefit for members with at least 25 years of service, is equal to 2.0% of Final Average Salary (“FAS”) for the first 30 years of service plus 1.5% of FAS for years of service in excess of 30. If the member completes less than 20 years of credited service, the benefit equals 1- 2/3% of FAS multiplied by years of service. FAS is defined as the highest average pensionable compensation over five consecutive years.

Tier 6 members in the Basic 63/10 Plan must be at least age 63 with the completion of at least 10 years to be eligible to collect a service retirement benefit. Generally, the benefit for members with at least 20 years of service, is equal to 35% of FAS plus 2.0% of FAS for years of service in excess of 20. If the member completes less than 20 years of credited service, the benefit equals 1-2/3% of FAS multiplied by years of service. FAS is defined as the highest average pensionable earnings over five consecutive years. For early retirement, members must be at least age 55 with the completion of at least 10 years of service. The benefit equals the service retirement benefit reduced by 6.5% for each year early retirement precedes age 63.

Ordinary and Accidental Disability Benefits — For eligible members of the 55/25 Special Plan and the Basic 63/10 Plan, ordinary and accidental disability benefits, are provided after 10 years of credited service for ordinary disability benefit. There is no service requirement for accidental disability benefit. The benefit equals the greater of 1-2/3% of FAS per year of service and 1/3 of FAS.

Ordinary Death Benefits — For eligible members of the 55/25 Special Plan and the Basic 63/10 Plan, the pre-retirement ordinary death benefit is equal to a lump sum of annual salary times the lesser of completed years of service and 3. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest and one-half of accumulated additional member contributions with interest are also payable. Upon retirement, the post-retirement benefit is reduced by 50% and reduced an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.

3. MNR Cash Balance Plan —

Pension Benefits — Participants of the MNR Cash Balance Plan are vested in their benefit upon the earlier of (a) the completion of 5 years of service with MTA Metro-North Railroad or (b) the attainment of age 62. The accrued benefit is a participant’s Initial Account Balance increased each month by the benefit escalator. The benefit escalator is defined as the Pension Benefit Guaranty Corporation (“PBGC”) immediate annuity rate in effect for December of the year preceding the year for which the determination is being made) divided by 180. The accrued benefit is paid as an escalating annuity. Vested participants are entitled to receive pension

benefits commencing at age sixty-five. Participants may elect to receive the value of their accumulated plan benefits as a lump-sum distribution upon retirement or they may elect a monthly life annuity. Participants may elect to receive their pension in the form of a joint and survivor annuity.

Participants of the MNR Cash Balance Plan are eligible for early retirement benefits upon termination of employment, the attainment of age 62, or age 60 and completion of 15 years of service, or age 55 and the completion of 30 years of service. The early retirement benefits paid is the normal retirement pension deferred to age 65 or an immediate pension equal to the life annuity actuarial equivalent of a participant's escalating annuity at normal retirement date indexed by the Initial Benefit Escalator from early retirement date to normal retirement date and reduced by 5/9 of 1% for each month retirement precedes age 65 up to 60 months and 5/18 of 1% for each month after 60 months.

For members with cash balances who are currently members of the Metropolitan Transportation Authority Defined Benefit Pension Plan, an additional benefit is provided equal to the amount needed to bring their total benefits (i.e., Railroad Retirement Tier I and II benefits, Conrail Plan benefits, Cash Balance Plan benefits, and MTA Defined Benefit Pension Plan benefits) up to a minimum of 65% of their 3-year final average pay under the MTA Defined Benefit Plan. In no event will the Additional Benefit exceed 2% of 3-year final average pay multiplied by the Conrail Management Service prior to July 1, 1983. This benefit is payable as a life annuity and is reduced for commencement prior to age 65 in the same manner as the regular cash balance benefit. This additional benefit is payable only in the form of a life annuity or 100% or 50% contingent annuity.

Death Benefits — Benefits are paid to vested participants' beneficiaries in the event of a participants' death. The amount of benefits payable is the participant's account balance at the date of his or her death. Pre-retirement death benefits paid for a participant's death after 55 is equal to the amount the spouse would have received had the participant elected retirement under the normal form of payment on the day preceding his death. Pre-retirement death benefits paid for a participant's death before 55 is equal to the amount the spouse would have received had the participant survived to age 55 and retired under the normal form of payment on that date. The benefit is based on service to the participant's date of death and is payable beginning on the date the participant would have attained age 55.

In lieu of the above benefit, the surviving spouse can elect to receive the participant's account balance in a single lump sum payment immediately. If the participant was not married, the participant's beneficiary is entitled to receive the participant's Account Balance as of the participant's date of death in a single lump sum payment.

4. MTA Defined Benefit Plan —

Pension Benefits — Retirement benefits are paid from the Plan to covered MTA Metro-North Railroad, MTA Staten Island Railway and post - 1987 MTA Long Island Rail Road employees as service retirement allowances or early retirement allowances. A participant is eligible for a service retirement allowance upon termination if the participant satisfied both age and service requirement. A participant is eligible for a service retirement allowance upon termination if the participant satisfied both age and service requirements. A participant is eligible for an early retirement allowance upon termination if the participant has attained age 55 and completed at least 10 years of credited service. Terminated participants with 5 or more years of credited service are eligible for a deferred vested benefit. Deferred vested benefits are payable on an unreduced basis on the first day of the month following the participant's 62nd birthday.

Certain represented employees of the MTA Long Island Rail Road and the MTA Metro-North Railroad continue to make contributions to the Plan for 15 years. Certain represented employees of the MTA Long Island Rail Road and the MTA Metro-North Railroad are eligible for an early retirement allowance upon termination if the participant has attained age 60 and completed at least 5 years of credited service, or has attained age 55 and completed at least 30 years of credited service. The early retirement allowance is reduced one-quarter of 1% per month for each full month that retirement predates age 60 for certain represented employees of the MTA Long Island Rail Road and the MTA Metro-North Railroad.

Effective in 2007, members and certain former members who become (or became) employed by another MTA agency which does not participate in the Plan continue to accrue service credit based on such other employment. Upon retirement, the member's vested retirement benefit from the Plan will be calculated on the final average salary of the subsequent MTA agency, if higher. Moreover, the Plan benefit will be reduced by the benefit, if any, payable by the other plan based on such MTA agency employment. Such member's disability and ordinary death benefit will be determined in the same way.

Retirement benefits are paid from the Plan under the MTA 20-Year Police Retirement Program. A participant is eligible for service retirement at the earlier of completing twenty years of credited Police service or

attainment of age 62. Terminated participants with five years of credited police service, who are not eligible for retirement, are eligible for a deferred benefit. Deferred vested benefits are payable on the first of the month following the participant's attainment of age 55.

Retirement benefits paid from the Plan to covered represented MTA Bus employees include service retirement allowances or early retirement allowances. Under the programs covering all represented employees at Baisley Park, Eastchester, LaGuardia, Spring Creek, and Yonkers Depots and the represented employees at College Point Depot, JFK, Far Rockaway a participant is eligible for a service retirement allowance upon termination if the participant has attained age sixty-five and completed at least five years of credited service or if the participant has attained age 57 and completed at least 20 years of credited service. A participant hired prior to June 2009 from Baisley Park, College Point, and La Guardia Depots is eligible for an early retirement allowance if the participant has attained age 55 and completed 20 years of credited service. Terminated participants with five or more years of credited service who are not eligible to receive a service retirement allowance or early retirement allowance are eligible for a deferred vested benefit. Deferred vested benefits are payable on an unreduced basis on or after the participant attains age 65.

At Baisley Park, Far Rockaway, JFK, LaGuardia and Spring Creek Depots, a participant who is a non-represented employee is eligible for an early retirement allowance upon termination if the participant has attained age 55 and completed 15 years of service. Terminated participants with five or more years of credited service who are not eligible to receive a service retirement allowance or early retirement allowance are eligible for a deferred vested benefit. Deferred vested benefits are payable on an unreduced basis on or after the participant attains age 62.

The MTA Bus retirement programs covering represented and non-represented employees at Eastchester and Yonkers and covering the represented employees at Baisley Park, College Point, Far Rockaway, JFK, LaGuardia and Spring Creek are fixed dollar plans, i.e., the benefits are a product of credited service and a specific dollar amount.

The retirement benefits for certain non-represented employees at Baisley Park, Far Rockaway, JFK, LaGuardia and Spring Creek are based on final average salary. Certain participants may elect to receive the retirement benefit as a single life annuity or in the form of an unreduced 75% joint and survivor benefit.

Pre-1988 MTA Long Island Rail Road participants are eligible for a service retirement allowance upon termination if the participants has either: (a) attained age sixty-five and completed at least five years of credited service, or if an employee on January 1, 1988 completed at least 10 years of credited service, or (b) attained age fifty and has completed at least 20 years of credited service. Terminated participants who were not employees on January 1, 1988 with five or more years of credited service are eligible for a deferred vested benefit. Pension benefits payable to age 65, where eligible, are calculated as 2% of the employee's applicable final average earnings for each year of qualifying service up to 25 years plus 1.5% of applicable final average earning of each year of qualifying service in excess of 25 years. For pension benefits payable at and after age 65 regardless of whether benefits commenced before or after the employee attained age 65, benefits are calculated in the same manner as pension benefits payable prior to age 65 except that the amount so determined is reduced by a percentage of the employee's annuity (not including supplemental annuity) value at age 65 under the Federal Railroad Retirement Act. The reduction of pension benefits for amounts payable under the Federal Railroad Retirement Act is 50%.

Death and Disability Benefits — In addition to service retirement benefits, participants of the Plan are eligible to receive disability retirement allowances and death benefits. Participants who become disabled may be eligible to receive disability retirement allowances after 10 years of covered MTA Bus service; 10 years of credited service for covered MTA Metro-North Railroad and MTA Long Island Rail Road management and represented employees, covered MTA Staten Island Railway employees and covered MTA police participants.

The disability retirement allowance for covered MTA Metro-North Railroad and MTA Long Island Rail Road management and represented covered MTA Staten Island Railway employees is calculated based on the participant's credited service and final average salary ("FAS") but not less than $\frac{1}{3}$ of FAS. Under the MTA 20 Year Police Retirement Program, a disabled participant may be eligible for one of three forms of disability retirement: (a) ordinary disability which is payable if a participant has ten years of credited Police service and is calculated based on the participant's credited Police service and FAS but not less than $\frac{1}{3}$ of FAS; (b) performance of duty, which is payable if a participant is disabled in the performance of duty and is $\frac{1}{2}$ of FAS, and (c) accidental disability, which is payable if a participant is disabled as the result of an on-the-job accidental injury and is $\frac{3}{4}$ of FAS subject to an offset of Workers' Compensation benefits. Pursuant to the MTA Bus programs, the disability benefit is the same as the service retirement benefit.

Pre -1988 MTA Long Island Rail Road participants who become disabled after accumulating 10 years of credited service and who meet the requirements as described in the Plan may be eligible to receive a disability benefit. Disability pension benefits are based on the participant's qualified service and a percentage of final average compensation reduced by the full amount of the disability benefit under the Federal Railroad Retirement Act. Survivorship benefits for pre-1988 MTA Long Island Rail Road participants are paid to the spouse when a survivorship option is elected or when an active participant has not divested their spouse of benefits.

The survivorship benefit is payable at the time of death or when the vested participant would have attained an eligible age. The amount payable is in the form of an annuity. A lump sum death benefit no greater than \$5,000 (whole dollars) is payable upon death on behalf of a non-vested participant or vested participant whose pension rights were waived.

Death benefits are paid to the participant's beneficiary in the event of the death of a covered MTA Metro-North Railroad, post-1987 MTA Long Island Rail Road or MTA Staten Island Railway employee after completion of one year of credited service. The death benefit payable is calculated based on a multiple of a participant's salary based on years of credited service up to three years and is reduced beginning at age 61. There is also a post-retirement death benefit which, in the 1st year of retirement, is equal to 50% of the pre-retirement death benefit amount, whichever is greater, 25% the 2nd year and 10% of the death benefit payable at age 60 for the 3rd and later years. For the Police 20 Year Retirement Program, the death benefit is payable after ninety days of credited MTA Police service, and is equal to three times their salary. For non-Police groups, this death benefit is payable in a lump sum distribution while for Police, the member or the beneficiary can elect to have it paid as an annuity. The MTA Police do not have a post retirement benefit.

In the MSBA Employees' Pension Plan, there are special spousal benefits payable upon the death of a participant who is eligible for an early retirement benefit, or a normal service retirement benefit, or who is a vested participant or vested former participant. To be eligible, the spouse and participant must have been married at least one year at the time of death. Where the participant was eligible for an early service retirement benefit or was a vested participant or former participant, the benefit is a pension equal to 40% of the benefit payable to the participant as if the participant retired on the date of death. Where the participant was eligible for a normal service retirement benefit, the eligible spouse can elect either the benefit payable as a pension, as described in the prior sentence, or a lump sum payment based on an actuarially determined pension reserve. If there is no eligible spouse for this pension reserve benefit, a benefit is payable to the participant's beneficiary or estate.

Moreover, an accidental death benefit is payable for the death of a participant who is a covered MTA Metro-North Railroad or post-1987 MTA Long Island Rail Road employee, a covered MTA Staten Island Railway employee or a covered MTA Police member and dies as the result of an on-the-job accidental injury. This death benefit is paid as a pension equal to 50% of the participant's salary and is payable to the spouse for life, or, if none, to children until age eighteen (or twenty-three, if a student), or if none, to a dependent parent.

For MTA Bus employees, there is varied death benefit coverage under the Plan. For all represented and non-represented MTA Bus employees at Eastchester and Yonkers Depots and represented MTA Bus employees at Baisley Park, College Point, Far Rockaway, JFK, Laguardia and Spring Creek Depots, if a participant dies prior to being eligible for a retirement benefit, the participant's beneficiary may elect to receive a refund of the participant's contributions plus interest.

Moreover, the spouses of the above employees who are vested are entitled to a presumed retirement survivor annuity which is based on a 50% Joint and Survivor annuity. The date as of which such annuity is determined and on which it commences varies among the different programs depending on whether the participants are eligible for retirement and for payment of retirement benefits.

In addition, the spouse of a non-represented MTA Bus employee at Spring Creek, JFK, Laguardia, Baisley Park and Far Rockaway, if such employee is age 55 and has 15 years of service and is a terminated member with a vested benefit which is not yet payable, may elect the presumed retirement survivor annuity or 1/2 the participant's accrued benefit paid monthly and terminating on the 60th payment or the spouse's death. The spouse of a non-represented MTA Bus employee at Yonkers Depot may also receive a pre-retirement survivor annuity from the supplemental plan. If there is no such spouse, the actuarial equivalent of such annuity is payable.

Dependent children of MTA Bus employees are also entitled to an annuity based on the spouse's pre-retirement survivor annuity (1/2 of the spouse's annuity is payable to each child, but no more than 100% of the spouse's annuity is payable). In addition, the dependent children of retirees who were MTA Bus employees at these Depots are entitled to an annuity based on the presumed retirement survivor's annuity

(25% of the spouse's annuity; but no more than 50% of the spouse's annuity is payable).

Retirement benefits establishment and changes for represented employees are collectively bargained and must be ratified by the respective union and the MTA Board. For non represented employees, retirement benefits establishment and changes are presented to the MTA Board and must be accepted and approved by the MTA Board.

5. NYCERS —

NYCERS provides three main types of retirement benefits: Service Retirements, Ordinary Disability Retirements (non-job-related disabilities) and Accident Disability Retirements (job-related disabilities) to participants generally based on salary, length of service, and member Tiers.

The Service Retirement benefits provided to Tier 1 participants fall into four categories according to the level of benefits provided and the years of service required. Three of the four categories provide annual benefits of 50% to 55% of final salary after 20 or 25 years of service, with additional benefits equal to a specified percentage per year of service (currently 1.2% to 1.7%) of final salary. The fourth category has no minimum service requirement and instead provides an annual benefit for each year of service equal to a specified percentage (currently 0.7% to 1.53%) of final salary.

Tier 2 participants have provisions similar to Tier 1, except that the eligibility for retirement and the salary base for benefits are different and there is a limitation on the maximum benefit.

Tier 3 participants were later mandated into Tier 4, but could retain their Tier 3 rights. The benefits for Tier 3 participants are reduced by one half of the primary Social Security benefit attributable to service, and provides for an automatic annual cost-of-living escalator in pension benefits of not more than 3.0%.

Tier 4 participants upon satisfying applicable eligibility requirements may be mandated or elected, as applicable, into the Basic 62/5 Retirement Plan, the 57/5 Plan, the 55/25 Plan, the Transit 55/25 Plan, the MTA Triborough Bridge and Tunnel Authority 50/20 Plan, and the Automotive Member 25/50 Plan. These plans provide annual benefits of 40% to 50% of final salary after 20 or 25 years of service, with additional benefits equal to a specified percentage per year of service (currently 1.5% to 2%) of final salary.

Chapter 18 of the Laws of 2012 created Tier 6. These changes increase the retirement age to 63, require member contributions for all years of service, institute progressive member contributions, and lengthen the final average salary period from 3 to 5 years.

NYCERS also provides automatic Cost-of-Living Adjustments ("COLA") for certain retirees and beneficiaries, death benefits; and certain retirees also receive supplemental benefits. Subject to certain conditions, members generally become fully vested as to benefits upon the completion of 5 years of service.

6. NYSLERS —

NYSLERS provides retirement benefits as well as death and disability benefits. Members who joined prior to January 1, 2010 need 5 years of service to be fully vested. Members who joined on or after January 1, 2010 need 10 years of service to be fully vested.

Tiers 1 and 2 —

Eligibility: Tier 1 members generally must be at least age 55 to be eligible for a retirement benefit. There is no minimum service requirement for Tier 1 members. Generally, Tier 2 members must have 5 years of service and be at least age 55 to be eligible for a retirement benefit. The age at which full benefits may be collected for Tier 1 is 55, and the full benefit age for Tier 2 is 62.

Benefit Calculation: Generally, the benefit is 1.67% of final average salary for each year of service if the member retires with less than 20 years. If the member retires with 20 or more years of service, the benefit is 2 percent of final average salary for each year of service. Tier 2 members with five or more years of service can retire as early as age 55 with reduced benefits. Tier 2 members age 55 or older with 30 or more years of service can retire with no reduction in benefits. As a result of Article 19 of the RSSL, Tier 1 and Tier 2 members who worked continuously from April 1, 1999 through October 1, 2000 received an additional month of service credit for each year of credited service they have at retirement, up to a maximum of 24 additional months. Final average salary is the average of the wages earned in the three highest consecutive years of employment. For Tier 1 members who joined on or after June 17, 1971, each year's compensation used in the final average salary calculation is limited to no more than 20 percent greater than the previous year. For Tier 2 members, each year of final average salary is limited to no more than 20 percent greater than the average of the previous two years.



Tiers 3, 4, and 5 —

Eligibility: Most Tier 3 and 4 members must have 5 years of service and be at least age 55 to be eligible for a retirement benefit. Tier 5 members, must have 10 years of service and be at least age 55 to be eligible to collect a retirement benefit. The full benefit age for Tiers 3, 4 and 5 is 62.

Benefit Calculation: Generally, the benefit is 1.67% of final average salary for each year of service if the member retires with less than 20 years. If a member retires with between 20 and 30 years of service, the benefit is 2 percent of final average salary for each year of service. If a member retires with more than 30 years of service, an additional benefit of 1.5% of final average salary is applied for each year of service over 30 years. Tier 3 and 4 members with five or more years of service and Tier 5 members with 10 or more years of service can retire as early as age 55 with reduced benefits. Tier 3 and 4 members age 55 or older with 30 or more years of service can retire with no reduction in benefits. Final average salary is the average of the wages earned in the three highest consecutive years of employment. For Tier 3, 4 and 5 members, each year's compensation used in the final average salary calculation is limited to no more than 10% greater than the average of the previous two years.

Tier 6 —

Eligibility: Generally, Tier 6 members must have 10 years of service and be at least age 55 to be eligible to collect a retirement benefit. The full benefit age for Tier 6 is 63.

Benefit Calculation: Generally, the benefit is 1.67% of final average salary for each year of service if the member retires with less than 20 years. If a member retires with 20 years of service, the benefit is 1.75% of final average salary for each year of service. If member retires with more than 20 years of service, an additional benefit of 2% of final average salary is applied for each year of service over 20 years. Tier 6 members with 10 or more years of service can retire as early as age 55 with reduced benefits. Final average salary is the average of the wages earned in the five highest consecutive years of employment. For Tier 6 members, each year's compensation used in the final average salary calculation is limited to no more than 10% greater than the average of the previous four years.

Disability Benefits— Generally, disability retirement benefits are available to members unable to perform their job duties because of permanent physical or mental incapacity. There are three general types of disability benefits: ordinary, performance of duty, and accidental disability benefits. Eligibility, benefit amounts, and other rules such as any offsets of other benefits depend on a member's tier, years of service, and plan. Ordinary disability benefits, usually one-third of salary, are provided to eligible members after ten years of service; in some cases, they are provided after five years of service. For all eligible Tier 1 and Tier 2 members, the accidental disability benefit is a pension of 75 percent of final average salary, with an offset for any Workers' Compensation benefits received. The benefit for eligible Tier 3, 4, 5 and 6 members is the ordinary disability benefit with the years-of-service eligibility requirement dropped.

Ordinary Death Benefits — Death benefits are payable upon the death, before retirement, of a member who meets eligibility requirements as set forth by law. The first \$50,000 (whole dollars) of an ordinary death benefit is paid in the form of group term life insurance. The benefit is generally three times the member's annual salary. For most members, there is also a reduced post-retirement ordinary death benefit available.

Post-Retirement Benefit Increases — A cost-of-living adjustment is provided annually to: (i) all pensioners who have attained age 62 and have been retired for five years; (ii) all pensioners who have attained age 55 and have been retired for ten years; (iii) all disability pensioners, regardless of age, who have been retired for five years; (iv) recipients of an accidental death benefit, regardless of age, who have been receiving such benefit for five years and (v) the spouse of a deceased retiree receiving a lifetime benefit under an option elected by the retiree at retirement. An eligible spouse is entitled to one-half the cost-of-living adjustment amount that would have been paid to the retiree when the retiree would have met the eligibility criteria. This cost-of-living adjustment is a percentage of the annual retirement benefit of the eligible member as computed on a base benefit amount not to exceed \$18,000 (whole dollars) of the annual retirement benefit. The cost-of-living percentage shall be 50 percent of the annual Consumer Price Index as published by the U.S. Bureau of Labor, but cannot be less than 1 percent or exceed 3 percent.

Membership

As of January 1, 2017, January 1, 2016 and January 1, 2015, the dates of the most recent actuarial valuations, membership data for the following pension plans are as follows:

Membership at:	January 1, 2017	January 1, 2016			TOTAL
	MNR Cash Balance Plan	Additional Plan	MaBSTOA Plan	MTA Defined Benefit Plan	
Active Plan Members	4	216	8,617	17,670	26,507
Retirees and beneficiaries receiving benefits	27	5,900	5,468	10,701	22,096
Vested formerly active members not yet receiving benefits	13	38	998	1,439	2,488
Total	44	6,154	15,083	29,810	51,091

Membership at:	January 1, 2016	January 1, 2015			TOTAL
	MNR Cash Balance Plan	Additional Plan	MaBSTOA Plan	MTA Defined Benefit Plan	
Active Plan Members	7	282	8,122	17,156	25,567
Retirees and beneficiaries receiving benefits	27	5,985	5,394	11,382	22,788
Vested formerly active members not yet receiving benefits	14	53	1,054	1,417	2,538
Total	48	6,320	14,570	29,955	50,893

Contributions and Funding Policy

1. Additional Plan —

Employer contributions are actuarially determined on an annual basis and are recognized when due. The Additional Plan is a defined benefit plan administered by the Board of Pension Managers and is a governmental plan and accordingly, is not subject to the funding and other requirements of ERISA.

Upon termination of employment before retirement, vested participants who have been required to contribute must choose to: (1) receive a refund of their own contributions, including accumulated interest at rates established by the MTA Long Island Rail Road's Board of Managers of Pensions (1.5% in 2016 and 2015), or (2) leave their contributions in the Additional Plan until they retire and become entitled to the pension benefits. Non-vested participants who have been required to contribute will receive a refund of their own contributions, including accumulated interest at rates established by the MTA Long Island Rail Road's Board of Managers of Pensions (1.5% in 2016 and 2015).

Funding for the Additional Plan by the MTA Long Island Rail Road is provided by MTA. Certain funding by MTA is made to the MTA Long Island Rail Road on a discretionary basis. The continuance of the MTA Long Island Rail Road's funding for the Additional Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

2. MaBSTOA Plan —

The contribution requirements of MaBSTOA Plan members are established and may be amended only by the MaBSTOA Board in accordance with Article 10.01 of the MaBSTOA Plan. MaBSTOA's funding policy for periodic employer contributions is to provide for actuarially determined amounts that are designed to accumulate sufficient assets to pay benefits when due. It is MaBSTOA's policy to fund, at a minimum, the current year's normal pension cost plus amortization of the unfunded actuarial accrued liability.

The MaBSTOA Pension Plan includes the following plans, including the 2000 amendments which are all under the same terms and conditions as NYCERS:

- i. Tier 1 and 2 - Basic Plans;
- ii. Tier 3 and 4 - 55 and 25 Plan;
- iii. Tier 3 and 4 - Regular 62 and 5 Plan;
- iv. Tier 4 - 57 and 5 Plan
- v. Tier 6 - 55 and 25 Special Plan
- vi. Tier 6 - Basic 63 and 10 Plan

For employees, the MaBSTOA Plan has both contributory and noncontributory requirements depending on the date of entry into service. Employees entering qualifying service on or before July 26, 1976, are non contributing (Tiers 1 and 2). Certain employees entering qualifying service on or after July 27, 1976, are required to contribute 3% of their salary (Tiers 3 and 4).

In March 2012, pursuant to Chapter 18 of the Laws of 2012, individuals joining NYCERS or the MaBSTOA Pension Plan on or after April 1, 2012 are subject to the provisions of Tier 6. The highlights of Tier 6 include:

- Increases in employee contribution rates. The rate varies depending on salary, ranging from 3% to 6% of gross wages. Contributions are made until retirement or separation from service.
- The retirement age increases to 63 and includes early retirement penalties, which reduce pension allowances by 6.5 percent for each year of retirement prior to age 63.
- Vesting after 10 years of credited service; increased from 5 years of credited service under Tier 3 and Tier 4.
- Adjustments of the Pension Multiplier for calculating pension benefits (excluding Transit Operating Employees): the multiplier will be 1.75% for the first 20 years of service, and 2% starting in the 21st year; for an employee who works 30 years, their pension will be 55% of Final Average Salary under Tier 4, instead of 60% percent under Tier 4.
- Adjustments to the Final Average Salary Calculation; the computation changed from an average of the final 3 years to an average of the final 5 years. Pensionable overtime will be capped at \$15,000 dollars per year plus an inflation factor.
- Pension buyback in Tier 6 will be at a rate of 6% of the wages earned during the period of buyback, plus 5% compounded annually from the date of service until date of payment.

Pursuant to Section 7.03 of the MaBSTOA Plan, active plan members are permitted to borrow up to 75% of their contributions with interest. Their total contributions and interest remain intact and interest continues to accrue on the full balance. The participant's accumulated contribution account is used as collateral against the loan.

3. MNR Cash Balance Plan —

Funding for the MNR Cash Balance Plan is provided by MTA Metro-North Railroad, a public benefit corporation that receives funding for its operations and capital needs from the MTA and the Connecticut Department of Transportation ("CDOT"). Certain funding by MTA is made to the MTA Metro-North Railroad on a discretionary basis. The continuance of funding for the MNR Cash Balance Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

MTA Metro-North Railroad's funding policy with respect to the MNR Cash Balance Plan was to contribute the full amount of the pension benefit obligation ("PBO") of approximately \$2,977 to the trust fund in 1989. As participants retire, the Trustee has made distributions from the MNR Cash Balance Plan. MTA Metro-North Railroad anticipated that no further contributions would be made to the MNR Cash Balance Plan. However, due to changes in actuarial assumptions and market performance, additional contributions were made to the MNR Cash Balance Plan in several subsequent years.

4. MTA Defined Benefit Plan —

Employer contributions are actuarially determined on an annual basis. Amounts recognized as receivables for contributions include only those due pursuant to legal requirements. Employee contributions to the MTA Defined Benefit Plan are recognized in the period in which the contributions are due. There are no contributions required under the Metropolitan Suburban Bus Authority Employee's Pension Plan.

The following summarizes the employee contributions made to the MTA Defined Benefit Plan:

Effective January 1, 1994, covered MTA Metro-North Railroad and MTA Long Island Rail Road non-represented employees are required to contribute to the MTA Plan to the extent that their Railroad Retirement Tier II employee contribution is less than the pre-tax cost of the 3% employee contributions. Effective October 1, 2000, employee contributions, if any, were eliminated after ten years of making contributions to the MTA Plan. MTA Metro-North Railroad employees may purchase prior service from January 1, 1983 through December 31, 1993 and MTA Long Island Rail Road employees may purchase prior service from January 1, 1988 through December 31, 1993 by paying the contributions that would have been required of that employee for the years in question, calculated as described in the first sentence, had the MTA Plan been in effect for those years.

Police Officers who become participants of the MTA Police Program prior to January 9, 2010 contribute to that program at various rates. Police Officers who become participants on or after January 9, 2010, but before April 1, 2012 contribute 3% up to the completion of 30 years of service, the maximum amount of service credit allowed. Police Officers who become participants on or after April 1, 2012 contribute 3%, with additional new rates starting April 2013, ranging from 3.5%, 4.5%, 5.75%, to 6%, depending on salary level, for their remaining years of service.

Covered MTA Metro-North Railroad represented employees and MTA Long Island Rail Road represented employees who first became eligible to be MTA Plan participants prior to January 30, 2008 contribute 3% of salary. MTA Staten Island Railway employees contribute 3% of salary except for represented employees hired on or after June 1, 2010 who contribute 4%. MTA Long Island Rail Road represented employees who became participants after January 30, 2008 contribute 4% of salary. For the MTA Staten Island Railway employees, contributions are not required after the completion of ten years of credited service. MTA Long Island Rail Road represented employees are required to make the employee contributions for ten years, or fifteen years if hired after certain dates in 2014 as per collective bargaining agreements. Certain Metro-North represented employees, depending on their collective bargaining agreements, are required to make the employee contributions until January 1, 2014, January 1, 2017, June 30, 2017, or the completion of required years of credited service as per the relevant collective bargaining agreements.

Covered MTA Bus represented employees and certain non-represented employees are required to contribute a fixed dollar amount, which varies, by depot. Currently, non-represented employees at certain Depots, contribute \$21.50 (whole dollars) per week. Non-represented employees at Eastchester hired prior to 2007 contribute \$25 (whole dollars) per week. Represented employees at Baisley Park, College Point, Eastchester, Far Rockaway, JFK, LaGuardia and Yonkers Depots contribute \$29.06 (whole dollars) per week; Spring Creek represented employees contribute \$32.00 (whole dollars) per week. Certain limited number of represented employees promoted prior to the resolution of a bargaining impasse continue to participate in the MTA Defined Benefit Plan that was in effect before their promotion. Certain MTA Bus non-represented employees who are formerly employed by the private bus companies (Jamaica, Green, Triboro and Command) at Baisley Park, Far Rockaway, JFK, LaGuardia and Spring Creek Depots who are in the pension program covering only such employees make no contributions to the program. (Note: the dollar figures in this paragraph are in dollars, not in millions of dollars).

MTA Bus is required to make significant annual contributions to the MTA Plan on a current basis. Pursuant to the January 1, 2014 and January 1, 2013 actuarial valuations for the MTA Plan, which included amounts for actuarial assets and liabilities relating to both active and retired members for most portions of the former private plans (excepting, for example, members of the Transport Workers Union—New York City Private Bus Lines Pension Trust who were working on school bus routes which did not become part of MTA Bus service), MTA Bus recorded pension expense equal to the valuation annual required contribution of \$44.3 and \$45.9 for the years ended December 31, 2016 and 2015, respectively. Both of these employer contributions were paid to the MTA Plan in their respective years.

5. NYCERS —

NYCERS funding policy is to contribute statutorily-required contributions (“Statutory Contributions”), determined by the Chief Actuary for the New York City Retirement Systems, in accordance with State statutes and City laws, and are generally funded by employers within the appropriate Fiscal Year. The Statutory Contributions are determined under the One-Year Lag Methodology (“OYLM”). Under OYLM, the actuarial valuation date is used for calculating the Employer Contributions for the second following Fiscal Year. Statutory Contributions are determined annually to be an amount that, together with member contributions and investment income, provides for NYCERS’ assets to be sufficient to pay benefits when due.

Member contributions are established by law. NYCERS has both contributory and noncontributory requirements, with retirement age varying from 55 to 70 depending upon when an employee last entered qualifying service.

In general, Tier 1 and Tier 2 member contribution rates are dependent upon the employee’s age at membership and retirement plan election. In general, Tier 3 and Tier 4 members make basic contributions of 3.0% of salary, regardless of age at membership. Effective October 1, 2000, in accordance with Chapter 126 of the Laws of 2000, these members, except for certain Transit Authority employees enrolled in the Transit 20-Year Plan, are not required to make basic contributions after the 10th anniversary of their membership date or completion of ten years of credited service, whichever is earlier. In addition, members who meet certain eligibility requirements will receive one month’s additional service credit for each completed year of service up to a maximum of two additional years of service credit. Effective December 2000, certain Transit Authority Tier 3 and Tier 4 members make basic member contributions of 2.0% of salary, in accordance with Chapter 10 of the Laws of 2000. Certain Tier 2, Tier 3 and Tier 4 members who are participants in special retirement plans are required to make additional member contributions of 1.85%, in addition to their base membership contribution. Tier 6 members are mandated to contribute between 3.0% and 6.0% of salary, depending on salary level, until they separate from City service or until they retire.

NYCERS established a “special program” for employees hired on or after July 26, 1976. A plan for employees, who have worked 20 years, and reached age 50, is provided to Bridge and Tunnel Officers, Sergeants and Lieutenants and Maintainers. Also, an age 57 retirement plan is available for all other such MTA Bridges and Tunnels employees. Both of these plans require increased employee contributions.

Certain retirees also receive supplemental benefits from MTA Bridges and Tunnels. Certain participants are permitted to borrow up to 75% of their own contributions including accumulated interest. These loans are accounted for as reductions in such participants’ contribution accounts. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions, including accumulated interest, less any outstanding loan balances.

MTA New York City Transit and MTA Bridges and Tunnels are required to contribute at an actuarially determined rate. The contribution requirements of plans members, MTA New York City Transit and MTA Bridges and Tunnels are established and amended by law.

6. NYSLERS —

Employer Contributions - Under the authority of the RSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers’ contributions based on salaries paid during the NYSLERS fiscal year ending June 30.

Member Contributions - NYSLERS is noncontributory except for employers who joined the plan after July 27, 1976. Generally, Tier 3, 4, and 5 members must contribute 3% of their salary to NYSLERS. As a result of Article 19 of the RSSL, eligible Tier 3 and 4 employees, with a membership date on or after July 27, 1976, who have ten or more years of membership or credited service with NYSLERS, are not required to contribute. Members cannot be required to begin making contributions or to make increased contributions beyond what was required when membership began. For Tier 6 members, the contribution rate varies from 3% to 6% depending on salary. Generally, Tier 5 and 6 members are required to contribute for all years of service.

MTAHQ, MTA Capital Construction and MTA Long Island Bus are required to contribute at an actuarially determined rate.

A summary of the aggregate actual contributions made to each pension plan and the respective contribution rates as a percent of covered payroll for the years ended December 31, 2017 and 2016 are as follows:

Year-ended December 31, (\$ in millions)	2017		2016	
	Actual Employer Contributions	Contributions as a percentage of covered payroll	Actual Employer Contributions	Contributions as a percentage of covered payroll
Additional Plan	\$ 221.5	1080.62%	\$ 151.1	515.49%
MaBSTOA Plan	202.7	27.04%	220.7	30.80%
MNR Cash Balance Plan	- *	0.00%	- *	2.68%
MTA Defined Benefit Plan	321.9	17.33%	280.8	15.73%
NYCERS	800.9	21.25%	797.9	22.64%
NYSLERS	14.0	13.46%	13.0	13.69%
Total	<u>\$ 1,561.0</u>		<u>\$ 1,463.5</u>	

*MNR Cash Balance Plan's actual employer contribution for the years ended December 31, 2017 and 2016 was \$0 thousand and \$23 thousand, respectively.

Net Pension Liability

The MTA's net pension liabilities for each of the pension plans reported at December 31, 2017 and 2016 were measured as of the fiscal year-end dates for each respective pension plan. The total pension liabilities used to calculate those net pension liabilities were determined by actuarial valuations as of each pension plan's valuation date, and rolled forward to the respective year-ends for each pension plan. Information about the fiduciary net position of each qualified pension plan's fiduciary net position has been determined on the same basis as reported by each respective qualified pension plan. For this purpose, benefits and refunds are recognized when due and payable in accordance with the terms of the respective qualified pension plan, and investments are reported at fair value. The following table provides the measurement and valuation dates used by each pension plan to calculate the MTA's aggregate net pension liability.

Year-ended December 31, Pension Plan	2017		2016	
	Plan Measurement Date	Plan Valuation Date	Plan Measurement Date	Plan Valuation Date
Additional Plan	December 31, 2016	January 1, 2016	December 31, 2015	January 1, 2015
MaBSTOA Plan	December 31, 2016	January 1, 2016	December 31, 2015	January 1, 2015
MNR Cash Balance Plan	December 31, 2016	January 1, 2017	December 31, 2015	January 1, 2016
MTA Defined Benefit Plan	December 31, 2016	January 1, 2016	December 31, 2015	January 1, 2015
NYCERS	June 30, 2017	June 30, 2015	June 30, 2016	June 30, 2014
NYSLERS	March 31, 2017	April 1, 2016	March 31, 2016	April 1, 2015

Pension Plan Fiduciary Net Position

Detailed information about the fiduciary net position of the Additional Plan, MaBSTOA Plan, MNR Cash Balance Plan, MTA Defined Benefit Plan, NYCERS plan and the NYSLERS plan is available in the separately issued pension plan financial reports for each respective plan.

Actuarial Assumptions

The total pension liabilities in each pension plan's actuarial valuation dates were determined using the following actuarial assumptions for each pension plan, applied to all periods included in the measurement date:

Valuation Date:	Additional Plan		MaBSTOA Plan		MNR Cash Balance Plan	
	January 1, 2016	January 1, 2015	January 1, 2016	January 1, 2015	January 1, 2017	January 1, 2016
Investment Rate of Return	7.00% per annum, net of investment expenses.	7.00% per annum, net of investment expenses.	7.00% per annum, net of investment expenses.	7.00% per annum, net of investment expenses.	4.00% per annum, net of investment expenses.	4.00% per annum, net of investment expenses.
Salary Increases	3.00%	3.00%	Reflecting general wage, merit and promotion increases of 3.5% for operating employees and 4.0% for non-operating employees per year. Larger increases are assumed in the first 5 years of a member's career.	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 15.0% for operating employees and 4.0% to 7.0% for non-operating employees per year, depending on years of service.	Not applicable	Not applicable
Inflation	2.50%; 3.50% for Railroad Retirement Wage Base.	2.50%; 3.50% for Railroad Retirement Wage Base.	2.50%.	2.50%.	2.30%	2.30%
Cost-of Living Adjustments	Not applicable	Not applicable	1.375% per annum.	1.375% per annum.	Not applicable	Not applicable
Valuation Date:	MTA Defined Benefit Plan		NYCERS		NYSLERS	
	January 1, 2016	January 1, 2015	June 30, 2015	June 30, 2014	April 1, 2016	April 1, 2015
Investment Rate of Return	7.00% per annum, net of investment expenses.	7.00% per annum, net of investment expenses.	7.00% per annum, net of expenses.	7.00% per annum, net of expenses.	7.00% per annum, including inflation, net of investment expenses.	7.50% per annum, including inflation, net of investment expenses.
Salary Increases	Varies by years of employment, and employee group; 3.0% General Wage Increases for TWU MTA Bus hourly employees.	Varies by years of employment, and employee group; 3.5% for MTA Bus hourly employees.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	3.80% in ERS, 4.5% in PFRS	3.8% in ERS, 4.5% in PFRS
Inflation	2.50%; 3.50% for Railroad Retirement Wage Base.	2.50%; 3.00% for Railroad Retirement Wage Base.	2.50%	2.50%	2.50%	2.50%
Cost-of Living Adjustments	55% of inflation assumption or 1.375%, if applicable.	55% of inflation assumption or 1.375%, if applicable.	1.5% per annum for Tiers 1, 2, 4 and certain Tier 3 and Tier 6 retirees. 2.5% per annum for certain Tier 3 and Tier 6 retirees.	1.5% per annum for Tiers 1, 2, 4 and certain Tier 3 and Tier 6 retirees. 2.5% per annum for certain Tier 3 and Tier 6 retirees.	1.30% per annum.	1.30% per annum.

Mortality

Additional Plan / MaBSTOA Plan/ MNR Cash Balance Plan and MTA Defined Benefit Plan:

The actuarial assumptions used in the January 1, 2017, 2016, and 2015 valuations for the MTA plans are based on January 1, 2006 through December 31, 2011 experience study dated June 5, 2014. Mortality assumption is based on a 2012 experience study for all MTA plans. The pre-retirement and post-retirement healthy annuitant rates are projected on a generational basis using Scale AA, as recommended by the Society of Actuaries Retirement Plans Experience Committee. As generational tables, they reflect mortality improvements both before and after the measurement date.

Pre-retirement: The MTA plans utilized RP-2000 Employee Mortality Table for Males and Females with Blue collar adjustments.

Post-retirement Healthy Lives: Assumption utilized 95% of RP-2000 Healthy Annuitant mortality table for males with Blue Collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.

Post-retirement Disabled Lives: Assumption utilized 75% of the rates from the RP-2000 Disabled Annuitant mortality table for males and females. At age 85 and later for males and age 77 and later for females, the disability rates are set to the male and female healthy rates, respectively. This assumption was not applicable for the Additional Plan and the MNR Cash Balance Plan.

NYCERS:

Pursuant to Section 96 of the New York City Charter, an independent actuarial firm conducts studies of the actuarial assumptions used to value liabilities of the NYCERS pension plan every two years. In accordance, with the Administrative Code of the City of New York ("ACNY"), the Board of Trustees of NYCERS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

Mortality tables for service and disability pensioners were developed from experience studies of the NYCERS Plan. The mortality tables for beneficiaries were developed from an experience review.

The actuarial assumptions used in the June 30, 2015 and June 30, 2014 valuations are based, in part, on the GRS report, on published studies of mortality improvement, and on input from the NYC's outside consultants and auditors, the Actuary proposed, and the Board of Trustees of NYCERS adopted, new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement are based primarily on the experience of NYCERS and the application of the Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015. Scale MP-2015 replaced Mortality Improvement Scale AA.

NYSLERS:

The actuarial assumptions used in the April 1, 2016 and April 1, 2015 valuations are based on the results of an actuarial experience study for the period April 1, 2010 through March 31, 2015. The annuitant mortality rates are based on the results of the 2015 experience study of the period April 1, 2010 through March 31, 2015, with adjustments for mortality improvement based on the Society of Actuaries' Scale MP-2014.

Expected Rate of Return on Investments

The long-term expected rate of return on pension plan investments for each pension plan is presented in the following table.

Pension Plan	Plan Measurement Date	Rate
Additional Plan	December 31, 2016	7.00%
MaBSTOA Plan	December 31, 2016	7.00%
MNR Cash Balance Plan	December 31, 2016	4.00%
MTA Defined Benefit Plan	December 31, 2016	7.00%
NYCERS	June 30, 2017	7.00%
NYSLERS	March 31, 2017	7.00%

For the Additional Plan, MaBSTOA Plan, MNR Cash Balance Plan, MTA Defined Benefit Plan, NYCERS plan and NYSLERS plan, the long-term expected rate of return on investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation of each of the funds and the expected real rate of returns (“RROR”) for each of the asset classes are summarized in the following tables for each of the pension plans:

Asset Class	Additional Plan		MaBSTOA Plan	
	Target Asset Allocation	Long - Term Expected Real Rate of Return	Target Asset Allocation	Long - Term Expected Real Rate of Return
US Core Fixed Income	10.00%	1.67%	10.00%	1.67%
US High Yield Bonds	8.00%	5.04%	8.00%	5.04%
Global Bonds	10.00%	0.28%	10.00%	0.28%
Emerging Markets Bonds	3.00%	3.78%	3.00%	3.78%
US Large Caps	10.00%	4.80%	10.00%	4.80%
US Small Caps	5.50%	6.06%	5.50%	6.06%
Global Equity	10.00%	5.49%	10.00%	5.49%
Foreign Developed Equity	10.00%	6.06%	10.00%	6.06%
Emerging Markets Equity	3.50%	8.39%	3.50%	8.39%
Global REITs	5.00%	5.77%	5.00%	5.77%
Private Real Estate Property	3.00%	3.64%	3.00%	3.64%
Private Equity	7.00%	8.99%	7.00%	8.99%
Hedge Funds - MultiStrategy	15.00%	3.45%	15.00%	3.45%
	<u>100.00%</u>		<u>100.00%</u>	
Assumed Inflation - Mean		2.50%		2.50%
Assumed Inflation - Standard Deviation		1.85%		1.85%
Portfolio Nominal Mean Return		7.03%		7.03%
Portfolio Standard Deviation		11.54%		11.54%
Long Term Expected Rate of Return selected by MTA		7.00%		7.00%

Asset Class	MTA Defined Benefit Plan		MNR Cash Balance Plan	
	Target Asset Allocation	Long - Term Expected Real Rate of Return	Target Asset Allocation	Long - Term Expected Real Rate of Return
US Core Fixed Income	10.00%	1.67%	100.00%	1.17%
US High Yield Bonds	8.00%	5.04%		
Global Bonds	10.00%	0.28%		
Emerging Markets Bonds	3.00%	3.78%		
US Large Caps	10.00%	4.80%		
US Small Caps	5.50%	6.06%		
Global Equity	10.00%	5.49%		
Foreign Developed Equity	10.00%	6.06%		
Emerging Markets Equity	3.50%	8.39%		
Global REITs	5.00%	5.77%		
Private Real Estate Property	3.00%	3.64%		
Private Equity	7.00%	8.99%		
Hedge Funds - MultiStrategy	15.00%	3.45%		
	<u>100.00%</u>		<u>100.00%</u>	
Assumed Inflation - Mean		2.50%		2.50%
Assumed Inflation - Standard Deviation		1.85%		1.85%
Portfolio Nominal Mean Return		7.03%		3.69%
Portfolio Standard Deviation		11.54%		4.55%
Long Term Expected Rate of Return selected by MTA		7.00%		4.00%

Asset Class	NYCERS		NYSLERS	
	Target Asset Allocation	Long - Term Expected Real Rate of Return	Target Asset Allocation	Long - Term Expected Real Rate of Return
U.S. Public Market Equities	29.00%	5.70%	36.00%	4.55%
International Public Market Equities	13.00%	6.10%	14.00%	6.35%
Emerging Public Market Equities	7.00%	7.60%	0.00%	0.00%
Private Market Equities	7.00%	8.10%	10.00%	7.75%
Fixed Income	33.00%	3.00%	17.00%	1.31%
Alternatives (Real Assets, Hedge Funds)	11.00%	4.70%	3.00%	5.54%
Real Estate			10.00%	5.80%
Absolute Return Strategies			2.00%	4.00%
Opportunistic Portfolio			3.00%	5.89%
Cash			1.00%	-0.25%
Inflation-indexed Bonds			4.00%	1.50%
	<u>100.00%</u>		<u>100.00%</u>	
Assumed Inflation - Mean		2.50%		2.50%
Long Term Expected Rate of Return		7.00%		7.00%

Discount rate

The discount rate used to measure the total pension liability of each pension plan is presented in the following table:

Year ended December 31,	Discount Rate			
	2017		2016	
Pension Plan	Plan Measurement Date	Rate	Plan Measurement Date	Rate
Additional Plan	December 31, 2016	7.00%	December 31, 2015	7.00%
MaBSTOA Plan	December 31, 2016	7.00%	December 31, 2015	7.00%
MNR Cash Balance Plan	December 31, 2016	4.00%	December 31, 2015	4.00%
MTA Defined Benefit Plan	December 31, 2016	7.00%	December 31, 2015	7.00%
NYCERS	June 30, 2017	7.00%	June 30, 2016	7.00%
NYSLERS	March 31, 2017	7.00%	March 31, 2016	7.00%

The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the rates applicable for each pension plan and that employer contributions will be made at the rates determined by each pension plan's actuary. Based on those assumptions, each pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current and inactive plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability – Additional Plan, MaBSTOA Plan, MNR Cash Balance Plan and the MTA Defined Benefit Plan

Changes in the MTA's net pension liability for the Additional Plan, MaBSTOA Plan, MNR Cash Balance Plan and the MTA Defined Benefit Plan for the year ended December 31, 2017, based on the December 31, 2016 measurement date, and for the year ended December 31, 2016, based on the December 31, 2015 measurement date, were as follows:

	Additional Plan			MaBSTOA Plan		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(in thousands)					
Balance as of December 31, 2015	\$ 1,562,251	\$ 726,198	\$ 836,053	\$ 3,391,989	\$ 2,292,316	\$ 1,099,673
Changes for fiscal year 2016:						
Service Cost	2,752	-	2,752	82,075	-	82,075
Interest on total pension liability	104,093	-	104,093	236,722	-	236,722
Effect of economic /demographic (gains) or losses	15,801	-	15,801	13,784	-	13,784
Benefit payments	(158,593)	(158,593)	-	(187,823)	(187,823)	-
Administrative expense	-	(611)	611	-	(186)	186
Member contributions	-	884	(884)	-	18,472	(18,472)
Net investment income	-	58,239	(58,239)	-	212,259	(212,259)
Nonemployer contributions	-	70,000	(70,000)	-	-	-
Employer contributions	-	81,100	(81,100)	-	220,697	(220,697)
Balance as of December 31, 2016	<u>\$ 1,526,304</u>	<u>\$ 777,217</u>	<u>\$ 749,087</u>	<u>\$ 3,536,747</u>	<u>\$ 2,555,735</u>	<u>\$ 981,012</u>

	Additional Plan			MaBSTOA Plan		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(in thousands)					
Balance as of December 31, 2014	\$ 1,602,159	\$ 782,852	\$ 819,307	\$ 3,331,464	\$ 2,265,293	\$ 1,066,171
Changes for fiscal year 2015:						
Service Cost	3,441	-	3,441	77,045	-	77,045
Interest on total pension liability	106,987	-	106,987	232,405	-	232,405
Effect of economic /demographic (gains) or losses	6,735	-	6,735	(68,997)	-	(68,997)
Benefit payments	(157,071)	(157,071)	-	(179,928)	(179,928)	-
Administrative expense	-	(1,218)	1,218	-	(88)	88
Member contributions	-	1,108	(1,108)	-	16,321	(16,321)
Net investment income	-	527	(527)	-	(24,163)	24,163
Employer contributions	-	100,000	(100,000)	-	214,881	(214,881)
Balance as of December 31, 2015	<u>\$ 1,562,251</u>	<u>\$ 726,198</u>	<u>\$ 836,053</u>	<u>\$ 3,391,989</u>	<u>\$ 2,292,316</u>	<u>\$ 1,099,673</u>

	MNR Cash Balance Plan			MTA Defined Benefit Plan		
	Total Pension	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	Liability			Liability		
	(in thousands)					
Balance as of December 31, 2015	\$ 634	\$ 612	\$ 22	\$ 4,364,946	\$ 3,074,777	\$ 1,290,169
Changes for fiscal year 2016:						
Service Cost	-	-	-	138,215	-	138,215
Interest on total pension liability	24	-	24	308,009	-	308,009
Effect of plan changes	-	-	-	73,521	-	73,521
Effect of economic / demographic (gains) or losses	(15)	-	(15)	86,809	-	86,809
Effect of assumption changes or inputs	-	-	-	-	-	-
Benefit payments	(77)	(77)	-	(209,623)	(209,623)	-
Administrative expense	-	-	-	-	(3,051)	3,051
Member contributions	-	-	-	-	29,392	(29,392)
Net investment income	-	16	(16)	-	247,708	(247,708)
Employer contributions	-	23	(23)	-	280,768	(280,768)
Balance as of December 31, 2016	<u>\$ 566</u>	<u>\$ 574</u>	<u>\$ (8)</u>	<u>\$ 4,761,877</u>	<u>\$ 3,419,971</u>	<u>\$ 1,341,906</u>

	MNR Cash Balance Plan			MTA Defined Benefit Plan		
	Total Pension	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	Liability			Liability		
	(in thousands)					
Balance as of December 31, 2014	\$ 710	\$ 698	\$ 12	\$ 4,099,738	\$ 3,065,220	\$ 1,034,518
Changes for fiscal year 2015:						
Service Cost	-	-	-	124,354	-	124,354
Interest on total pension liability	29	-	29	288,820	-	288,820
Effect of plan changes	-	-	-	6,230	-	6,230
Effect of economic / demographic (gains) or losses	(10)	-	(10)	121,556	-	121,556
Effect of assumption changes or inputs	18	-	18	(76,180)	-	(76,180)
Benefit payments	(113)	(113)	-	(199,572)	(199,572)	-
Administrative expense	-	3	(3)	-	(1,962)	1,962
Member contributions	-	-	-	-	34,519	(34,519)
Net investment income	-	6	(6)	-	(45,122)	45,122
Employer contributions	-	18	(18)	-	221,694	(221,694)
Balance as of December 31, 2015	<u>\$ 634</u>	<u>\$ 612</u>	<u>\$ 22</u>	<u>\$ 4,364,946</u>	<u>\$ 3,074,777</u>	<u>\$ 1,290,169</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the MTA's net pension liability calculated for the Additional Plan, MaBSTOA Plan, MNR Cash Balance Plan and the MTA Defined Benefit Plan using the discount rate as of each measurement date, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the actual discount rate used for each measurement date:

Measurement Date:	December 31, 2016			December 31, 2015		
	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
	(in thousands)			(in thousands)		
Additional Plan	\$ 871,350	\$ 749,087	\$ 642,973	\$ 963,427	\$ 836,053	\$ 725,673
MaBSTOA Plan	1,376,916	981,012	643,826	1,480,961	1,099,673	775,092
MTA Defined Benefit Plan	1,936,639	1,341,906	840,176	1,835,699	1,290,169	830,112
	1% Decrease (3.0%)	Discount Rate (4.0%)	1% Increase (5.0%)	1% Decrease (3.5%)	Discount Rate (4.5%)	1% Increase (5.5%)
	(in whole dollars)			(in whole dollars)		
MNR Cash Balance Plan	\$ 25,200	\$ (7,899)	\$ (37,092)	\$ 60,689	\$ 21,847	\$ (12,361)

The MTA's Proportion of Net Pension Liability – NYCERS and NYSLERS

The following table presents the MTA's proportionate share of the net pension liability of NYCERS based on the June 30, 2015 and June 30, 2014 actuarial valuations, rolled forward to June 30, 2017 and June 30, 2016, respectively, and the proportion percentage of the aggregate net pension liability allocated to the MTA:

	NYCERS	
	June 30, 2017	June 30, 2016
	(\$ in thousands)	
MTA's proportion of the net pension liability	24.096%	23.493%
MTA's proportionate share of the net pension liability	\$ 5,003,811	\$ 5,708,052

The following table presents the MTA's proportionate share of the net pension liability of NYSLERS based on the April 1, 2016 and April 1, 2015 actuarial valuations, rolled forward to March 31, 2017 and March 31, 2016, respectively, and the proportion percentage of the aggregate net pension liability allocated to the MTA:

	NYSLERS	
	March 31, 2017	March 31, 2016
	(\$ in thousands)	
MTA's proportion of the net pension liability	0.311%	0.303%
MTA's proportionate share of the net pension liability	\$ 29,239	\$ 48,557

The MTA's proportion of each respective Plan's net pension liability was based on the MTA's actual required contributions made to NYCERS for the plan's fiscal year-end June 30, 2017 and 2016 and to NYSLERS for the plan's fiscal year-end March 31, 2017 and 2016, relative to the contributions of all employers in each plan.

Sensitivity of the MTA's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the MTA's proportionate share of the net pension liability for NYCERS and NYSLERS calculated using the discount rate as of each measurement date, as well as what the proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the actual discount rate used as of each measurement date (\$ in thousands):

Measurement Date:	June 30, 2017			June 30, 2016		
	1% Decrease	Discount Rate	1% Increase	1% Decrease	Discount Rate	1% Increase
	(6.0%)	(7.0%)	(8.0%)	(6.0%)	(7.0%)	(8.0%)
NYCERS	\$ 7,231,780	\$ 5,003,811	\$ 3,046,531	\$ 7,826,325	\$ 5,708,052	\$ 3,933,870

Measurement Date:	March 31, 2017			March 31, 2016		
	1% Decrease	Discount Rate	1% Increase	1% Decrease	Discount Rate	1% Increase
	(6.0%)	(7.0%)	(8.0%)	(6.0%)	(7.0%)	(8.0%)
NYSLERS	\$ 93,385	\$ 29,239	\$ (24,995)	\$ 109,494	\$ 48,557	\$ (2,931)

Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the nine-month period ended September 30, 2018 and year ended December 31, 2017, the MTA recognized pension expense related to each pension plan as follows (in \$ thousands):

Pension Plan	September 30, 2018 (Unaudited)	December 31, 2017
Additional Plan	\$ 45,750	\$ 84,583
MaBSTOA Plan	143,988	156,302
MNR Cash Balance plan	-	(10)
MTA Defined Benefit Plan	239,274	346,535
NYCERS	577,710	595,905
NYSLERS	10,479	17,486
Total	\$ 1,017,201	\$ 1,200,801

For the nine-month period ended September 30, 2018 and year ended December 31, 2017, the MTA reported deferred outflow of resources and deferred inflow of resources for each pension plan as follows (in \$ thousands):

For the Period Ended September 30, 2018 (Unaudited)	Additional Plan		MaBSTOA Plan		MNR Cash Balance Plan		MTA Defined Benefit Plan	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ -	\$ 11,663	\$ 47,891	\$ -	\$ -	\$ 167,897	\$ -
Changes in assumptions	-	-	-	-	-	-	-	56,647
Net difference between projected and actual earnings on pension plan investments	32,500	-	88,414	-	20	4	171,591	-
Changes in proportion and differences between contributions and proportionate share of contributions	-	-	-	-	-	-	6,386	6,386
Employer contributions to the plan subsequent to the measurement of net pension liability	221,523	-	205,401	-	-	-	318,433	-
Total	<u>\$ 254,023</u>	<u>\$ -</u>	<u>\$ 305,478</u>	<u>\$ 47,891</u>	<u>\$ 20</u>	<u>\$ 4</u>	<u>\$ 664,307</u>	<u>\$ 63,033</u>

For the Period Ended September 30, 2018 (Unaudited)	NYCERS		NYSLERS		TOTAL	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ 133,514	\$ 733	\$ 4,440	\$ 180,293	\$ 185,845
Changes in assumptions	246,670	-	9,989	-	256,659	56,647
Net difference between projected and actual earnings on pension plan investments	-	204,459	5,840	-	298,365	204,463
Changes in proportion and differences between contributions and proportionate share of contributions	119,738	26,449	2,631	132	128,755	32,967
Employer contributions to the plan subsequent to the measurement of net pension liability	403,722	-	13,969	-	1,163,048	-
Total	<u>\$ 770,130</u>	<u>\$ 364,422</u>	<u>\$ 33,162</u>	<u>\$ 4,572</u>	<u>\$ 2,027,120</u>	<u>\$ 479,922</u>

**For the Year Ended
December 31, 2017**

	Additional Plan		MaBSTOA Plan		MNR Cash Balance Plan		MTA Defined Benefit Plan	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ -	\$ 11,663	\$ 47,891	\$ -	\$ -	\$ 167,897	\$ -
Changes in assumptions	-	-	-	-	-	-	-	56,647
Net difference between projected and actual earnings on pension plan investments	32,500	-	88,414	-	20	4	171,591	-
Changes in proportion and differences between contributions and proportionate share of contributions	-	-	-	-	-	-	6,386	6,386
Employer contributions to the plan subsequent to the measurement of net pension liability	221,523	-	202,684	-	-	-	321,860	-
Total	<u>\$ 254,023</u>	<u>\$ -</u>	<u>\$ 302,761</u>	<u>\$ 47,891</u>	<u>\$ 20</u>	<u>\$ 4</u>	<u>\$ 667,734</u>	<u>\$ 63,033</u>

**For the Year Ended
December 31, 2017**

	NYCERS		NYSLERS		TOTAL	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ 133,514	\$ 733	\$ 4,440	\$ 180,293	\$ 185,845
Changes in assumptions	246,670	-	9,989	-	256,659	56,647
Net difference between projected and actual earnings on pension plan investments	-	204,459	5,840	-	298,364	204,463
Changes in proportion and differences between contributions and proportionate share of contributions	119,738	26,449	2,631	132	128,755	32,967
Employer contributions to the plan subsequent to the measurement of net pension liability	419,367	-	13,969	-	1,179,403	-
Total	<u>\$ 785,775</u>	<u>\$ 364,422</u>	<u>\$ 33,162</u>	<u>\$ 4,572</u>	<u>\$ 2,043,474</u>	<u>\$ 479,922</u>

The annual differences between the projected and actual earnings on investments are amortized over a five-year closed period beginning the year in which the difference occurs.

The following table presents the recognition periods used by each pension plan to amortize the annual differences between expected and actual experience, changes in proportion and differences between employer contributions and proportionate share of contributions, and changes in actuarial assumptions, beginning the year in which the deferred amount occurs.

Pension Plan	Recognition Period (in years)		
	Differences between expected and actual experience	Changes in proportion and differences between employer contributions and proportionate share of contributions	Changes in actuarial assumptions
Additional Plan	1.00	N/A	N/A
MaBSTOA Plan	6.50	N/A	6.30
MNR Cash Balance Plan	1.00	N/A	1.00
MTA Defined Benefit Plan	8.10	8.10	7.80
NYCERS	5.60	5.60	3.33
NYSLERS	5.00	5.00	5.00

For the nine-month period ended September 30, 2018 and year ended December 31, 2017, \$1,163.0 and \$1,179.4 were reported as deferred outflows of resources related to pensions resulting from the MTA's contributions subsequent to the measurement date which will be recognized as a reduction of the net pension liability in the year ending December 31, 2018 and December 31, 2017, respectively. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at September 30, 2018 will be recognized as pension expense as follows:

	Additional Plan	MaBSTOA Plan	MNR Cash Balance plan	MTA Defined Benefit Plan	NYCERS	NYSLERS	Total
	(in thousands)						
Year Ending December 31:							
2018	\$ 12,591	\$ 26,605	\$ 4	\$ 82,465	\$ (16,688)	\$ 6,271	\$ 111,248
2019	12,591	26,605	4	82,465	157,042	6,271	284,978
2020	8,890	17,892	6	62,958	(9,102)	5,797	86,441
2021	(1,572)	(18,811)	2	11,047	(137,250)	(3,718)	(150,302)
2022	-	(1,165)	-	16,746	7,984	-	23,565
Thereafter	-	1,060	-	27,160	-	-	28,220
	<u>\$ 32,500</u>	<u>\$ 52,186</u>	<u>\$ 16</u>	<u>\$ 282,841</u>	<u>\$ 1,986</u>	<u>\$ 14,621</u>	<u>\$ 384,150</u>

Deferred Compensation Program

Description - The Deferred Compensation Program consists of two defined contribution plans that provide benefits based solely on the amount contributed to each participant's account(s), plus or minus any income, expenses and gains/losses. The Deferred Compensation Program is comprised of the Deferred Compensation Plan For Employees of the Metropolitan Transportation Authority ("MTA"), its Subsidiaries and Affiliates ("457 Plan") and the Thrift Plan For Employees of the Metropolitan Transportation Authority, its Subsidiaries and Affiliates ("401(k) Plan"). Certain MTA Related Groups employees are eligible to participate in both deferred compensation plans. Both Plans are designed to have participant charges, including investment and other fees, cover the costs of administering the Deferred Compensation Program.

Participation in the 401(k) Plan is now available to non-represented employees and, after collective bargaining, most represented employees. All amounts of compensation deferred under the 401(k) Plan, and all income attributable to such compensation, less expenses and fees, are held in trust for the exclusive benefit of the participants and their beneficiaries. Accordingly, the 401(k) Plan is not reflected in the accompanying consolidated statements of net position.

The Deferred Compensation Program is administered and may be amended by the Deferred Compensation Committee.

As the Deferred Compensation Program's asset base and contribution flow increased, participants' investment options were expanded by the Deferred Compensation Committee with the advice of its Financial Advisor to provide greater diversification and flexibility. In 1988, after receiving an IRS determination letter for the 401(k) Plan, the MTA offered its managers the choice of either participating in the 457 Plan or the 401(k) Plan. By 1993, the MTA offered eight investment funds: a Guaranteed Interest Account Fund, a Money Market Fund, a Common Stock Fund, a Managed Fund, a Stock Index Fund, a Government Income Fund, an International Fund and a Growth Fund.

In 1998, the Deferred Compensation Committee approved the unbundling of the Plans. In 2008, the Plans' investment choices were restructured to set up a four-tier strategy:

- Tier 1 – The MTA Target-Year Lifecycle Funds, which are comprised of a mix of several funds, most of which are available as separate investments in the Deferred Compensation Program. The particular mix of investments for each Fund is determined by the “target” date, which is the date the money is intended to be needed for retirement income.
- Tier 2 - The MTA Index Funds offer a tier of index funds, which invest in the securities of companies that are included in a selected index, such as the Standard & Poor's 500 (large cap) Index or Russell Mid Cap Index.
- Tier 3 – The MTA Actively Managed Portfolios, which are comprised of actively managed portfolios that are directed by one or a team of professional managers who buy and sell a variety of holdings in an effort to outperform a selected index. These institutional strategies provide participants with a diversified array of distinct asset classes, with a single fund option in each class to simplify the decision making process.
- Tier 4 – Self-Directed Mutual Fund Option is designed for the more experienced investors. Offers access to an expanded universe of mutual funds from hundreds of well-known mutual fund families. Participants may invest only a portion of their account balances in this Tier.

In 2011, the Deferred Compensation Program began offering Roth contributions. Employees can elect after-tax Roth contributions and before-tax contributions in both the 401(k) Plan and the 457 Plan. The total combination of Roth after-tax contributions and regular before-tax contributions cannot exceed the IRS maximum of \$18,000 dollars or \$24,000 dollars for those over age 50 for the year ended December 31, 2017.

The two Plans offer the same array of investment options to participants. Eligible participants in the Deferred Compensation Program include employees (and in the case of MTA Long Island Bus, former employees) of:

- MTA
- MTA Long Island Rail Road
- MTA Bridges and Tunnels
- MTA Long Island Bus
- MTA Metro-North Railroad
- MTA New York City Transit
- MTA Staten Island Rapid Transit
- MTA Capital Construction
- MTA Bus

Matching Contributions - MTA Bus on behalf of certain MTA Bus employees, MTA Metro-North Railroad on behalf of certain MNR employees who opted-out of participation in the MTA Defined Benefit Pension Plan and MTA on behalf of certain represented MTA Business Service Center employees and on behalf of certain MTA Police Officers, make contributions to the 401(k) Plan. The rate for the employer contribution varies.

MTA Bus - Certain members who were employed by Queens Surface Corporation on February 26, 2005, and who became employees of MTA Bus on February 27, 2005, receive a matching contribution equal to 50% of member's before-tax contributions provided that the maximum matching contribution shall not exceed 3% of the member's base pay. MTA Bus also makes a basic contribution equal to 2% of the member's compensation. These members shall vest in the amount in the member's account attributable to the matching contributions and basic contributions as follows:

<u>Years of Service</u>	<u>Vested Percentage</u>
Less than 2	0%
2	20%
3	40%
4	60%
5	80%
6 or more	100%

As a result of collective bargaining, these members were offered a one-time opportunity to opt-out of the matching contributions and employer basic contributions and, instead, participate in the MTA Defined Benefit Pension Plan. No further matching or employer basic contributions will be made for those who make such election.

MTA Metro-North Railroad - MNR employees represented by certain unions and who elected to opt-out of participation in the MTA Defined Benefit Pension Plan receive an annual employer contribution equal to 4% of the member's compensation. Effective on the first full pay period following the nineteenth anniversary date of an eligible MNR member's continuous employment, MTA Metro-North Railroad contributes an amount equal to 7% of the member's compensation. Eligible MNR members vest in these employer contributions as set forth below:

<u>Years of Service</u>	<u>Vested Percentage</u>
Less than 5	0%
5 or more	100%

MTA Headquarters - Police - For each plan year, the MTA shall make contributions to the account of each eligible MTA Police Benevolent Association member in the amounts required by the collective bargaining agreement ("CBA") and subject to the contribution limits set forth in the CBA. These contributions shall be made monthly and shall be considered MTA Police contributions. Members are immediately 100% vested in these employer contributions.

In addition, for each plan year, the MTA shall make contributions to the account of each eligible MTA Police Department Commanding Officers Benevolent Association member in the amounts required by the CBA and subject to the contribution limits set forth in the CBA. These members are immediately 100% vested in these employer contributions.

MTA Headquarters - Business Services - Effective January 1, 2011, all newly hired MTA Business Services Center employees represented by the Transportation Communications Union are eligible to receive a matching contribution up to a maximum of 3% of the participant's compensation. A participant's right to the balance in his or her matching contributions shall vest upon the first of the following to occur:

1. Completing 5 years of service,
2. Attaining the Normal Retirement Age of 62 while in continuous employment, or
3. Death while in continuous employment.

Additional Deposits (Incoming Rollover or Transfers) - Participants in the Deferred Compensation Program are eligible to roll over both their before-tax and after-tax assets from other eligible retirement plans into the 401(k) and 457 Plans. Under certain conditions, both Plans accept rollovers from all eligible retirement plans (as defined by the Code), including 401(a), 457, 401(k), 403(b), and rollover IRAs.

Forfeitures – Non vested contributions are forfeited upon termination of employment. Such forfeitures are used to cover a portion of the pension plan’s administrative expenses.

	December 31, 2017	December 31, 2016
	(In thousands)	
Employer 401K contributions	\$ 4,109	\$ 3,973

5. OTHER POSTEMPLOYMENT BENEFITS

The MTA has implemented GASB Statement No. 45, *Accounting and Financial Reporting for Employers for Postemployment Benefits Other Than Pensions* (“GASB 45”). This Statement established the standards for the measurement, recognition, and display of Other Postemployment Benefits (“OPEB”) expense/expenditures and related liabilities (assets), note disclosures, and, if applicable, required supplementary information (“RSI”) in the financial reports of state and local governmental employers.

Postemployment benefits are part of an exchange of salaries and benefits for employee services rendered. Most OPEB have been funded on a pay-as-you-go basis and have been reported in financial statements when the promised benefits are paid. GASB 45 requires state and local government’s financial reports to reflect systematic, accrual-basis measurement and recognition of OPEB cost (expense) over a period that approximates employees’ years of service and provides information about actuarial accrued liabilities associated with the OPEB and to what extent progress is being made in funding the plan.

The Other Postemployment Benefits Plan (“the OPEB Plan”) and the related Trust Fund (“Trust”) was established on January 1, 2009 for the exclusive benefit of MTA retired employees and their eligible spouses and dependents, to fund some of the OPEB provided in accordance with the MTA’s various collective bargaining agreements. The Plan and the Trust are exempt from federal income taxation under Section 115(1) of the Internal Revenue Code. The OPEB Plan is classified as a single-employer plan.

The separate annual financial statements of the OPEB Plan may be obtained by writing to MTA Comptroller, 2 Broadway, 16th Floor, New York, New York, 10004 or at www.mta.info.

Plan Description — The benefits provided by the MTA Group include medical, pharmacy, dental, vision, and life insurance, plus monthly supplements for Medicare Part B or Medicare supplemental plan reimbursements and welfare fund contributions. The different types of benefits provided vary by agency and employee type (represented employees versus management). All benefits are provided upon retirement as stated in the applicable pension plan, although some agencies provide benefits to some members if terminated within 5 years of attaining retirement eligibility. Employees of the MTA Group are members of the following pension plans: the MTA Defined Benefit Plan, the Additional Plan, the MNR Cash Balance Plan, the MaBSTOA Plan, NYCERS, and NYSLERS.

The MTA Group participates in the New York State Health Insurance Program (“NYSHIP”) to provide medical and prescription drug benefits, including Medicare Part B reimbursements, to many of its employees and retirees. NYSHIP provides a Preferred Provider Organization (“PPO”) plan and several Health Maintenance Organization (“HMO”) plans. Represented MTA New York City Transit employees, other MTA New York City Transit former employees who retired prior to January 1, 1996 or January 1, 2001, and MTA Bus retirees do not participate in NYSHIP. These benefits are provided either through a self-insured health plan, a fully insured health plan or an HMO.

The MTA is a participating employer in NYSHIP. The NYSHIP financial report can be obtained by writing to NYS Department of Civil Service, Employee Benefits Division, Alfred E. Smith Office Building, 805 Swan Street, Albany, NY 12239.

GASB Statement No. 45 requires employers to perform periodic actuarial valuations to determine annual accounting costs, and to keep a running tally of the extent to which these amounts are over or under funded. The valuation must be performed at least biennially. The most recent valuation was performed as of January 1, 2016. Forty-six thousand plan participants were receiving retirement benefits as of December 31, 2016, the last valuation reporting period.

During 2012, MTA funded \$250 into an OPEB Trust ("Trust") allocated between MTA Headquarters and MTA New York City Transit and funded an additional \$50 during 2013 allocated between MTA Long Island Railroad and MTA Metro-North Railroad. There have been no further contributions made to the Trust. Under GASB Statement No. 45, the discount rate is based on the assets in a trust, the assets of the employer or a blend of the two based on the anticipated funding levels of the employer. For this valuation, the discount rate reflects a blend of Trust assets and employer assets. The assumed return on Trust assets is 6.5% whereas the assumed return on employer assets is 3.3% resulting in a discount rate under GASB Statement No. 45 of 3.3%, which is slightly lower than the discount rate of 3.5% used in the prior valuation. This decrease is primarily due to the decrease in Treasury yields and thus returns on employer assets since the prior valuation.

Annual OPEB Cost ("AOC") and Net OPEB Obligation — The MTA's annual OPEB cost (expense) represents the accrued cost for postemployment benefits under GASB Statement No. 45. Currently, the MTA expenses the actual benefits paid during a year. The cumulative difference between the annual OPEB cost ("new method") and the benefits paid during a year ("old method") will result in a net OPEB obligation (the "Net OPEB Obligation"), included in the consolidated statements of net position. The annual OPEB cost is equal to the Annual Required Contribution (the "ARC") less adjustments if a Net OPEB Obligation exists and plus the interest on Net OPEB Obligations.

Actuarial Cost, Amortization Methods and Assumptions - For determining the ARC, the MTA has chosen to use the Frozen Initial Liability cost method (the "FIL Cost Method"), one of the cost methods in accordance with the parameters of GASB Statement No. 45. The initial liability is amortized over a 22-year period. As of the last valuation date, January 1, 2016, the remaining amortization period is 12 years.

The Entry Age Normal ("EAN") Cost Method is used to determine the initial Frozen Accrued Liability as well as any subsequent changes in Accrued Liability due to changes in the plan and/or actuarial assumptions. The initial Frozen Unfunded Accrued Liability was determined as of January 1, 2006 (2007 for MTA Bus Company) to be used in the financials for the 2007 fiscal year. EAN is used to determine the unfunded actuarial accrued liability in the GASB Statement No. 45 supplementary schedules. The EAN method determines the Accrued Liability for each individual based on a level percent of pay for service accrued through the valuation date.

The Frozen Unfunded Accrued Liability is determined each year as the Frozen Unfunded Accrued Liability for the prior year, increased with interest, reduced by the end-of-year amortization payment and increased or decreased by any new bases established for the current year.

The difference between the Actuarial Present Value of Benefits and the Frozen Unfunded Accrued Liability less the Actuarial Value of Assets, if any, equals the Present Value of Future Normal Cost. The Normal Cost equals the Present Value of Future Normal Cost divided by the present value of future compensation and multiplied by the total of current compensation for members less than certain retirement age.

The Annual Required Contribution ("ARC") is equal to the sum of the Normal Cost and the amortization for the Frozen Unfunded Accrued Liability with appropriate interest adjustments. Any difference between the ARC and actual plan contributions from the prior year are considered an actuarial gain/loss and thus are included in the development of the Normal Cost. This methodology differs from the approach used for the pension plan where the difference between the ARC and actual plan contributions from the prior year, if any, will increase or decrease the Frozen Unfunded Accrued Liability and will be reflected in future amortization payments. A different approach was applied to the OPEB benefits because these benefits are not actuarially funded.

Valuation Date - The valuation date is the date that all participant and other pertinent information is collected and liabilities are measured. This date may not be more than 24 months prior to the beginning of the fiscal year. The valuation date for this valuation is January 1, 2016, which is 12 months prior to the beginning of the 2017 calendar year.

Inflation Rate - 2.5% per annum compounded annually.

Discount Rate – GASB Statement No. 45 provides guidance to employers in selecting the discount rate. The discount rate should be based on the estimated long-term investment yield on the investments that are expected to be used to finance the benefits. If there are no plan assets, assets of the employer should be used to derive the discount rate. This would most likely result in a lower discount rate and thus, liabilities significantly higher than if the benefits are prefunded. In recognition of the decrease in short-term investment yields, the discount rate for this valuation has been lowered from 3.5% to 3.3%.

Healthcare Reform - The results of this valuation reflect our understanding of the impact in future health costs due to the Affordable Care Act (“ACA”) passed into law in March 2010. An excise tax for high cost health coverage or “Cadillac” health plans was included in ACA. The provision levies a 40% tax on the value of health plan costs that exceed certain thresholds for single coverage or family coverage. If, between 2010 and 2018, the cost of health care insurance rises more than 55%, the threshold for the excise tax will be adjusted. Legislative changes passed in December 2015 have delayed the effective date of the excise tax until 2020. However, the calculation of the threshold amounts remains unchanged. Also included in ACA are various fees (including, but not limited to, the Patient-Centered Outcomes Research Institute fee, Transitional Reinsurance Program fee, and the Health Insurer fee) associated with the initiation of health exchanges in 2014. The current provisions of ACA should be reflected in the projection of benefits and therefore, include the value of the excise tax and ACA fees which apply to the plan(s). It is assumed that there will be no changes to the current law and that there will be no changes in plan design to help mitigate the impact of the excise tax.

The legislative changes from H.R.1, originally known as the “Tax Cuts and Jobs Act”, and H.R. 195, the “Extension of Continuing Appropriations Act, 2018”, are not reflected in this valuation as passage occurred after the measurement date.

The OPEB-specific actuarial assumptions used in the most recent biennial valuation are as follows:

Valuation date	January 1, 2016
Actuarial cost method	Frozen Initial Liability
Discount rate	3.30%
Price inflation	2.5% per annum, compounded annually
Per-Capita retiree contributions	*
Amortization method	Frozen Initial Liability
Remaining amortization period	12 years
Period closed or open	Closed

* In general, all coverages are paid for by the MTA. However, for MTAHQ members retired prior to 1997, pay a portion of the premium, depending on the year they retired.

Actuarial valuation involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and that actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

Per Capita Claim Costs — Use of a blended premium rate for active employees and retirees under age 65 is a common practice. Health costs generally increase with age, so the blended premium rate is higher than the true underlying cost for actives and the blended premium is lower than the true underlying cost for retirees. For retirees, this difference is called the implicit rate subsidy. Since GASB Statement No. 45 only requires an actuarial valuation for retirees, it requires the plan sponsor to determine the costs of these benefits by removing the subsidy. However in prior years a plan sponsor may use the premiums without adjustment for age if the employer participates in a community-rated plan, in which the premium rates reflect projected health claims experience of all participating employers, or if the insurer would offer the same premium rate if only non-Medicare-eligible retirees were covered.

Effective with this valuation, age adjustments are required for valuing NYSHIP benefits due to a change in actuarial standards. Age adjustments reflect that health costs are typically higher for retirees under age 65 than an average active population and, upon reaching Medicare, health costs are reduced as NYSHIP becomes the secondary payer.

The medical and pharmacy benefits provided to TWU Local 100, ATU 1056, ATU 726 and other eligible represented MTA New York City Transit members, represented MTA Bus members and represented MTA Staten Island Railway members are self-insured as well as some Pre-NYSHIP MTA New York City Transit members. For these benefits, a per capita claims cost assumptions was developed that vary by age, gender and benefit type. The per capita costs assumptions reflect medical and pharmacy claims information, including the Employer Group Waiver Plan ("EGWP") for providing pharmacy benefits to Medicare-eligible retirees, for 2015 and 2016.

Healthcare Cost Trend — The healthcare trend assumption is based on the Society of Actuaries-Getzen Model version 2017 utilizing the baseline assumptions included in the model, except inflation of 2.5% for medical and pharmacy benefits. Additional adjustments apply based on percentage of costs associated with administrative expenses, aging factors, potential excise taxes due to healthcare reform, and other healthcare reform provisions, separately for NYSHIP and self-insured benefits administered by MTA New York City Transit. The NYSHIP trend reflects actual increases in premiums to Participating Agencies through 2017. Long-term trend increases are 4% for dental and vision benefits and 4.5% for Medicare Part B reimbursements, but not more than projected medical trends excluding any excise tax adjustments. The self-insured trend is applied directly for represented employees of by MTA New York City Transit, MTA Staten Island Railway and MTA Bus. Note that for purposes of estimating the impact of the Excise Tax, the self-insured trends for MTA Bus and MTA New York City Transit differ. The following lists illustrative rates for the NYSHIP and self-insured trend assumptions for MTA New York City Transit, MTA Staten Island Railway and MTA Bus (all amounts are in percentages).

Health Care Cost Trend Rates

Fiscal Year	NYSHIP		MTA New York City Transit and MTA Staten Island Railway		MTA Bus	
	< 65	> = 65	< 65	> = 65	< 65	> = 65
2016	11.8	-	7.3	4.9	7.3	4.9
2017	6.7	6.4	7.1	4.9	7.1	4.9
2018	6.2	6.0	6.4	5.0	6.4	5.0
2019	6.3	5.5	9.5	5.0	9.2	5.0
2020	5.3	5.1	6.0	5.1	6.0	5.1
2025	6.0	5.1	5.9	5.1	5.9	5.1
2030	5.9	5.1	5.8	5.1	5.8	5.1
2035	5.9	5.2	5.8	5.2	5.8	5.2
2040	5.8	5.2	5.7	5.2	5.7	5.2
2050	5.4	5.8	5.3	5.0	5.3	5.0
2060	5.2	5.5	5.1	5.2	5.2	5.2
2070	4.6	4.7	4.6	4.6	4.6	4.9
Ultimate ¹	4.2	4.3	4.2	4.5	4.2	4.5

¹ Ultimate rate used for years prior to 2016 for Entry Age purposes.

Participation — The table below summarizes the census data provided by each Agency utilized in the preparation of the actuarial valuation. The table shows the number of active and retired employees by Agency and provides a breakdown of the coverage elected and benefits offered to current retirees.

OPEB Participation By Agency at January 1, 2016 (Valuation date for December 31, 2017)

	MTA New York City Transit	MTA Long Island Rail Road	MTA Metro - North Rail Road	MTA Bridges & Tunnels	MTAHQ	MTA Long Island Bus *	MTA Staten Island Railway	MTA Bus	Total
Active Members									
Number	49,174	7,141	6,506	1,475	1,720	-	297	3,757	70,070
Average Age	49	45	45	47	46	-	44	47	48
Average Service	14	12	13	14	13	-	12	12	13
Retirees									
Single Medical Coverage	12,818	662	452	622	193	88	27	616	15,478
Employee/Spouse Coverage	17,427	2,065	1,050	716	371	198	60	939	22,826
Employee/Child Coverage	1,085	107	77	45	29	21	4	47	1,415
No medical Coverage	817	2,387	2,486	7	11	317	24	296	6,345
Total Number	32,147	5,221	4,065	1,390	604	624	115	1,898	46,064
Average Age	72.0	68.5	74.5	69.7	65.9	66.1	64.8	70.6	71.5
Total Number with Dental/Vision	7,018	846	534	435	529	58	47	110	9,577
Total Number with Vision	27,843	846	534	435	529	58	93	1,562	31,900
Total Number with Supplement	26,448	1,957	-	955	-	462	22	1,454	31,298
Average Monthly Supplement									
Amount in whole dollars (Excluding Part B Premium)	\$ 32	\$ 229	\$ -	\$ 211	\$ -	\$ -	\$ 238	\$ 25	\$ 50
Total Number with Life Insurance	7,163	4,751	2,536	380	519	509	92	232	16,182
Average Life Insurance Amount	\$ 2,693	\$ 23,515	\$ 2,722	\$ 5,605	\$ 5,000	\$ 9,715	\$ 2,978	\$ 5,409	\$ 9,215

* No active members as of January 1, 2016. In addition, there are 155 vestees not included in these counts.

Coverage Election Rates — The majority of members participating in NYSHIP are assumed to elect coverage in the Empire PPO plan. For certain agencies (MTA New York City Transit, MTA Bridges and Tunnels, and MTA Staten Island Railway) a percentage of the membership is assumed to elect the NYSHIP HIP plan and for MTA Metro-North Railroad, a percentage is assumed to elect ConnectiCare.

Dependent Coverage — Spouses are assumed to be the same age as the employee/retiree. 80% of male and 45% of female eligible members participating in NYSHIP are assumed to elect family coverage upon retirement and 65% of male and 35% of female eligible members participating in self-insured programs administered by MTA New York City Transit are assumed to cover a dependent. Actual coverage elections for current retirees are used. If a current retiree's only dependent is a child, eligibility is assumed for an additional 7 years from the valuation date.

Demographic Assumptions:

Mortality — Preretirement and postretirement healthy annuitant rates are projected on a generational basis using Scale AA. As a generational table, it reflects mortality improvements both before and after the measurement date. The postretirement mortality assumption is based on an experience analysis covering the period from January 1, 2011 to December 31, 2015 for the MTA-sponsored pension plans.

Preretirement — RP-2000 Employee Mortality Table for Males and Females with blue-collar adjustments. No blue-collar adjustments were used for management members of MTAHQ.

Postretirement Healthy Lives — 95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females. No blue collar or percentage adjustments were used for management members of MTAHQ.

Postretirement Disabled Lives — RP-2014 Disabled Annuitant mortality table for males and females.

Vestee Coverage — For members that participate in NYSHIP, Vesteers (members who have terminated, but not yet eligible to retire) are eligible for NYSHIP benefits provided by the Agency upon retirement, but must maintain NYSHIP coverage at their own expense from termination to retirement. Vesteers are assumed to retire at first eligibility and would continue to maintain NYSHIP coverage based on the following percentages. This assumption is based on the Development of Recommended Actuarial Assumptions for New York State/SUNY GASB 45 Valuation report provided to Participating Employers of NYSHIP. These percentages were also applied to current vesteers based on age at the valuation date.

Age at Termination	Percent Electing
< 40	0 %
40–43	5
44	20
45–46	30
47–48	40
49	50
50–51	80
52+	100

The following table shows the elements of the MTA's annual OPEB cost for the year, the amount actually paid, and changes in the MTA's net OPEB obligation to the plan for the nine-month period ended September 30, 2018 and year ended December 31, 2017. The portion of this actuarial present value allocated to a valuation year is called the Normal Cost. Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of each valuation and on the pattern of sharing costs between the employer and plan members to that point. Calculations reflect a long-term perspective.

(In millions)	September 30, 2018 (Unaudited)	December 31, 2017
Annual required contribution ("ARC")	\$ 2,238.9	\$ 2,985.1
Interest on net OPEB obligation	375.1	500.1
Adjustment to ARC	(1,028.8)	(1,329.8)
OPEB cost	1,585.2	2,155.4
Payments made	(475.3)	(579.9)
Increase in net OPEB obligation	1,109.9	1,575.5
Net OPEB obligation — beginning of period	16,731.0	15,155.5
Net OPEB obligation — end of period	\$ 17,840.9	\$ 16,731.0

The MTA's annual OPEB cost, the percentage of annual OPEB cost contributed to, and the net OPEB obligation for the year ended December 31, 2017, 2016 and 2015 are as follows (in millions):

Year Ended	Annual OPEB Cost	% of Annual Cost Contributed	Net OPEB Obligation
December 31, 2017	\$ 2,155.4	26.9%	\$ 16,731.0
December 31, 2016	2,146.4	25.7	15,155.5
December 31, 2015	1,997.2	25.2	13,560.1

The MTA funded status of the Plan is as follows (in millions):

Year Ended	Valuation Date	Actuarial Value of Assets {a}	Actuarial Accrued Liability (AAL)* {b}	Unfunded Actuarial Accrued Liability (UAAL) {c}={b}-{a}	Funded Ratio {a}/{b}	Covered Payroll {d}	Ratio of UAAL to Covered Payroll {c}/{d}
December 31, 2017	January 1, 2016	\$297.5	\$19,801.7	\$19,504.2	1.5%	\$5,041.00	386.9 %

* Based on Entry Age Normal

The required schedule of funding progress for the MTA Postemployment Benefit Plan immediately following the notes to the financial statements presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

6. CAPITAL ASSETS

Capital assets and improvements include all land, buildings, equipment, and infrastructure of the MTA having a minimum useful life of two years and having a cost of more than \$25 thousand.

Capital assets are stated at historical cost, or at estimated historical cost based on appraisals, or on other acceptable methods when historical cost is not available. Capital leases are classified as capital assets in amounts equal to the lesser of the fair market value or the present value of net minimum lease payments at the inception of the lease.

Accumulated depreciation and amortization are reported as reductions of fixed assets. Depreciation is computed using the straight-line method based upon estimated useful lives of 25 to 50 years for buildings, 2 to 40 years for equipment, and 25 to 100 years for infrastructure. Capital lease assets and leasehold improvements are amortized over the term of the lease or the life of the asset whichever is less. Capital assets consist of the following at December 31, 2016, December 31, 2017 and September 30, 2018 (in millions):

	Balance December 31, 2016			Balance December 31, 2017			Balance September 30, 2018	
		Additions / Reclassifications	Deletions / Reclassifications		Additions / Reclassifications (Unaudited)	Deletions / Reclassifications (Unaudited)	(Unaudited)	(Unaudited)
Capital assets not being depreciated:								
Land	\$ 203	\$ 14	\$ -	\$ 217	\$ -	\$ -	\$ 217	
Construction work-in-progress	16,256	6,491	5,769	16,978	5,234	3,069	19,143	
Total capital assets not being depreciated	16,459	6,505	5,769	17,195	5,234	3,069	19,360	
Capital assets being depreciated:								
Buildings and structures	17,458	751	493	17,716	102	2	17,816	
Bridges and tunnels	3,316	288	-	3,604	372	-	3,976	
Equipment:								
Passenger cars and locomotives	13,863	1	4	13,860	237	24	14,073	
Buses	3,446	213	46	3,613	218	79	3,752	
Infrastructure	22,078	1,783	27	23,834	732	-	24,566	
Other	20,122	2,602	18	22,706	1,118	6	23,818	
Total capital assets being depreciated	80,283	5,638	588	85,333	2,779	111	88,001	
Less accumulated depreciation:								
Buildings and structures	6,683	530	290	6,923	370	1	7,292	
Bridges and tunnels	746	37	-	783	14	-	797	
Equipment:								
Passenger cars and locomotives	6,839	371	4	7,206	312	24	7,494	
Buses	2,005	250	39	2,216	174	79	2,311	
Infrastructure	8,635	672	21	9,286	613	-	9,899	
Other	7,316	751	13	8,054	527	5	8,576	
Total accumulated depreciation	32,224	2,611	367	34,468	2,010	109	36,369	
Total capital assets being depreciated - net	48,059	3,027	221	50,865	769	2	51,632	
Capital assets - net	\$ 64,518	\$ 9,532	\$ 5,990	\$ 68,060	\$ 6,003	\$ 3,071	\$ 70,992	

Interest capitalized in conjunction with the construction of capital assets for the periods ended September 30, 2018 and December 31, 2017 was \$36.7 and \$58.9, respectively.

Capital assets acquired prior to April 1982 for MTA New York City Transit were funded primarily by NYC with capital grants made available to MTA New York City Transit. NYC has title to a substantial portion of such assets and, accordingly, these assets are not recorded on the books of the MTA. Subsequent acquisitions, which are part of the MTA Capital Program, are recorded at cost by MTA New York City Transit. In certain instances, title to MTA Bridges and Tunnels' real property may revert to NYC in the event the MTA determines such property is unnecessary for its corporate purpose. With respect to MTA Metro-North Railroad, capital assets completely funded by CDOT are not reflected in MTA's financial statements, as ownership is retained by CDOT.

For certain construction projects, the MTA holds in a trust account marketable securities pledged by third-party contractors in lieu of cash retainages. At September 30, 2018 and December 31, 2017, these securities, which are not included in these financial statements, totaled \$87.9 and \$114.8, respectively, and had a market value of \$81.7 and \$83.7, respectively.

7. LONG-TERM DEBT

(In millions)	Original Issuance	December 31, 2017	Issued (Unaudited)	Retired (Unaudited)	September 30, 2018 (Unaudited)
MTA:					
Transportation Revenue Bonds					
1.37%–6.68% due through 2057	\$ 36,161	\$ 21,028	\$ 680	\$ 209	\$ 21,499
Bond Anticipation Notes					
5.0% due through 2021	6,704	1,516	2,103	512	3,107
State Service Contract Bonds					
4.125%–5.70% due through 2031	2,395	68	-	68	-
Dedicated Tax Fund Bonds					
2.05%–5.00% due through 2057	11,039	5,371	-	35	5,336
	56,299	27,983	2,783	824	29,942
Net unamortized bond premium	-	1,578	221	212	1,587
	56,299	29,561	3,004	1,036	31,529
TBTA:					
General Revenue Bonds					
4.00%–5.77% due through 2050	15,977	7,218	781	418	7,581
Bond Anticipation Notes					
5.77% due through 2032	400	165	-	165	-
Subordinate Revenue Bonds					
4.00%–5.77% due through 2032	4,066	1,386	-	162	1,224
	20,443	8,769	781	745	8,805
Net unamortized bond premium	-	581	130	64	647
	20,443	9,350	911	809	9,452
MTA Hudson Rail Yards Trust:					
MTA Hudson Rail Yards Trust Obligations					
1.88%–2.65% due through 2056	1,057	1,057	-	-	1,057
Net unamortized bond premium	-	130	-	2	128
	1,057	1,187	-	2	1,185
Total	\$ 77,799	\$ 40,098	\$ 3,915	\$ 1,847	\$ 42,166
Current portion		\$ 1,806			\$ 1,030
Long-term portion		\$ 38,292			\$ 41,136

(In millions)	Original Issuance	December 31, 2016	Issued	Retired	December 31, 2017
MTA:					
Transportation Revenue Bonds					
1.37%–6.68% due through 2057	\$ 35,689	\$ 21,209	\$ 3,803	\$ 3,984	\$ 21,028
Bond Anticipation Notes					
2.0% due through 2018	4,604	948	2,204	1,636	1,516
State Service Contract Bonds					
4.125%–5.70% due through 2031	2,395	145	-	77	68
Dedicated Tax Fund Bonds					
2.05%–5.00% due through 2056	11,039	5,009	993	631	5,371
	53,727	27,311	7,000	6,328	27,983
Net unamortized bond premium	-	1,345	740	507	1,578
	53,727	28,656	7,740	6,835	29,561
TBTA:					
General Revenue Bonds					
4.00%–5.77% due through 2050	15,625	6,817	2,040	1,639	7,218
Bond Anticipation Notes					
5.77% due through 2032	400	-	400	235	165
Subordinate Revenue Bonds					
4.00%–5.77% due through 2032	4,066	1,520	108	242	1,386
	20,091	8,337	2,548	2,116	8,769
Net unamortized bond premium	-	735	399	553	581
	20,091	9,072	2,947	2,669	9,350
MTA Hudson Rail Yards Trust:					
MTA Hudson Rail Yards Trust Obligations					
1.88%–2.65% due through 2056	1,057	1,057	-	-	1,057
Net unamortized bond premium	-	137	-	7	130
	1,057	1,194	-	7	1,187
Total	\$ 74,875	\$ 38,922	\$ 10,687	\$ 9,511	\$ 40,098
Current portion		\$ 1,977			\$ 1,806
Long-term portion		\$ 36,945			\$ 38,292

MTA Transportation Revenue Bonds — Prior to 2018, MTA issued sixty-one Series of Transportation Revenue Bonds secured under its General Resolution Authorizing Transportation Revenue Obligations adopted on March 26, 2002 in the aggregate principal amount of \$31,419. The Transportation Revenue Bonds are MTA's special obligations payable solely from transit and commuter systems revenues and certain state and local operating subsidies.

On January 23, 2018, MTA issued \$472 of Transportation Revenue Bonds, Series 2018A. Proceeds from the transaction were used to pay off the existing outstanding 2017B Bond Anticipation Notes in the amount of \$500. The Series 2018A bonds were issued as \$195 Subseries 2018A-1 and \$277 Subseries 2018A-2. The Series 2018A-1 bonds were issued as mandatory tender bonds with an initial purchase date of November 15, 2020. The Series 2018A-2 bonds were issued as mandatory tender bonds with an initial purchase date of November 15, 2022.

On March 12, 2018, S&P Global Ratings lowered its long-term rating on all outstanding MTA Transportation Revenue Bonds to A+ from AA-.

On March 29, 2018, MTA effectuated a mandatory tender and remarketed \$100 of MTA Transportation Revenue Variable Rate Refunding Bonds, Subseries 2002D-2b because its current interest rate period was set to expire by its terms.

On August 8, 2018, S&P Global Ratings lowered its long-term rating on all outstanding MTA Transportation Revenue Bonds to A from A+.

On August 21, 2018, MTA extended the direct pay letter of credit from U.S. Bank National Association that is associated with Transportation Revenue Variable Rate Bonds, Subseries 2015E-1 for three years to August 20, 2021.

On August 22, 2018, MTA effectuated a mandatory tender and remarketed \$95.180 MTA Transportation Revenue Variable Rate Refunding Bonds, Subseries 2005E-1 and \$71.385 MTA Transportation Revenue Variable Rate Refunding Bonds, Subseries 2005E-3 because their irrevocable direct-pay LOCs with Bank of Montreal were expiring by their terms and was substituted with separate irrevocable direct-pay LOCs each issued by PNC Bank, National Association. Each LOC will expire on August 20, 2021.

On August 23, 2018, MTA issued \$207.220 MTA Transportation Revenue Refunding Green Bonds, 2018B. The Series 2018B bonds were issued as tax-exempt fixed rate bonds with a final maturity of November 15, 2028. Proceeds from the transaction were used to refund the following bonds: \$35 MTA Dedicated Tax Fund Refunding Bonds, Subseries 2008B-3a; \$73.985 MTA Transportation Revenue Bonds, Series 2008C; \$19.805 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-1; \$49.510 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-2; \$39.610 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-3; \$13.010 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-4; and \$13.010 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-5.

On September 5, 2018, MTA effectuated a mandatory tender of \$193.460 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-2 because its irrevocable direct-pay LOC with Bank of Tokyo-Mitsubishi UFJ Ltd. was expiring by its terms and MTA executed a Bond Purchase Agreement and Firm Remarketing Agreement constituting a Private Placement with Royal Bank of Canada to replace the expiring LOC. The Initial Mandatory Purchase date for the Subseries 2015E-2 bonds is September 5, 2023.

On September 5, 2018, MTA effectuated a mandatory tender and remarketed \$154.850 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-3; \$70.350 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-4; and \$48.185 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-5 because their respective irrevocable direct-pay LOCs were expiring by their terms. The LOC relating to the Subseries 2015E-3 issued by Citibank, N.A. was substituted with a LOC issued by Bank of America, N.A. The LOC will expire on September 2, 2022. The LOCs relating to the Subseries 2015E-4 and Subseries 2015E-5 issued by Bank of the West and U.S. Bank National Association, respectively, were substituted with a LOC issued by PNC Bank, National Association as both Subseries were combined into one (Subseries 2015E-4). The LOC for the combined Subseries 2015E-4 will expire on September 3, 2021.

MTA Bond Anticipation Notes — From time to time, MTA issues Transportation Revenue Bond Anticipation Notes in accordance with the terms and provisions of the General Resolution described above in the form of commercial paper to fund its transit and commuter capital needs. The interest rate payable on the notes depends on the maturity and market conditions at the time of issuance. The MTA Act requires MTAHQ to periodically (at least each five years) refund its bond anticipation notes with bonds.

On January 23, 2018, MTA issued \$500 of MTA Transportation Revenue Bond Anticipation Notes, Series 2018A to finance existing approved transit and commuter projects. The Subseries 2018A notes are fixed rate tax-exempt notes with a final maturity of August 15, 2019.

On June 19, 2018, MTA issued \$1,600 of MTA Transportation Revenue Bond Anticipation Notes, Series 2018B to generate new money proceeds to finance existing approved transit and commuter projects. The Series 2018B Notes are fixed rate tax-exempt notes with a final maturity of May 15, 2021.

MTA Revenue Anticipation Notes — On January 9, 2014, MTA closed a \$350 revolving working capital liquidity facility with the Royal Bank of Canada which is expected to remain in place until July 7, 2017. Draws on the facility will be taxable, as such this facility is intended to be used only for operating needs of MTA and the related entities. On January 31, 2017, MTA drew down \$200 of its \$350 Revolving Credit Agreement with the Royal Bank of Canada, which was entered into on January 1, 2014. The purpose of the draw was to retire Transportation Revenue Bond Anticipation Notes, Subseries 2016A-2. The \$200 drawdown plus accrued interest was repaid on March 31, 2017.

On August 24, 2017, MTA entered into a \$350 taxable Revenue Anticipation Note facility (the “2017 RAN”) with JPMorgan Chase Bank, National Association. The 2017 RAN is a revolving credit agreement that is active through August 24, 2022 and is available for any corporate purpose as needed. An initial draw of \$3.5 was made upon closing. That balance will remain throughout the duration of the agreement. On August 14, 2018, MTA and JPMorgan Chase Bank amended the 2017 RAN, increasing the line of credit to \$700. Another initial draw of \$3.5 was made upon closing, and the balance will remain throughout the duration of the agreement.

MTA State Service Contract Bonds — Prior to 2018, MTA issued two Series of State Service Contract Bonds secured under its State Service Contract Obligation Resolution adopted on March 26, 2002, in the aggregate principal amount of \$2,395. Currently, there are no outstanding bonds. The State Service Contract Bonds are MTA's special obligations payable solely from certain payments from the State of New York under a service contract.

MTA Dedicated Tax Fund Bonds — Prior to 2018, MTA issued twenty-two Series of Dedicated Tax Fund Bonds secured under its Dedicated Tax Fund Obligation Resolution adopted on March 26, 2002, in the aggregate principal amount of \$9,769. The Dedicated Tax Fund Bonds are MTA's special obligations payable solely from monies held in the Pledged Amounts Account of the MTA Dedicated Tax Fund. State law requires that the MTTT revenues and MMTOA revenues (described above in Note 2 under "Nonoperating Revenues") be deposited, subject to appropriation by the State Legislature, into the MTA Dedicated Tax Fund.

MTA Certificates of Participation — Prior to 2018, MTA (solely on behalf of MTA Long Island Rail Road and MTA Metro-North Railroad), MTA New York City Transit and MTA Bridges and Tunnels executed and delivered three Series of Certificates of Participation in the aggregate principal amount of \$807 to finance certain building and leasehold improvements to an office building at Two Broadway in Manhattan occupied principally by MTA New York City Transit, MTA Bridges and Tunnels, MTA Capital Construction, and MTAHQ. The Certificates of Participation represented proportionate interests in the principal and interest components of Base Rent paid severally, but not jointly, in their respective proportionate shares by MTA New York City Transit, MTA, and MTA Bridges and Tunnels, pursuant to a Leasehold Improvement Sublease Agreement.

MTA Bridges and Tunnels General Revenue Bonds — Prior to 2018, MTA Bridges and Tunnels issued twenty-nine Series of General Revenue Bonds secured under its General Resolution Authorizing General Revenue Obligations adopted on March 26, 2002, in the aggregate principal amount of \$12,422. The General Revenue Bonds are MTA Bridges and Tunnels' general obligations payable generally from the net revenues collected on the bridges and tunnels operated by MTA Bridges and Tunnels.

On January 24, 2018, MTA effectuated a mandatory tender and remarketed \$122.635 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Subseries 2003B-1 because the irrevocable direct-pay LOC relating to the Subseries 2003B-1 Bonds issued by PNC Bank, National Association, and the irrevocable direct-pay LOC relating to the Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Subseries 2003B-3 Bonds issued by Wells Fargo Bank, National Association expired by their terms. The LOC facilities related to both Subseries 2003B-1 and Subseries 2003B-3 were substituted with an irrevocable direct-pay LOC issued by Bank of America, N.A. The LOC expires on January 21, 2022.

On January 24, 2018, MTA effectuated a mandatory tender and remarketed \$190.3 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Refunding Bonds, Subseries 2005B-2 because the irrevocable direct-pay LOC issued by Wells Fargo Bank, National Association expired by its terms, and was substituted with an irrevocable direct-pay LOC issued by Citibank, N.A. The LOC expires on January 23, 2021.

On February 1, 2018, MTA issued \$352 of Triborough Bridge and Tunnel Authority General Revenue Bonds, Series 2018A. The proceeds from the transactions were used to retire \$165 of MTA Bridges and Tunnels General Revenue Bond Anticipation Notes, Series 2017A and to finance bridge and tunnel capital projects. The Series 2018A bonds have a final maturity of November 15, 2048.

On June 27, 2018, MTA effectuated a mandatory tender and remarketed \$107.275 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Series 2001C because the irrevocable direct-pay LOC relating to the Series 2001C Bonds issued by The Bank of Tokyo-Mitsubishi UFJ, Ltd., was expiring by its terms and was substituted with an irrevocable direct-pay LOC issued by State Street Bank and Trust Company. The LOC will expire on June 26, 2023.

On June 27, 2018, MTA effectuated a mandatory tender and remarketed \$190.300 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Refunding Bonds, Subseries 2005B-3 because the irrevocable direct-pay LOC relating to the Subseries 2005B-3 Bonds issued by The Bank of Tokyo-Mitsubishi UFJ, Ltd., was expiring by its terms and was substituted with an irrevocable direct-pay LOC issued by State Street Bank and Trust Company. The LOC will expire on June 26, 2023.

On August 30, 2018, MTA issued \$270.090 Triborough Bridge and Tunnel Authority General Revenue Refunding Bonds, Series 2018B. The Series 2018B bonds were issued as tax-exempt fixed rate bonds with a final maturity of November 15, 2031. Proceeds from the transaction were used to refund the following bonds: \$195.450 TBTA General Revenue Bonds, Series 2008C; and \$123.300 TBTA Subordinate Revenue Bonds, Series 2008D.

On August 30, 2018, MTA issued \$159.280 Triborough Bridge and Tunnel Authority General Revenue Refunding

Bonds, Series 2018C. The Series 2018C bonds were issued as tax-exempt fixed rate bonds with a final maturity of November 15, 2038. Proceeds from the transaction were used to refund \$181.135 Triborough Bridge and Tunnel Authority General Revenue Bonds, Subseries 2009A-2.

On September 26, 2018, MTA effectuated a mandatory tender and remarketed \$107.280 Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Series 2001B because its irrevocable direct-pay LOC relating to the Series 2001B Bonds issued by State Street Bank, was expiring by its terms. The Series 2001B Bonds were remarketed in Term Rate Mode as Secured Overnight Financing Rate (“SOFR”) Tender Notes with a purchase date of September 26, 2019.

MTA Bridges and Tunnels Subordinate Revenue Bonds — Prior to 2018, MTA Bridges and Tunnels issued twelve Series of Subordinate Revenue Bonds secured under its 2001 Subordinate Revenue Resolution Authorizing Subordinate Revenue Obligations adopted on March 26, 2002, in the aggregate principal amount of \$3,871. The Subordinate Revenue Bonds are MTA Bridges and Tunnels’ special obligations payable generally from the net revenues collected on the bridges and tunnels operated by MTA Bridges and Tunnels after the payment of debt service on the MTA Bridges and Tunnels General Revenue Bonds described in the preceding paragraph.

MTA Hudson Rail Yards Trust Obligations — The MTA Hudson Rail Yards Trust Obligations, Series 2016A (“Series 2016A Obligations”) were executed and delivered on September 22, 2016 by Wells Fargo Bank National Association, as Trustee (“Trustee”), to (i) retire the outstanding Transportation Revenue Bond Anticipation Notes, Series 2016A of the MTA, which were issued to provide interim financing of approved capital program transit and commuter projects, (ii) finance approved capital program transit and commuter projects of the affiliates and subsidiaries of the MTA, (iii) fund an Interest Reserve Requirement in an amount equal to one-sixth (1/6) of the greatest amount of Interest Components (as hereinafter defined) in the current or any future year, (iv) fund a portion of the Capitalized Interest Fund requirement, and (v) finance certain costs of issuance.

Pursuant to the Financing Agreement (as hereinafter defined), the MTA has agreed to pay to, or for the benefit of, the Trustee the “MTA Financing Agreement Amount,” consisting of principal and interest components. The Series 2016A Obligations evidence the interest of the Owners thereof in such MTA Financing Agreement Amount payable by the MTA pursuant to the Financing Agreement. The principal amount of the Series 2016A Obligations represent the principal components of the MTA Financing Agreement Amount (“Principal Components”) and the interest represent the interest components of the MTA Financing Agreement Amount (“Interest Components”). The Series 2016A Obligations (and the related Principal Components and Interest Components) are special limited obligations payable solely from the Trust Estate established under the MTA Hudson Rail Yards Trust Agreement, dated as of September 1, 2016 (“Trust Agreement”), by and between the MTA and the Trustee.

The Trust Estate consists principally of (i) the regularly scheduled rent, delinquent rent or prepaid rent (“Monthly Ground Rent”) to be paid by Ground Lease Tenants (the tenants under the Western Rail Yard Original Ground Lease and each Severed Parcel Ground Lease of the Eastern Rail Yard) of certain parcels being developed on and above the Eastern Rail Yard and Western Rail Yard portions of the John D. Caemmerer West Side Yards (“Hudson Rail Yards”) currently operated by The Long Island Rail Road Company (“LIRR”), (ii) monthly scheduled transfers from the Capitalized Interest Fund during the limited period that the Monthly Ground Rent is abated under the applicable Ground Lease, (iii) payments made by the Ground Lease Tenants if they elect to exercise their option to purchase the fee interest in such parcels (“Fee Purchase Payments”), (iv) Interest Reserve Advances and Direct Cost Rent Credit Payments (collectively “Contingent Support Payments”) made by the MTA, (v) rights of the MTA to exercise certain remedies under the Ground Leases and (vi) rights of the Trustee to exercise certain remedies under the Ground Leases and the Fee Mortgages.

Pursuant to the Interagency Financing Agreement, dated as of September 1, 2016 (“Financing Agreement”), by and among the MTA, New York City Transit Authority, Manhattan and Bronx Surface Transit Operating Authority, LIRR, Metro-North Commuter Railroad Company, and MTA Bus Company (collectively, the “Related Transportation Entities”), and the Trustee, the MTA has agreed to pay to the Trustee the MTA Financing Agreement Amount with moneys provided by the Financing Agreement Payments (which are principally the revenues within the Trust Estate) and Interest Reserve Advances. The MTA has established a deposit account with Wells Fargo Bank, National Association, as depository (“Depository”), and the MTA will direct all Ground Lease Tenants to make Monthly Ground Rent and Fee Purchase Payments (payments made by the Ground Lease Tenants if they elect to exercise their option to purchase the fee interest in such parcels) directly to the Depository, which deposits will be transferred daily to the Trustee. In addition, in the event the MTA elects to exercise certain Authority Cure Rights upon the occurrence of a Ground Lease Payment Event of Default or is required to make certain Direct Cost Rent Credit Payments, the MTA will make all payments relating to defaulted and future Monthly Ground Rent directly to the Depository.

Refer to Note 8 for further information on Leases.

Debt Limitation — The New York State Legislature has imposed limitations on the aggregate amount of debt that the MTA and MTA Bridges and Tunnels can issue to fund the approved transit and commuter capital programs. The current aggregate ceiling, subject to certain exclusions, is \$55,497 compared with issuances totaling approximately \$34,397. The MTA expects that the current statutory ceiling will allow it to fulfill the bonding requirements of the approved Capital Programs.

Bond Refundings — From time to time, the MTA and MTA Bridges and Tunnels issue refunding bonds to achieve debt service savings or other benefits. The proceeds of refunding bonds are generally used to purchase U.S. Treasury obligations that are placed in irrevocable trusts. The principal and interest within the trusts will be used to repay the refunded debt. The trust account assets and the refunded debt are excluded from the consolidated statements of net position.

At September 30, 2018 and December 31, 2017, the following amounts of MTA bonds, which have been refunded, remain valid debt instruments and are secured solely by and payable solely from their respective irrevocable trusts.

(In millions)	September 30, 2018 (Unaudited)	December 31, 2017
MTA Transit and Commuter Facilities:		
Transit Facilities Revenue Bonds	\$ 169	\$ 189
Commuter Facilities Revenue Bonds	172	193
Transit and Commuter Facilities Service Contract Bonds	-	28
Dedicated Tax Fund Bonds	42	61
MTA New York City Transit — Transit Facilities Revenue		
Bonds (Livingston Plaza Project)	-	8
MTA Bridges and Tunnels:		
General Purpose Revenue Bonds	674	694
Special Obligation Subordinate Bonds	102	115
Total	<u>\$ 1,159</u>	<u>\$ 1,288</u>

For the nine months ended September 30, 2018, MTA refunding transactions decreased aggregate debt service payments by \$25 and provided an economic gain of \$49. For the nine months ended September 30, 2017, MTA refunding transactions decreased aggregate debt service payments by \$360 and provided an economic gain of \$271. Details of bond refunding savings as of September 30, 2018 and December 31, 2017 are as follows:

Bonds Refunded in 2018 (In millions)	Series	Date issued	Par value Refunded	Debt Service Savings	Net Present Value of Savings
Transportation Revenue Bonds	TRB 2018B	08/23/2018	\$ 207	\$ 30	\$ 28
MTA Bridges and Tunnels General Revenue Bonds	TBTA 2018C	08/23/2018	159	(5)	21
Total Bond Refunding Savings			<u>\$ 366</u>	<u>\$ 25</u>	<u>\$ 49</u>

Bonds Refunded in 2017 (In millions)	Series	Date issued	Par value Refunded	Debt Service Savings	Net Present Value of Savings
Transportation Revenue Bonds	TRB 2017A-2	03/16/2017	\$ 137	\$ 22	\$ 16
	TRB 2017B	09/20/2017	662	91	80
	TRB 2017C	12/14/2017	2,021	170	156
	TRB 2017D	12/21/2017	643	56	51
			<u>3,463</u>	<u>339</u>	<u>303</u>
Dedicated Tax Fund Bonds	DTF 2017B-2	05/17/2017	371	47	36
MTA Bridges and Tunnels General Revenue Bonds	TBTA 2017B	01/19/2017	903	199	139
	TBTA 2017C-1	11/17/2017	521	62	56
			<u>1,424</u>	<u>261</u>	<u>195</u>
Total Bond Refunding Savings			<u>\$ 5,258</u>	<u>\$ 647</u>	<u>\$ 534</u>

For the nine-month periods ended September 30, 2018 and 2017, the accounting loss on bond refundings totaled \$2 and the accounting gain on bond refundings totaled \$133, respectively.

Unamortized losses related to bond refundings were as follows:

(In millions)	December 31, 2016	(Gain)/loss on refunding	2017 amortization	December 31, 2017	(Gain)/loss on refunding (Unaudited)	Current year amortization (Unaudited)	September 30, 2018 (Unaudited)
MTA:							
Transportation Revenue Bonds	\$ 557	\$ 222	\$ (51)	\$ 728	\$ 2	\$ (45)	\$ 685
State Service Contract Bonds	(7)	-	(3)	(10)	-	(2)	(12)
Dedicated Tax Fund Bonds	215	55	(16)	254	-	(12)	242
	<u>765</u>	<u>277</u>	<u>(70)</u>	<u>972</u>	<u>2</u>	<u>(59)</u>	<u>915</u>
TBTA:							
General Revenue Bonds	171	82	(20)	233	1	(20)	214
Subordinate Revenue Bonds	32	-	(2)	30	(1)	5	34
	<u>203</u>	<u>82</u>	<u>(22)</u>	<u>263</u>	<u>-</u>	<u>(15)</u>	<u>248</u>
Total	<u>\$ 968</u>	<u>\$ 359</u>	<u>\$ (92)</u>	<u>\$ 1,235</u>	<u>\$ 2</u>	<u>\$ (74)</u>	<u>\$ 1,163</u>

Debt Service Payments — Future principal and interest debt service payments at September 30, 2018 are as follows (in millions):

(Unaudited)	MTA		MTA BRIDGES AND TUNNELS		Debt Service	
	Principal	Interest	Principal	Interest	Principal	Interest
2018	\$ 722	\$ 1,337	\$ 308	\$ 169	\$ 1,030	\$ 1,506
2019	2,237	1,296	255	353	2,492	1,649
2020	711	1,276	321	343	1,032	1,619
2021	2,345	1,165	324	328	2,669	1,493
2022	808	1,129	336	313	1,144	1,442
2023-2027	5,090	4,778	2,031	1,300	7,121	6,078
2028-2032	6,390	3,834	2,586	800	8,976	4,634
2033-2037	5,611	2,859	1,176	454	6,787	3,313
2038-2042	4,084	1,927	833	176	4,917	2,103
2043-2047	1,428	478	533	42	1,961	520
2048-2052	572	208	102	4	674	212
2053-2057	319	119	0	0	319	119
Thereafter	682	-	0	0	682	-
Total	<u>\$ 30,999</u>	<u>\$ 20,406</u>	<u>\$ 8,805</u>	<u>\$ 4,282</u>	<u>\$ 39,804</u>	<u>\$ 24,688</u>

The above interest amounts include both fixed-rate and variable-rate calculations. The interest rate assumptions for variable rate bonds are as follows:

- *Transportation Revenue Refunding Bonds, Series 2002D* — 4.45% per annum taking into account the interest rate swap plus the current fixed floating rate note spread.
- *Transportation Revenue Refunding Bonds, Series 2002G* — 3.542% per annum taking into account the interest rate swap plus the current fixed floating rate note spread; and 4.00% per annum plus the current fixed floating rate note spread on the unhedged portion.
- *Transportation Revenue Bonds, Series 2005D* — 3.561% per annum taking into account the interest rate swaps.
- *Transportation Revenue Bonds, Series 2005E* — 3.561% per annum taking into account the interest rate swaps and 4.00% per annum on the unhedged portion.
- *Transportation Revenue Bonds, Series 2011B* — 3.542% per annum taking into account the interest rate swaps plus the current fixed floating rate note spread; and 4.00% per annum plus the current fixed floating rate note spread on the unhedged portion.

- *Transportation Revenue Bonds, Series 2012A* — 4.00% per annum plus the current fixed floating rate note spread.
- *Transportation Revenue Bonds, Series 2012G* — 3.563% per annum taking into account the interest rate swaps plus the current fixed floating rate note spread.
- *Transportation Revenue Bonds, Series 2014D-2* — 4.00% per annum plus the current fixed floating rate note spread.
- *Transportation Revenue Bonds, Series 2015A-2* — 4.00% per annum plus the current fixed floating rate note spread.
- *Transportation Revenue Bonds, Series 2015E* — 4.00% per annum.
- *Dedicated Tax Fund Bonds, Series 2002B* — 4.00% per annum on SubSeries 2002B-1; and 4.00% per annum plus the current fixed floating rate note spread.
- *Dedicated Tax Fund Variable Rate Refunding Bonds, Series 2008A* — 3.316% per annum taking into account the interest rate swaps plus the current fixed floating rate note spread; and 4.00% per annum plus the current fixed floating rate note spread on the unhedged portion.
- *Dedicated Tax Fund Refunding Bonds, SubSeries 2008B-3a and 2008B-3c* — 4.00% per annum plus the current fixed floating rate note spread.
- *MTA Bridges and Tunnels Subordinate Refunding Bonds, Series 2000ABCD* — 6.08% per annum taking into account the interest rate swap plus the current fixed floating rate note spread; and 4.00% per annum plus the current fixed floating rate note spread on the unhedged portion.
- *MTA Bridges and Tunnels General Revenue Refunding Bonds, Series 2001C* — 4.00% per annum.
- *MTA Bridges and Tunnels General Revenue Refunding Bonds, Series 2001B* — 4.00% per annum plus the current fixed floating rate note spread.
- *MTA Bridges and Tunnels General Revenue Refunding Bonds, Series 2002F* — 5.404% and 3.076% per annum taking into account the interest rate swaps and 4.00% per annum on portions not covered by the interest rate swaps.
- *MTA Bridges and Tunnels General Revenue Bonds, Series 2003B* — 4.00% per annum; and 4.00% per annum plus the current fixed floating rate note spread on SubSeries 2003B-2.
- *MTA Bridges and Tunnels General Revenue Bonds, Series 2005A* — 4.00% per annum except from November 1, 2027 through November 1, 2030, 3.076% per annum taking into account the interest rate swap.
- *MTA Bridges and Tunnels General Revenue Refunding Bonds, Series 2005B* — 3.076% per annum based on the Initial Interest Rate Swaps plus the current fixed floating rate note spread.
- *MTA Bridges and Tunnels General Revenue Bonds, Series 2008B-2* — 4.00% per annum plus the current fixed floating rate note spread.
- *MTA Bridges and Tunnels General Revenue Bonds, Series 2018D* — 4.00% per annum plus the current fixed floating rate note spread.

Loans Payable – The MTA and the New York Power Authority (“NYPA”) entered into an updated Energy Services Program Agreement (“ESP Agreement”). The ESP Agreement authorized MTA affiliates and subsidiaries to enter into a Customer Installation Commitment (“CIC”) with NYPA for turn-key, energy efficiency projects, which would usually be long-term funded and constructed by NYPA. The repayment period for the NYPA loan can be up to 20 years, but can be repaid at any time without penalty.

The debt service requirements at September 30, 2018 are as follows:

Loans Payable (in millions)

Year	(Unaudited)	Principal	Interest	Total
2018		\$ 10	\$ 1	\$ 11
2019		14	1	15
2020		13	1	14
2021		13	1	14
2022		11	1	12
2023-2027		34	2	36
2028-2032		13	1	14
2033-2037		2	0	2
Total		<u>\$ 110</u>	<u>\$ 8</u>	<u>\$ 118</u>
Current portion		\$ 12		
Long-term portion		98		
Total NYPA Loans Payable		<u>\$ 110</u>		

The above interest amounts include both fixed and variable rate calculations. Interest on the variable-rate loan is paid at the Securities Industry and Financial Markets Association Municipal Swap Index ("SIFMA") rate and is reset annually.

Tax Rebate Liability — Under the Internal Revenue Code of 1986, the MTA may accrue a liability for an amount of rebateable arbitrage resulting from investing low-yielding, tax-exempt bond proceeds in higher-yielding, taxable securities. The arbitrage liability is payable to the federal government every five years. No accruals or payments were made during the periods ended September 30, 2018 and December 31, 2017.

Liquidity Facility — MTA and MTA Bridges and Tunnels have entered into several Standby Bond Purchase Agreements ("SBPA") and Letter of Credit Agreements ("LOC") as listed on the table below.

Resolution	Series	Swap	Provider (Insurer)	Type of Facility	Exp. Date
Transportation Revenue	2002G-1g	Y	TD Bank, N.A.	LOC	11/1/2018
Transportation Revenue	2005D-1	Y	Helaba	LOC	11/7/2018
Transportation Revenue	2005D-2	Y	Helaba	LOC	11/10/2022
Transportation Revenue	2005E-1	Y	PNC Bank, National Association	LOC	8/20/2021
Transportation Revenue	2005E-2	Y	Bank of America, N.A.	LOC	12/10/2021
Transportation Revenue	2005E-3	Y	PNC Bank, National Association	LOC	8/20/2021
Transportation Revenue	2012G-2	Y	TD Bank, N.A.	LOC	11/1/2018
Transportation Revenue	2015E-1	N	U.S. Bank National Association	LOC	8/20/2021
Transportation Revenue	2015E-3	N	Bank of America, N.A.	LOC	9/2/2022
Transportation Revenue	2015E-4	N	PNC Bank, National Association	LOC	9/3/2021
Dedicated Tax Fund	2002B-1	Y	Bank of Tokyo Mitsubishi	LOC	3/22/2021
Dedicated Tax Fund	2008A-1	Y	TD Bank, N.A.	LOC	6/13/2022
MTA Bridges and Tunnels General Revenue	2001C	Y	State Street	LOC	6/26/2023
MTA Bridges and Tunnels General Revenue	2002F	Y	Helaba	SBPA	11/1/2018
MTA Bridges and Tunnels General Revenue	2003B-1	Y	Bank of America, N.A.	LOC	1/21/2022
MTA Bridges and Tunnels General Revenue	2005A	Y	TD Bank, N.A.	LOC	1/28/2020
MTA Bridges and Tunnels General Revenue	2005B-2	Y	Citibank, N.A.	LOC	1/23/2021

Derivative Instruments — Fair value for the swaps is calculated in accordance with GASB Statement No. 72, utilizing the income approach and Level 2 inputs. It incorporates the mid-market valuation, nonperformance risk of either MTA/MTA Bridges and Tunnels or the counterparty, as well as bid/offer. The fair values were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swap.

The fair value balances and notional amounts of derivative instruments outstanding at September 30, 2018 and December 31, 2017, classified by type, and the changes in fair value of such derivative instruments from the year ended December 31, 2017 are as follows:

Derivative Instruments - Summary Information

(in \$ millions)

(in \$ millions)

Bond Resolution Credit	Underlying Bond Series	Type of Derivative	Cash Flow or		Trade/Hedge Association Date	As of September 30, 2018	
			Fair Value Hedge	Effective Methodology		Notional Amount	Fair Value
Cashflow Hedges							
						(Unaudited)	
MTA Bridges and Tunnels Senior Revenue Bonds	2002F & 2003B-2 (Citi 2005B)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	6/2/2005	\$ 190.300	\$ (19.393)
MTA Bridges and Tunnels Senior Revenue Bonds	2005B-2,3,4	Libor Fixed Payer	Cash Flow	Synthetic Instrument	6/2/2005	570.900	(58.178)
MTA Bridges and Tunnels Senior Revenue Bonds	2005A (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	4/1/2016	22.650	(2.027)
MTA Bridges and Tunnels Senior Revenue Bonds	2001C (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	12/5/2016	40.275	(1.315)
MTA Bridges and Tunnels Subordinate Revenue Bonds	2000ABCD	SIFMA Fixed Payer	Cash Flow	Synthetic Instrument	8/12/1998	11.150	(0.262)
MTA Dedicated Tax Fund Bonds	2008A	Libor Fixed Payer	Cash Flow	Synthetic Instrument	3/8/2005	326.860	(30.750)
MTA Transportation Revenue Bonds	2002D-2	Libor Fixed Payer	Cash Flow	Synthetic Instrument	7/11/2002	200.000	(50.639)
MTA Transportation Revenue Bonds	2005D & 2005E	Libor Fixed Payer	Cash Flow	Synthetic Instrument	9/10/2004	380.700	(47.427)
MTA Transportation Revenue Bonds	2012G	Libor Fixed Payer	Cash Flow	Synthetic Instrument	12/12/2007	357.150	(58.359)
MTA Transportation Revenue Bonds	2002G-1 (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	4/1/2016	127.660	(7.068)
MTA Transportation Revenue Bonds	2011B (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	4/1/2016	69.590	(10.587)
Total						\$ 2,297.235	\$ (286.005)

Derivative Instruments - Summary Information

(in \$ millions)

(in \$ millions)						As of December 31, 2017	
Bond Resolution Credit	Underlying Bond Series	Type of Derivative	Cash Flow or Fair Value Hedge	Effective Methodology	Trade/Hedge Association Date	Notional Amount	Fair Value
Cashflow Hedges							
MTA Bridges and Tunnels Senior Revenue Bonds	2002F & 2003B-2 (Citi 2005B)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	6/2/2005	\$ 191.300	\$ (29.658)
MTA Bridges and Tunnels Senior Revenue Bonds	2005B-2,3,4	Libor Fixed Payer	Cash Flow	Synthetic Instrument	6/2/2005	573.900	(88.974)
MTA Bridges and Tunnels Senior Revenue Bonds	2005A (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	4/1/2016	22.765	(3.028)
MTA Bridges and Tunnels Senior Revenue Bonds	2001C (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	12/5/2016	57.475	(2.409)
MTA Bridges and Tunnels Subordinate Revenue Bonds	2000ABCD	SIFMA Fixed Payer	Cash Flow	Synthetic Instrument	8/12/1998	34.150	(1.450)
MTA Dedicated Tax Fund Bonds	2008A	Libor Fixed Payer	Cash Flow	Synthetic Instrument	3/8/2005	326.860	(45.587)
MTA Transportation Revenue Bonds	2002D-2	Libor Fixed Payer	Cash Flow	Synthetic Instrument	7/11/2002	200.000	(65.547)
MTA Transportation Revenue Bonds	2005D & 2005E	Libor Fixed Payer	Cash Flow	Synthetic Instrument	9/10/2004	380.700	(67.631)
MTA Transportation Revenue Bonds	2012G	Libor Fixed Payer	Cash Flow	Synthetic Instrument	12/12/2007	357.150	(81.075)
MTA Transportation Revenue Bonds	2002G-1 (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	4/1/2016	142.015	(11.405)
MTA Transportation Revenue Bonds	2011B (COPS 2004A)	Libor Fixed Payer	Cash Flow	Synthetic Instrument	4/1/2016	56.220	(14.961)
Total						\$ 2,342.535	\$ (411.725)

	Changes In Fair Value Amount Classification (in millions)	Fair Value at September 30, 2018 Amount Classification (in millions)	Notional (in millions)
Government activities	(Unaudited)	(Unaudited)	(Unaudited)
Cash Flow hedges:			
Pay-fixed interest rate swaps	Deferred outflow of resources \$125.720	Debt \$(286.005)	\$2,297.235

Swap Agreements Relating to Synthetic Fixed Rate Debt

Board-adopted Guidelines. The Related Entities adopted guidelines governing the use of swap contracts on March 26, 2002. The guidelines were amended and approved by the MTA Board on March 13, 2013. The guidelines establish limits on the amount of interest rate derivatives that may be outstanding and specific requirements that must be satisfied for a Related Entity to enter into a swap contract, such as suggested swap terms and objectives, retention of a swap advisor, credit ratings of the counterparties, collateralization requirements and reporting requirements.

Objectives of synthetic fixed rate debt. To achieve cash flow savings through a synthetic fixed rate, MTA and MTA Bridges and Tunnels have entered into separate pay-fixed, receive-variable interest rate swaps at a cost anticipated to be less than what MTA and MTA Bridges and Tunnels would have paid to issue fixed-rate debt, and in some cases where Federal tax law prohibits an advance refunding to synthetically refund debt on a forward basis.

Terms and Fair Values. The terms, fair values and counterparties of the outstanding swaps of MTA and MTA Bridges and Tunnels are reflected in the following tables (as of September 30, 2018).

Metropolitan Transportation Authority						
Related Bonds	Notional Amount as of 9/30/18 (Unaudited)	Effective Date	Maturity Date	Terms	Counterparty and Ratings(S&P / Moody's / Fitch)	Fair Value as of 9/30/18 (Unaudited)
TRB 2002D-2	\$ 200.000	01/01/07	11/01/32	Pay 4.45%; receive 69% 1M LIBOR	JPMorgan Chase Bank, NA (A+ / Aa3 / AA)	\$ (50.639)
TRB 2005D & 2005E	285.525	11/02/05	11/01/35	Pay 3.561%; receive 67% 1M LIBOR	UBS AG (A+ / Aa3 / AA-)	(35.570)
TRB 2005E	95.175	11/02/05	11/01/35	Pay 3.561%; receive 67% 1M LIBOR	AIG Financial Products ⁽¹⁾ (BBB+ / Baa1 / BBB+)	(11.857)
TRB 2012G	357.150	11/15/12	11/01/32	Pay 3.563%; receive 67% 1M LIBOR	JPMorgan Chase Bank, NA (A+ / Aa3 / AA)	(58.359)
DTF 2008A	326.860	03/24/05	11/01/31	Pay 3.3156%; receive 67% 1M LIBOR	Bank of New York Mellon (AA- / Aa2 / AA)	(30.750)
Total	\$ 1,264.710					\$ (187.175)

¹ Guarantor: American International Group, Inc., parent of AIG Financial Products.

MTA Bridges and Tunnels						
Related Bonds	Notional Amount as of 9/30/18 (Unaudited)	Effective Date	Maturity Date	Terms	Counterparty and Ratings (S&P / Moody's / Fitch)	Fair Value as of 9/30/18 (Unaudited)
TBTA 2002F & 2003B-2	\$ 190.300	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	Citibank, N.A. (A+ / A1 / A+)	\$ (19.393)
TBTA 2005B-2	190.300	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	JPMorgan Chase Bank, NA (A+ / Aa3 / AA)	(19.393)
TBTA 2005B-3	190.300	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	BNP Paribas North America (A / Aa3 / A+)	(19.393)
TBTA 2005B-4	190.300	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	UBS AG (A+ / Aa3 / AA-)	(19.393)
TBTA 2000ABCD	11.150	01/01/01	01/01/19	Pay 6.08%; receive SIFMA-15 bp ¹	JPMorgan Chase Bank, NA (A+ / Aa3 / AA)	(0.262)
TRB 2002G-1 & 2011B TBTA 2005A & 2001C ²	130.088 ³	04/01/16	01/01/30	Pay 3.52%; receive 67% 1M LIBOR	U.S. Bank N.A. (AA- / A1 / AA-)	(10.498) ³
TRB 2002G-1 & 2011B TBTA 2005A & 2001C ²	130.087 ³	04/01/16	01/01/30	Pay 3.52%; receive 67% 1M LIBOR	Wells Fargo Bank, N.A. (A+ / Aa2 / AA-)	(10.498) ³
Total	\$ 1,032.525					\$ (98.830)

1 In accordance with a swaption entered into on August 12, 1998, TBTA received an upfront option premium of \$22.740, which is being amortized over the life of the swap agreement.

2 Between November 22, 2016 and December 5, 2016, the Variable Rate Certificates of Participation, Series 2004A were redeemed. Corresponding notional amounts from the Series 2004A COPs were reassigned to MTA Bridges and Tunnels General Revenue Variable Rate Bonds, Series 2001C.

3 Pursuant to an Interagency Agreement (following novations from UBS in April 2016), MTA New York City Transit is responsible for 68.7%, MTA is responsible for 21.0%, and TBTA is responsible for 10.3% of the transaction.

LIBOR: London Interbank Offered Rate
SIFMA: Securities Industry and Financial Markets Association Index
TRB: Transportation Revenue Bonds
DTF: Dedicated Tax Fund Bonds

Risks Associated with the Swap Agreements

From MTA's and MTA Bridges and Tunnels' perspective, the following risks are generally associated with swap agreements:

Credit Risk. The risk that a counterparty becomes insolvent or is otherwise not able to perform its financial obligations. To mitigate the exposure to credit risk, the swap agreements include collateral provisions in the event of downgrades to the swap counterparties' credit ratings. Generally, MTA and MTA Bridges and Tunnels' swap agreements contain netting provisions under which transactions executed with a single counterparty are netted to determine collateral amounts. Collateral may be posted with a third-party custodian in the form of cash, U.S. Treasury securities, or certain Federal agency securities. MTA and MTA Bridges and Tunnels require its counterparties to fully collateralize if ratings fall below certain levels (in general, at the Baa1/BBB+ or Baa2/BBB levels), with partial posting requirements at higher rating levels (details on collateral posting discussed further under "Collateralization/Contingencies"). As of September 30, 2018, all of the valuations were in liability positions to MTA and MTA Bridges and Tunnels; accordingly, no collateral was posted by any of the counterparties.

The following table shows, as of September 30, 2018, the diversification, by percentage of notional amount, among the various counterparties that have entered into ISDA Master Agreements with MTA and/or MTA Bridges and Tunnels. The notional amount totals below include all swaps.

Counterparty	S&P	Moody's	Fitch	Notional Amount (in thousands) (Unaudited)	% of Total Notional Amount (Unaudited)
JPMorgan Chase Bank, NA	A+	Aa3	AA	\$758,600	33.02%
UBS AG	A+	Aa3	AA-	475,825	20.71
The Bank of New York Mellon	AA-	Aa2	AA	326,860	14.23
Citibank, N.A.	A+	A1	A+	190,300	8.28
BNP Paribas North America, Inc.	A	Aa3	A+	190,300	8.29
U.S. Bank National Association	AA-	A1	AA-	130,088	5.67
Wells Fargo Bank, N.A.	A+	Aa2	AA-	130,087	5.66
AIG Financial Products Corp.	BBB+	Baa1	BBB+	95,175	4.14
Total				\$2,297,235	100.00%

Interest Rate Risk. MTA and MTA Bridges and Tunnels are exposed to interest rate risk on the interest rate swaps. On the pay-fixed, receive variable interest rate swaps, as LIBOR or SIFMA (as applicable) decreases, MTA and MTA Bridges and Tunnels' net payments on the swaps increase.

Basis Risk. The risk that the variable rate of interest paid by the counterparty under the swap and the variable interest rate paid by MTA or MTA Bridges and Tunnels on the associated bonds may not be the same. If the counterparty's rate under the swap is lower than the bond interest rate, then the counterparty's payment under the swap agreement does not fully reimburse MTA or MTA Bridges and Tunnels for its interest payment on the associated bonds. Conversely, if the bond interest rate is lower than the counterparty's rate on the swap, there is a net benefit to MTA or MTA Bridges and Tunnels.

Termination Risk. The risk that a swap agreement will be terminated and MTA or MTA Bridges and Tunnels will be required to make a swap termination payment to the counterparty and, in the case of a swap agreement which was entered into for the purpose of creating a synthetic fixed rate for an advance refunding transaction may also be required to take action to protect the tax-exempt status of the related refunding bonds.

The ISDA Master Agreement sets forth certain termination events applicable to all swaps entered into by the parties to that ISDA Master Agreement. MTA and MTA Bridges and Tunnels have entered into separate ISDA Master Agreements with each counterparty that govern the terms of each swap with that counterparty, subject to individual terms negotiated in a confirmation. MTA and MTA Bridges and Tunnels are subject to termination risk if its credit ratings fall below certain specified thresholds or if MTA/MTA Bridges and Tunnels commits a specified event of default or other specified event of termination. If, at the time of termination, a swap were in a liability position to MTA or MTA Bridges and Tunnels, a termination payment would be owed by MTA or MTA Bridges and Tunnels to the counterparty, subject to applicable netting arrangements.

The following tables set forth the Additional Termination Events for MTA/MTA Bridges and Tunnels and its counterparties.

MTA Transportation Revenue		
Counterparty Name	MTA	Counterparty
AIG Financial Products Corp.; JPMorgan Chase Bank, NA; UBS AG	Below Baa3 (Moody's) or BBB- (S&P)*	Below Baa3 (Moody's) or BBB- (S&P)*

*Note: Equivalent Fitch rating is replacement for Moody's or S&P.

MTA Dedicated Tax Fund		
Counterparty Name	MTA	Counterparty
Bank of New York Mellon	Below BBB (S&P) or BBB (Fitch)*	Below A3 (Moody's) or A- (S&P)**

*Note: Equivalent Moody's rating is replacement for S&P or Fitch.

**Note: Equivalent Fitch rating is replacement for Moody's or S&P.

MTA Bridges and Tunnels Senior Lien		
Counterparty Name	MTA Bridges and Tunnels	Counterparty
BNP Paribas North America, Inc.; Citibank, N.A.; JPMorgan Chase Bank, NA; UBS AG	Below Baa2 (Moody's) or BBB (S&P)*	Below Baa1 (Moody's) or BBB+ (S&P)*

*Note: Equivalent Fitch rating is replacement for Moody's or S&P.

MTA Bridges and Tunnels Subordinate Lien		
Counterparty Name	MTA Bridges and Tunnels	Counterparty
JPMorgan Chase Bank, NA	Swap Insurer below A3 (Moody's) and A- (S&P); and MTA Bridges and Tunnels Senior Lien rating below Baa3 (Moody's) and BBB- (S&P)	Below Baa2 (Moody's) or BBB (S&P)
U.S. Bank National Association; Wells Fargo Bank, N.A.	BelowBaa2 (Moody's) or BBB (S&P)*	Below Baa2 (Moody's) or BBB (S&P)**

*Note: Equivalent Fitch rating is replacement for Moody's or S&P. If not below Investment Grade, MTA Bridges and Tunnels may cure such Termination Event by posting collateral at a Zero threshold.

**Note: Equivalent Fitch rating is replacement for Moody's or S&P.

MTA and MTA Bridges and Tunnels' ISDA Master Agreements provide that the payments under one transaction will be netted against other transactions entered into under the same ISDA Master Agreement. Under the terms of these agreements, should one party become insolvent or otherwise default on its obligations, close-out netting provisions permit the non-defaulting party to accelerate and terminate all outstanding transactions and net the amounts so that a single sum will be owed by, or owed to, the non-defaulting party.

Rollover Risk. The risk that the swap agreement matures or may be terminated prior to the final maturity of the associated bonds on a variable rate bond issuance, and MTA or MTA Bridges and Tunnels may be exposed to then market rates and cease to receive the benefit of the synthetic fixed rate for the duration of the bond issue. The following debt is exposed to rollover risk:

Associated Bond Issue	Bond Maturity Date	Swap Termination Date
MTA Bridges and Tunnels General Revenue Variable Rate Bonds, Series 2001C (swaps with U.S. Bank/Wells Fargo)	January 1, 2032	January 1, 2030
MTA Bridges and Tunnels General Revenue Variable Rate Refunding Bonds, Series 2002F (swap with Citibank, N.A.)	November 1, 2032	January 1, 2032
MTA Bridges and Tunnels General Revenue Variable Rate Bonds, Series 2003B (swap with Citibank, N.A.)	January 1, 2033	January 1, 2032
MTA Bridges and Tunnels General Revenue Variable Rate Bonds, Series 2005A (swaps with U.S. Bank/Wells Fargo and Citibank, N.A.)	November 1, 2035	January 1, 2030 (U.S. Bank/Wells Fargo) January 1, 2032 (Citibank)
MTA Transportation Revenue Variable Rate Bonds, Series 2011B (swaps with U.S. Bank/Wells Fargo)	November 1, 2041	January 1, 2030

Collateralization/Contingencies. Under the majority of the swap agreements, MTA and/or MTA Bridges and Tunnels is required to post collateral in the event its credit rating falls below certain specified levels. The collateral posted is to be in the form of cash, U.S. Treasury securities, or certain Federal agency securities, based on the valuations of the swap agreements in liability positions and net of the effect of applicable netting arrangements. If MTA and/or MTA Bridges and Tunnels do not post collateral, the swap(s) may be terminated by the counterparty(ies).

As of September 30, 2018, the aggregate mid-market valuation of the MTA's swaps subject to collateral posting agreements was (\$156.426); as of this date, the MTA was not subject to collateral posting based on its credit ratings (see further details below).

As of September 30, 2018, the aggregate mid-market valuation of MTA Bridges and Tunnels' swaps subject to collateral posting agreements was (\$98.567); as of this date, MTA Bridges and Tunnels was not subject to collateral posting based on its credit ratings (see further details below).

The following tables set forth the ratings criteria and threshold amounts applicable to MTA/MTA Bridges and Tunnels and its counterparties.

MTA Transportation Revenue		
Counterparty	MTA Collateral Thresholds (based on highest rating)	Counterparty Collateral Thresholds (based on highest rating)
AIG Financial Products Corp.; JPMorgan Chase Bank, NA; UBS AG	Baa1/BBB+: \$10 million Baa2/BBB & below: Zero	Baa1/BBB+: \$10 million Baa2/BBB & below: Zero

Note: Based on Moody's and S&P ratings. In all cases except JPMorgan counterparty thresholds, Fitch rating is replacement for either Moody's or S&P, at which point threshold is based on lowest rating.

MTA Dedicated Tax Fund		
Counterparty	MTA Collateral Thresholds	Counterparty Collateral Thresholds (based on lowest rating)
Bank of New York Mellon	N/A—MTA does not post collateral	Aa3/AA- & above: \$10 million A1/A+: \$5 million A2/A: \$2 million A3/A-: \$1 million Baa1/BBB+ & below: Zero

Note: Counterparty thresholds based on Moody's and S&P ratings. Fitch rating is replacement for either Moody's or S&P.

MTA Bridges and Tunnels Senior Lien		
Counterparty	MTA Bridges and Tunnels Collateral Thresholds (based on highest rating)	Counterparty Collateral Thresholds (based on highest rating)
BNP Paribas North America, Inc.; Citibank, N.A.; JPMorgan Chase Bank, NA; UBS AG	Baa1/BBB+: \$30 million Baa2/BBB: \$15 million Baa3/BBB- & below: Zero	A3/A-: \$10 million Baa1/BBB+ & below: Zero

Note: MTA Bridges and Tunnels thresholds based on Moody's, S&P, and Fitch ratings. Counterparty thresholds based on Moody's and S&P ratings; Fitch rating is replacement for Moody's or S&P.

MTA Bridges and Tunnels Subordinate Lien		
Counterparty	MTA Bridges and Tunnels Collateral Thresholds (based on lowest rating)	Counterparty Collateral Thresholds (based on lowest rating)
JPMorgan Chase Bank, NA	N/A—MTA Bridges and Tunnels does not post collateral	\$1,000,000
U.S. Bank National Association; Wells Fargo Bank, N.A.	Baa3/BBB- & below: Zero (note: only applicable as cure for Termination Event)	Aa3/AA- & above: \$15 million A1/A+ to A3/A-: \$5 million Baa1/BBB+ & below: Zero

Note: Thresholds based on Moody's and S&P ratings. Fitch rating is replacement for Moody's or S&P.

Swap payments and Associated Debt. The following tables contain the aggregate amount of estimated variable-rate bond debt service and net swap payments during certain years that such swaps were entered into in order to: protect against the potential of rising interest rates; achieve a lower net cost of borrowing; reduce exposure to changing interest rates on a related bond issue; or, in some cases where Federal tax law prohibits an advance refunding, achieve debt service savings through a synthetic fixed rate. As rates vary, variable-rate bond interest payments and net swap payments will vary. Using the following assumptions, debt service requirements of MTA's and MTA Bridges and Tunnels' outstanding variable-rate debt and net swap payments are estimated to be as follows:

- It is assumed that the variable-rate bonds would bear interest at a rate of 4.0% per annum.
- The net swap payments were calculated using the actual fixed interest rate on the swap agreements.

MTA				
(in millions)				
Period Ended September 30, 2018	Variable-Rate Bonds		Net Swap Payments	Total
	Principal	Interest		
2018	35.8	50.1	(5.4)	80.6
2019	55.6	48.6	(5.2)	99.0
2020	38.4	46.5	(4.9)	80.0
2021	58.3	44.9	(4.7)	98.5
2022	63.3	42.6	(4.4)	101.4
2023-2027	324.3	173.9	(17.2)	481.0
2028-2032	827.6	454.7	(8.3)	1,274.0
2033-2037	122.7	27.5	(2.0)	148.2

MTA Bridges and Tunnels				
(in millions)				
Period Ended September 30, 2018	Variable-Rate Bonds		Net Swap Payments	Total
	Principal	Interest		
2018	62.5	39.7	(6.6)	95.7
2019	43.4	38.0	(6.9)	74.5
2020	25.4	37.0	(6.9)	55.6
2021	26.6	36.0	(6.8)	55.8
2022	27.6	34.9	(6.8)	55.7
2023-2027	180.4	152.5	(32.3)	300.5
2028-2032	681.8	68.5	(16.5)	733.8
2033-2037	12.4	2.5	(0.1)	14.8

8. LEASE TRANSACTIONS

Leveraged Lease Transactions: Qualified Technological Equipment — On December 19, 2002, the MTA entered into four sale/leaseback transactions whereby MTA New York City Transit transferred ownership of certain MTA New York City Transit qualified technological equipment ("QTE") relating to the MTA New York City Transit automated fare collection system to the MTA. The MTA sold that equipment to third parties and the MTA leased that equipment back from such third parties. Three of those four leases were terminated early and are no longer outstanding. The fourth lease expires in 2022, at which point the MTA has the option of either exercising a fixed-price purchase option for the equipment or returning the equipment to the third-party owner.

Under the terms of the outstanding sale/leaseback agreement the MTA initially received \$74.9, which was utilized as follows: The MTA paid \$52.1 to an affiliate of the lender to the third party, which affiliate has the obligation to pay to MTA an amount equal to the rent obligations under the lease attributable to the debt service on the loan from the third party's lender. The MTA also purchased U.S. Treasury debt securities in amounts and with maturities, which are expected to be sufficient to pay the remainder of the regularly scheduled lease rent payments under the lease and the purchase price due upon exercise by the MTA of the related purchase option if exercised.

Leveraged Lease Transaction: Subway Cars — On September 3, 2003, the MTA entered into a sale/leaseback transaction whereby MTA New York City Transit transferred ownership of certain MTA New York City Transit subway cars to the MTA, the MTA sold those cars to a third party, and the MTA leased those cars back from such third party. The MTA subleased the cars to MTA New York City Transit. The lease expires in 2033. At the lease expiration, the MTA has the option of either exercising a fixed-price purchase option for the cars or returning the cars to the third-party owner.

Under the terms of the sale/leaseback agreement, the MTA initially received \$168.1, which was utilized as follows: The MTA paid \$126.3 to an affiliate of one of the lenders to the third party, which affiliate has the obligation to pay to the MTA an amount equal to the rent obligations under the lease attributable to the debt service on such loan from such third party's lender. The obligations of the affiliate of the third party's lender are guaranteed by American International Group, Inc. The MTA also purchased the Federal National Mortgage Association ("FNMA") and U.S. Treasury securities in amounts and with maturities which are sufficient to make the lease rent payments equal to the debt service on the loans from the other lender to the third party and to pay the remainder of the regularly scheduled rent due under that lease and the purchase price due upon exercise by the MTA of the fixed price purchase option if exercised. The amount remaining after payment of transaction expenses, \$7.4, was the MTA's benefit from the transaction.

Leveraged Lease Transactions: Subway Cars — On September 25, 2003 and September 29, 2003, the MTA entered into two sale/leaseback transactions whereby MTA New York City Transit transferred ownership of certain MTA New York City Transit subway cars to the MTA, the MTA sold those cars to third parties, and the MTA leased those cars back from such third parties. The MTA subleased the cars to MTA New York City Transit. Both leases expire in 2033. At the lease expiration, MTAHQ has the option of either exercising a fixed-price purchase option for the cars or returning the cars to the third-party owner.

Under the terms of the sale/leaseback agreements, the MTA initially received \$294, which was utilized as follows: In the case of one of the leases, the MTA paid \$97 to an affiliate of one of the lenders to the third party, which affiliate has the obligation to pay to the MTA an amount equal to the rent obligations under the lease attributable to the debt service on the loan from such third party's lender. The obligations of the affiliate of such third party's lender are guaranteed by American International Group, Inc. In the case of the other lease, the MTA purchased U.S. Treasury debt securities in amounts and with maturities, which are sufficient for the MTA to make the lease rent payments equal to the debt service on the loan from the lender to that third party. In the case of both of the leases, the MTA also purchased Resolution Funding Corporation ("REFCO") debt securities that mature in 2030. Under an agreement with AIG Matched Funding Corp. (guaranteed by American International Group, Inc.), AIG Matched Funding Corp. receives the proceeds from the REFCO debt securities at maturity and is obligated to pay to the MTA amounts sufficient for the MTA to pay the remainder of the regularly scheduled lease rent payments under those leases and the purchase price due upon exercise by the MTA of the purchase options if exercised. The amount remaining after payment of transaction expenses, \$24, was the MTA's net benefit from these two transactions.

On September 16, 2008, the MTA learned that American International Group, Inc. was downgraded to a level that under the terms of the transaction documents for the sale/leaseback transaction that closed on September 29, 2003, the MTA was required to replace or restructure the applicable Equity Payment Undertaking Agreement provided by AIG Financial Products Corp. and guaranteed by American International Group, Inc. On December 17, 2008, MTA terminated the Equity Payment Undertaking Agreement provided by AIG Financial Products Corp. and guaranteed by American International Group, Inc. and provided replacement collateral in the form of U.S. Treasury strips. REFCO debt security that was being held in pledge was released to MTA. On November 6, 2008, the MTA learned that Ambac Assurance Corp., the provider of the credit enhancement that insures the MTA's contingent obligation to pay a portion of the termination values upon an early termination in both the September 25, 2003 and September 29, 2003 transactions, was downgraded to a level that required the provision of new credit enhancement facilities for each lease by December 21, 2008.

On December 17, 2008, MTA terminated the Ambac Assurance Corp. surety bond for the lease transaction that closed on September 25, 2003 and since then MTA has provided short-term U.S. Treasury debt obligations as replacement collateral. As of September 30, 2018, the market value of total collateral funds was \$37.4.

On January 12, 2009, MTA provided a short-term U.S. Treasury debt obligation as additional collateral in addition to the Ambac Assurance Corp. surety bond for the lease transaction that closed on September 29, 2003. From time to time, additional collateral has been required to be added such that the total market value of the securities being held as additional collateral are expected to be sufficient to pay the remainder of the regularly scheduled lease rent payments under the lease. As of September 30, 2018, the market value of total collateral funds was \$52.7.

MTA Hudson Rail Yards Ground Leases – In the 1980’s, the MTA developed a portion of the Hudson Rail Yards as a storage yard, car wash and repair facility for the Long Island Railroad Company (“LIRR”) rail cars entering Manhattan. It was anticipated that, eventually, the air rights above the Hudson Rail Yards would be developed to meet the evolving needs for high-quality commercial, retail, residential and public space in Manhattan. The Hudson Rail Yards is a rectangular area of approximately 26-acres bounded by 10th Avenue on the east, 12th Avenue on the west, 30th Street on the south and 33rd Street on the North. The Hudson Rail Yards is divided into the Eastern Rail Yards (“ERY”) and the Western Rail Yards (“WRY”). In 2008, the MTA selected a development team led by the Related Companies, L.P to develop a commercial, residential and retail development on the ERY and the WRY.

To undertake the development of the Hudson Rail Yards, the MTA entered into 99-year ground leases (“Balance Leases”) for the airspace above a limiting plane above the tracks (from 31st to 33rd Streets) and the area where there are no rail tracks (from 30th to 31st Streets) within the boundary of the Hudson Rail Yards (“Ground Leased Property”). The Balance Leases do not encumber the railroad tracks, which will continue to be used for transportation purposes.

The following ground leases, each with a 99-year term (beginning December 3, 2012), entered into between the MTA, as landlord, and a special purpose entity controlled by Related-Oxford, as Ground Lease tenants, all of which Ground Leases demise the Eastern Rail Yards (“ERY”) and were severed from the ERY Balance Lease, dated as of April 10, 2013:

- the Ground Lease demising the Tower A Severed Parcel, also known as 30 Hudson Yards.
- the Ground Lease demising the Tower D Severed Parcel, also known as 15 Hudson Yards.
- the Ground Lease demising the Tower E Severed Parcel, also known as 35 Hudson Yards.
- the Ground Lease demising the Retail Podium Severed Parcel.
- the Ground Lease demising the Retail Pavilion Parcel.

The 99-year West Side Rail Yard (“WRY”) Balance Lease (beginning December 3, 2013) between the MTA and a special purpose entity controlled by Related-Oxford demising the WRY and the Severed Parcel Leases to be entered into upon the creation of Severed Parcels that may be severed from the WRY, at the option of the applicable Ground Lease Tenant, upon satisfaction of certain conditions, in order to construct improvements thereon in accordance with the terms of the applicable Severed Parcel Lease.

Both the ERY and WRY Ground Leases were pledged as security for the Series 2016A Hudson Yards Trust Obligations.

The MTA has also entered into the following ground leases which do not provide a source of payment or security for the Series 2016A Hudson Yards Trust Obligations:

- the now-terminated ground lease demising Tower C, also known as 10 Hudson Yards, as to which the Ground Lease tenant closed on its exercise of its Fee Conversion Option on August 1, 2016 for which MTA received \$120.
- the ground lease demising the Culture Shed, which does not pay any Monthly Ground Rent, and
- the ground lease demising the Open Space Severed Parcel which does not pay any Monthly Ground Rent.

The Severed Parcel Ground Leases required Ground Lease Tenants, at their sole cost and expense, to construct the Long Island Railroad Roof (“LIRR Roof”) over the Long Island Railroad tracks in the Hudson Rail Yards, which LIRR Roof will serve as the foundation for substantial portions of the buildings and other improvements being constructed pursuant to each Severed Parcel Ground Lease. Each Ground Lease tenant has the option to purchase fee title to the Ground Leased Property at any time following completion of construction of the building on the Ground Leased Property.

The MTA has classified the ERY and WRY Ground Leases as operating leases. If at the inception of the ground leases, the leases meet one or more of the following four criteria, the lease should be classified as a capital lease. Otherwise, it should be classified as an operating lease. The ERY and WRY Ground Leases did not meet one or more of the following criteria:

- i. The lease transfers ownership of the property to the lessee by the end of the lease term.
- ii. The lease contains a bargain purchase option.
- iii. The lease term is equal to 75 percent or more of the estimated economic life of the leased property.
- iv. The present value at the beginning of the lease term of the minimum lease payments, equals or exceeds 90 percent of the excess of the fair value of the leased property to the lessor at the inception of the lease over any related investment tax credit retained by and expected to be realized by the lessor.

Minimum rent receipts for ERY and WRY Ground Leases are as follows as of September 30, 2018 (unaudited):

Year	ERY	WRY	Total
2018	2	2	4
2019	18	16	34
2020	19	16	35
2021	19	32	51
2022	19	33	52
Thereafter	887	1,558	2,445
Total	\$964	\$1,657	\$2,621

Other Lease Transactions — On July 29, 1998 the MTA, (solely on behalf of MTA Long Island Rail Road and MTA Metro-North Railroad, MTA New York City Transit, and MTA Bridges and Tunnels) entered into a lease and related agreements whereby each agency, as sublessee, will rent, an office building at Two Broadway in lower Manhattan. The triple-net-lease has an initial stated term of approximately 50 years, with the right to extend the lease for two successive 15-year periods at a rental of at least 95% of fair market rent. Remaining payments under the lease approximate \$1.1 billion. Under the subleases, the lease is apportioned as follows: MTA New York City Transit, 68.7%, MTA, 21%; and MTA Bridges and Tunnels, 10.3%. However, the involved agencies have agreed to sub-sublease space from one another as necessary to satisfy actual occupancy needs. The agencies will be responsible for obligations under the lease based on such actual occupancy percentages. Actual occupancy percentages at September 30, 2018, for the MTA New York City Transit, MTA Bridges and Tunnels and MTA (including MTA Bus, MTA Capital Construction Company and MTA Business Service Center) were 57.8%, 7.5% and 34.7%, respectively. MTAs' sublease is for a year-to-year term, automatically extended, except upon the giving of a non-extension notice by MTA. The lease is comprised of both operating and capital elements, with the portion of the lease attributable to the land recorded as an operating lease, and the portion of the lease attributable to the building recorded as a capital lease. The total annual rental payments over the initial lease term are \$1,602 with rent being abated from the commencement date through June 30, 1999. The office building at 2 Broadway, is principally occupied by MTA New York City Transit, MTA Bridges and Tunnels, MTA Capital Construction, and MTAHQ.

MTA reflected a capital lease obligation as of September 30, 2018 and December 31, 2017, of \$228 and \$228, respectively. The MTA made rent payments of \$19 and \$25 for the period ended September 30, 2018 and December 31, 2017, respectively. MTA pays the lease payments on behalf of MTA New York City Transit and MTA Bridges and Tunnels and subsequently makes monthly chargebacks in the form of rental payments. During 2017, the total of the rental payments charged to MTA New York City Transit and MTA Bridges and Tunnels was \$4,138 and \$1,900 less, respectively, than the lease payment made by MTA on behalf of MTA New York City Transit and MTA Bridges and Tunnels.

The adjusted capital lease for the aforementioned building is being amortized over the remaining life of the lease. The cost of the building and related accumulated amortization at September 30, 2018 and December 31, 2017, is as follows (in millions):

	September 30, 2018 (Unaudited)	December 31, 2017
Capital lease - building	\$196	\$196
Less accumulated amortization	(91)	(88)
Capital lease - building - net	<u>\$105</u>	<u>\$108</u>

On April 8, 1994, the MTA amended its lease for the Harlem/Hudson line properties, including Grand Central Terminal. This amendment initially extends the lease term, previously expiring in 2031, an additional 110 years and, pursuant to several other provisions, an additional 133 years. In addition, the amendment grants the MTA an option to purchase the leased property after the 25th anniversary of the amended lease, subject to the owner's right to postpone such purchase option exercise date for up to an additional 15 years if the owner has not yet closed the sale, transfer or conveyance of an aggregate amount of 1,000,000 square feet or more of development rights appurtenant to Grand Central Terminal and the associated zoning lots. The amended lease comprises both operating (for the lease of land) and capital (for the lease of buildings and track structure) elements.

In August 1988, the MTA entered into a 99-year lease agreement with Amtrak for Pennsylvania Station. This agreement, with an option to renew, is for rights to the lower concourse level and certain platforms.

The \$45 paid to Amtrak by the MTA under this agreement is included in other assets. This amount is being amortized over 30 years.

Total rent expense under operating leases approximated \$52.8 and \$50.2 for the periods ended September 30, 2018 and 2017, respectively.

At September 30, 2018, the future minimum lease payments under non-cancelable leases are as follows (in millions):

Years	Operating (Unaudited)	Capital
2018	\$ 68	\$ 21
2019	73	25
2020	73	33
2021	72	24
2022	69	75
2023-2027	297	104
2028-2032	370	129
2033-2037	300	576
2038-2042	262	172
2043-2047	263	194
Thereafter	425	216
Future minimum lease payments	<u>\$ 2,272</u>	<u>1,569</u>
Amount representing interest		(1,128)
Total present value of capital lease obligations		441
Less current present value of capital lease obligations		4
Noncurrent present value of capital lease obligations		<u>\$ 437</u>

Capital Leases Schedule

For the Period Ended September 30, 2018

(in millions)

Description	December 31,		September 30,	
	2017	Increase	Decrease	2018
		(Unaudited)	(Unaudited)	
Sumitomo	\$ 15	\$ -	\$ -	\$ 15
Met Life	6	-	-	6
Met Life Equity	19	-	-	19
Bank of New York	22	-	-	22
Bank of America	37	-	-	37
Bank of America Equity	16	-	-	16
Sumitomo	31	1	-	32
Met Life Equity	52	-	-	52
Grand Central Terminal & Harlem Hudson Railroad Lines	14	-	-	14
2 Broadway Lease Improvement	173	-	-	173
2 Broadway	55	-	-	55
Total MTA Capital Lease	\$ 440	\$ 1	\$ -	\$ 441
Current Portion Obligations under Capital Lease	4			4
Long Term Portion Obligations under Capital Lease	\$ 436			\$ 437

Capital Leases Schedule

For the Year Ended December 31, 2017

(in millions)

Description	December 31,		December 31,	
	2016	Increase	Decrease	2017
Sumitomo	\$ 15	\$ -	\$ -	\$ 15
Met Life	5	1	-	6
Met Life Equity	19	-	-	19
Bank of New York	22	-	-	22
Bank of America	34	3	-	37
Bank of America Equity	16	-	-	16
Sumitomo	35	1	5	31
Met Life Equity	50	2	-	52
Grand Central Terminal & Harlem Hudson Railroad Lines	14	-	-	14
2 Broadway Lease Improvement	169	4	-	173
2 Broadway	54	1	-	55
Total MTA Capital Lease	\$ 433	\$ 12	\$ 5	\$ 440
Current Portion Obligations under Capital Lease	4			4
Long Term Portion Obligations under Capital Lease	\$ 429			\$ 436

9. FUTURE OPTION

In 2010, MTA and MTA Long Island Railroad entered into an Air Space Parcel Purchase and Sale Agreement ("Agreement") with Atlantic Yards Development Company, LLC ("AADC") pursuant to which AADC has obtained an exclusive right to purchase fee title to a parcel (subdivided into six sub-parcels) of air space above the MTA Long Island Railroad Vanderbilt Yard in Brooklyn, New York. Initial annual payments of \$2 (covering all six sub-parcels) commenced on June 1, 2012 and are due on the following three anniversaries of that date. Starting on June 1, 2016, and continuing on each anniversary thereof through and including June 1, 2031, an annual option payment in the amount of \$11 is due. The Agreement provides that all such payments are (i) fully earned by MTA as of the date due in consideration of the continuing grant to AADC of the rights to purchase the air space sub-parcels, (ii) are non-refundable except under certain limited circumstances and (iii) shall be deemed to be payments on account of successive annual options granted to AADC.

After AADC and its affiliates have completed the new yard and transit improvements to be constructed by them at and in the vicinity of the site, AADC has the right from time to time until June 1, 2031, to close on the purchase of any or all of the six air rights sub-parcels. The purchase price for the six sub-parcels is an amount, when discounted at 6.5% per annum from the date of each applicable payment that equals a present value of \$80 as of January 1, 2010. The purchase price of any particular air space sub-parcel is equal to a net present value as of January 1, 2010 (calculated based on each applicable payment) of the product of that sub-parcel's percentage of the total gross square footage of permissible development on all six air space sub-parcels multiplied by \$80.

10. ESTIMATED LIABILITY ARISING FROM INJURIES TO PERSONS

A summary of activity in estimated liability as computed by actuaries arising from injuries to persons, including employees, and damage to third-party property for the period ended September 30, 2018 and year ended December 31, 2017 is presented below (in millions):

	September 30, 2018 (Unaudited)	December 31, 2017
Balance - beginning of year	\$ 3,851	\$ 3,441
Activity during the year:		
Current year claims and changes in estimates	619	832
Claims paid	(344)	(422)
Balance - end of year	4,126	3,851
Less current portion	(426)	(415)
Long-term liability	<u>\$ 3,700</u>	<u>\$ 3,436</u>

See Note 2 for additional information on MTA's liability and property disclosures.

11. COMMITMENTS AND CONTINGENCIES

The MTA Group monitors its properties for the presence of pollutants and/or hazardous wastes and evaluates its exposure with respect to such matters. When the expense, if any, to clean up pollutants and/or hazardous wastes is estimable it is accrued by the MTA (see Note 12).

Management has reviewed with counsel all actions and proceedings pending against or involving the MTA Group, including personal injury claims. Although the ultimate outcome of such actions and proceedings cannot be predicted with certainty at this time, management believes that losses, if any, in excess of amounts accrued resulting from those actions will not be material to the financial position, results of operations, or cash flows of the MTA.

Under the terms of federal and state grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursements to the grantor agencies. While there have been some questioned costs in recent years, ultimate repayments required of the MTA have been infrequent.

Financial Guarantee — *Moynihan Station Development Project* - On May 22, 2017, the MTA Board approved entering into various agreements, including a Joint Services Agreement ("JSA"), necessary to effectuate Phase 2 of the Moynihan Station Development Project (the "Project"), which will entail the redevelopment of the James A. Farley Post Office Building to include a new world-class train hall to be shared by National Railroad Passenger Corporation ("Amtrak"), the Long Island Rail Road and Metro-North Commuter Railroad (the "Train Hall"), as well as retail and commercial space (Retail and Commercial Space).

On July 21, 2017, New York State Urban Development Corporation d/b/a Empire State Development ("ESD") executed a TIFIA Loan Agreement with the United States Department of Transportation (the "TIFIA Lender") in an amount of up to \$526 (the "TIFIA Loan"), with a final maturity date of the earlier of (1) October 30, 2055 and (2) the last semi-annual payment date occurring no later than the date that is thirty-five (35) years following the date on which the Train Hall is substantially completed. The proceeds of the TIFIA Loan are being used to pay for costs of the construction of the Train Hall. The TIFIA Loan is secured by a mortgage on the Train Hall property. The principal and interest on the TIFIA Loan is payable from a pledged revenue stream that primarily

consists of PILOT payments to be paid by certain tenants in the Retail and Commercial Space. The amount of the PILOT payments is fixed through September, 2030 and is thereafter calculated based upon the assessed value of the properties as determined by the City. The TIFIA Loan is further supported by a TIFIA Debt Service Reserve Account, which is funded in an amount equal to the sum of the highest aggregate TIFIA debt service amounts that will become due and payable on any two consecutive semi-annual payment dates in a five-year prospective period.

Simultaneously with the execution of the TIFIA Loan Agreement, the JSA was entered into by and among the MTA, the TIFIA Lender, ESD, and Manufacturers and Traders Trust Company (as Pilot trustee). Under the JSA, MTA is obligated to satisfy semi-annual deficiencies in the TIFIA Debt Service Reserve Account. MTA's obligations under the JSA are secured by the same moneys available to MTA for the payment of the operating and maintenance expenses of the operating agencies.

MTA's obligation under the JSA remains in effect until the earliest to occur of (a) the MTA JSA Release Date (as defined in the JSA and generally summarized below), (b) the date on which the TIFIA Loan has been paid in full and (c) foreclosure by the TIFIA Lender under the Mortgage (as defined in the TIFIA Loan Agreement).

The obligations of the MTA under the JSA will be terminated and released on the date (the "MTA JSA Release Date") on which each of the following conditions have been satisfied: (a) substantial completion of (1) the Train Hall Project and initiation by LIRR and Amtrak of transportation operations therein, and (2) the Retail and Commercial Space; (b) all material construction claims have been discharged or settled; (c) the PILOT payments have been calculated based upon assessed value for at least three years (i.e., 2033); (d) certain designated defaults or events of default under the TIFIA Loan Agreement have not occurred and are continuing; and (e) either of the following release tests shall have been satisfied:

- Release Test A: (a) certain debt service coverage ratios have equaled or exceeded levels set forth in the JSA, taking into consideration assessment appeals; (b) occupancy levels have equaled or exceeded levels set forth in the JSA; and (c) the TIFIA Loan is rated no lower than "BBB-" or "Baa3" by one rating agency, all as more fully described in the JSA; or
- Release Test B: the TIFIA Loan is rated no lower than "A-" or "A3" by two rating agencies, all as more fully described in the JSA.

On the date the JSA was executed and delivered, MTA deposited \$20 into an account, which MTA invests, to be used in accordance with the JSA to reimburse MTA in the event it is obligated under the JSA to make semi-annual deficiency payments to the TIFIA Debt Service Reserve Account.

On June 12, 2017, the MTA entered into a Memorandum of Understanding with ESD and the New York State Division of the Budget (the "Division") whereby the Division agreed that in the event in any given year during the term of the JSA (i) the MTA is required to make a semi-annual deficiency payment to the TIFIA Debt Service Reserve Account, and (ii) the Division has determined that the MTA has incurred an expense that would otherwise have been incurred by the State of New York (the "State Expense"), the Division will consider entering into a cost recovery agreement with the MTA pursuant to subdivision 4 of Section 2975 of the Public Authorities Law (the "PAL") for such year that will provide that in lieu of paying the full assessment pursuant to subdivisions 2 and 3 of Section 2975 of the PAL in any such year, any such assessment shall be reduced by the State Expense.

12. POLLUTION REMEDIATION COST

In accordance with GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, an operating expense provision and corresponding liability measured at its current value using the expected cash flow method is recognized when an obligatory event occurs. Pollution remediation obligations are estimates and subject to changes resulting from price increase or reductions, technology, or changes in applicable laws or regulations. The MTA does not expect any recoveries of cost that would have a material effect on the recorded obligations.

The MTA recognized pollution remediation expenses of \$4 and \$2 for the periods ended September 30, 2018 and 2017, respectively. A summary of the activity in pollution remediation liability at September 30, 2018 and December 31, 2017 were as follows:

	September 30, 2018 (Unaudited)	December 31, 2017
Balance at beginning of year	\$ 79	\$ 88
Current year expenses/changes in estimates	4	13
Current year payments	(4)	(22)
Balance at end of year	79	79
Less current portion	19	20
Long-term liability	<u>\$ 60</u>	<u>\$ 59</u>

The MTA's pollution remediation liability primarily consists of future remediation activities associated with asbestos removal, lead abatement, ground water contamination, arsenic contamination and soil remediation.

13. CURRENT AND NON-CURRENT LIABILITIES

Changes in the activity of current and non-current liabilities for the periods ended September 30, 2018 and December 31, 2017 are presented below:

	Balance December 31, 2016			Balance December 31, 2017 (Unaudited)			Balance September 30, 2018 (Unaudited)	
		Additions	Reductions		Additions	Reductions		
Current liabilities:								
Accounts payable	\$ 526	\$ 81	\$ -	\$ 607	\$ -	\$ (62)	\$ 545	
Interest	226	-	(22)	204	424	-	628	
Salaries, wages and payroll taxes	251	56	-	307	47	-	354	
Vacation and sick pay benefits	911	77	-	988	28	-	1,016	
Current portion — retirement and death benefits	15	-	(1)	14	22	-	36	
Capital accrual	436	-	(24)	412	37	-	449	
Other accrued expenses	648	213	-	861	259	-	1,120	
Unearned revenues	571	23	-	594	-	(7)	587	
Total current liabilities	<u>\$ 3,584</u>	<u>\$ 450</u>	<u>\$ (47)</u>	<u>\$ 3,987</u>	<u>\$ 817</u>	<u>\$ (69)</u>	<u>\$ 4,735</u>	
Non-current liabilities:								
Contract retainage payable	\$ 309	\$ 67	\$ -	\$ 376	\$ 33	\$ -	\$ 409	
Other long-term liabilities	317	30	-	347	7	-	354	
Total non-current liabilities	<u>\$ 626</u>	<u>\$ 97</u>	<u>\$ -</u>	<u>\$ 723</u>	<u>\$ 40</u>	<u>\$ -</u>	<u>\$ 763</u>	

14. FUEL HEDGE

MTA partially hedges its fuel cost exposure using financial hedges. All MTA fuel hedges provide for up to 24 monthly settlements. The table below summarizes twenty-four (24) active ultra-low sulfur diesel ("ULSD") hedges in whole dollars:

Counterparty	Macquarie Energy LLC	Goldman Sachs	Goldman Sachs	JPM Ventures Energy Corporation	Cargill	Goldman Sachs	Goldman Sachs	Goldman Sachs
Trade Date	10/26/2016	11/22/2016	12/20/2016	1/26/2017	2/28/2017	3/28/2017	4/27/2017	5/30/2017
Effective Date	1/17/2010	1/17/2011	1/17/2012	1/18/2001	1/18/2002	1/18/2003	1/18/2004	1/18/2005
Termination Date	9/30/2018	10/31/2018	11/30/2018	12/31/2018	1/31/2019	2/28/2019	3/31/2019	4/30/2019
Price/Gal	\$1.6240	\$1.6670	\$1.7657	\$1.7485	\$1.6824	\$1.6090	\$1.5915	\$1.6085
Original Notional Quantity	2,956,573	2,927,330	2,900,871	2,923,252	2,923,256	2,923,255	2,887,174	2,914,270

Counterparty	Goldman Sachs	Goldman Sachs	Goldman Sachs	Goldman Sachs	Goldman Sachs	Goldman Sachs	Goldman Sachs	Goldman Sachs
Trade Date	6/27/2017	7/26/2017	8/29/2017	9/22/2017	10/26/2017	11/29/2017	12/27/2017	1/31/2018
Effective Date	1/18/2006	1/18/2007	1/18/2008	1/18/2009	1/18/2010	1/18/2011	1/18/2012	1/19/2001
Termination Date	5/31/2019	6/30/2019	7/31/2019	8/31/2019	9/30/2019	10/31/2019	11/30/2019	12/31/2019
Price/Gal	\$1.5225	\$1.6180	\$1.6315	\$1.7205	\$1.7635	\$1.8520	\$1.9050	\$1.9570
Original Notional Quantity	2,914,264	2,914,252	2,914,252	2,914,244	2,612,515	2,870,561	2,870,574	2,870,565

Counterparty	Goldman Sachs	Goldman Sachs	Macquarie Energy LLC	Goldman Sachs	Goldman Sachs	BOA_Merrill	Goldman Sachs	Goldman Sachs
Trade Date	2/28/2018	3/28/2018	4/24/2018	5/29/2018	6/26/2018	7/31/2018	8/29/2018	9/25/2018
Effective Date	1/19/2002	1/19/2003	1/19/2004	1/19/2005	1/19/2006	1/19/2007	1/19/2008	1/19/2009
Termination Date	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020
Price/Gal	\$1.8815	\$1.9805	\$2.0795	\$2.1590	\$2.1755	\$2.1730	\$2.2145	\$2.2885
Original Notional Quantity	2,786,237	2,853,500	2,799,258	2,841,090	2,841,069	2,820,856	2,831,924	2,831,922

The monthly settlements are based on the daily prices of the respective commodities whereby MTA will either receive a payment, or make a payment to the various counterparties depending on the average monthly price of the commodities in relation to the contract prices. At a contract's termination date, the MTA will take delivery of the fuel. As of September 30, 2018, the total outstanding notional value of the ULSD contracts was 52.5 million gallons with a positive fair market value of \$22.5 (unaudited). The valuation of each trade was based on discounting future net cash flows to a single current amount (the income approach) using observable commodity futures prices (Level 2 inputs).

15. CONDENSED COMPONENT UNIT INFORMATION

The following tables present condensed financial information for MTA's component units (in millions).

	MTA	Metro - North Railroad	Long Island Railroad	New York City Transit Authority	Triborough Bridge and Tunnel Authority	Eliminations	Consolidated Total
September 30, 2018 (Unaudited)							
Current assets	\$ 6,876	\$ 184	\$ 208	\$ 543	\$ 905	\$ (295)	\$ 8,421
Capital assets	10,958	4,974	6,578	42,196	6,285	1	70,992
Other Assets	11,304	5	-	1	450	(10,720)	1,040
Intercompany receivables	1,323	89	177	1,378	(14)	(2,953)	-
Deferred outflows of resources	1,566	244	340	1,024	423	(125)	3,472
Total assets and deferred outflows of resources	\$ 32,027	\$ 5,496	\$ 7,303	\$ 45,142	\$ 8,049	\$ (14,092)	\$ 83,925
Current liabilities	\$ 3,012	\$ 280	\$ 230	\$ 1,924	\$ 947	\$ (167)	\$ 6,226
Non-current liabilities	36,144	1,228	2,385	22,366	10,378	(53)	72,448
Intercompany payables	2,342	130	99	666	413	(3,650)	-
Deferred inflows of resources	48	21	22	391	21	-	503
Total liabilities and deferred inflows of resources	\$ 41,546	\$ 1,659	\$ 2,736	\$ 25,347	\$ 11,759	\$ (3,870)	\$ 79,177
Net investment in capital assets	\$ (26,101)	\$ 4,960	\$ 6,578	\$ 42,024	\$ 1,633	\$ (77)	\$ 29,017
Restricted	2,312	-	-	-	855	(431)	2,736
Unrestricted	14,270	(1,123)	(2,011)	(22,229)	(6,198)	(9,714)	(27,005)
Total net position	\$ (9,519)	\$ 3,837	\$ 4,567	\$ 19,795	\$ (3,710)	\$ (10,222)	\$ 4,748
For the period ended September 30, 2018 (Unaudited)							
Fare revenue	\$ 170	\$ 548	\$ 551	\$ 3,319	\$ -	\$ -	\$ 4,588
Vehicle toll revenue	-	-	-	-	1,471	-	1,471
Rents, freight and other revenue	59	36	30	322	16	(32)	431
Total operating revenue	229	584	581	3,641	1,487	(32)	6,490
Total labor expenses	936	744	912	5,647	224	9	8,472
Total non-labor expenses	361	290	290	1,488	184	(43)	2,570
Depreciation	76	172	290	1,366	106	-	2,010
Total operating expenses	1,373	1,206	1,492	8,501	514	(34)	13,052
Operating (deficit) surplus	(1,144)	(622)	(911)	(4,860)	973	2	(6,562)
Subsidies and grants	1,056	95	-	648	6	(489)	1,316
Tax revenue	4,046	-	-	2,155	-	(1,679)	4,522
Interagency subsidy	543	236	406	191	-	(1,376)	-
Interest expense	(878)	-	-	(2)	(205)	(12)	(1,097)
Other	(1,390)	-	1	3	2	1,525	141
Total non-operating revenues (expenses)	3,377	331	407	2,995	(197)	(2,031)	4,882
Gain (Loss) before appropriations	2,233	(291)	(504)	(1,865)	776	(2,029)	(1,680)
Appropriations, grants and other receipts externally restricted for capital projects	(1,729)	290	825	512	(444)	1,750	1,204
Change in net position	504	(1)	321	(1,353)	332	(279)	(476)
Net position, beginning of period	(10,023)	3,838	4,246	21,148	(4,042)	(9,943)	5,224
Net position, end of period	\$ (9,519)	\$ 3,837	\$ 4,567	\$ 19,795	\$ (3,710)	\$ (10,222)	\$ 4,748
For the period ended September 30, 2018 (Unaudited)							
Net cash (used in) / provided by operating activities	\$ (949)	\$ (274)	\$ (484)	\$ (2,473)	\$ 1,175	\$ (108)	\$ (3,113)
Net cash provided by / (used in) non-capital financing activities	3,843	362	531	3,584	(557)	(2,761)	5,002
Net cash (used in) / provided by capital and related financing activities	(4,294)	(52)	23	(895)	(199)	2,761	(2,656)
Net cash provided by / (used in) investing activities	1,627	(35)	(70)	(220)	(418)	108	992
Cash at beginning of period	199	15	5	56	8	-	283
Cash at end of period	\$ 426	\$ 16	\$ 5	\$ 52	\$ 9	\$ -	\$ 508

		Metro- North Railroad	Long Island Railroad	New York City Transit Authority	Triborough Bridge and Tunnel Authority	Eliminations	Consolidated Total
December 31, 2017	MTA						
Current assets	\$ 6,017	\$ 227	\$ 236	\$ 586	\$ 471	\$ (111)	\$ 7,426
Capital assets	9,809	4,828	6,102	41,316	6,005	-	68,060
Other Assets	11,074	5	-	1	4	(9,977)	1,107
Intercompany receivables	751	77	159	1,884	635	(3,506)	-
Deferred outflows of resources	1,748	248	340	1,018	502	(169)	3,687
Total assets and deferred outflows of resources	\$ 29,399	\$ 5,385	\$ 6,837	\$ 44,805	\$ 7,617	\$ (13,763)	\$ 80,280
Current liabilities	\$ 3,017	\$ 288	\$ 253	\$ 1,876	\$ 1,039	\$ (227)	\$ 6,246
Non-current liabilities	33,469	1,185	2,282	21,390	10,093	(116)	68,304
Intercompany payables	2,885	53	34	-	506	(3,477)	-
Deferred inflows of resources	51	21	22	391	21	-	506
Total liabilities and deferred inflows of resources	\$ 39,422	\$ 1,547	\$ 2,591	\$ 23,657	\$ 11,659	\$ (3,820)	\$ 75,056
Net investment in capital assets	\$ (25,162)	\$ 4,814	\$ 6,102	\$ 41,144	\$ 1,730	\$ (378)	\$ 28,250
Restricted	1,484	-	-	-	717	(520)	1,681
Unrestricted	13,655	(976)	(1,856)	(19,996)	(6,489)	(9,045)	(24,707)
Total net position	\$ (10,023)	\$ 3,838	\$ 4,246	\$ 21,148	\$ (4,042)	\$ (9,943)	\$ 5,224
For the period ended September 30, 2017 (Unaudited)							
Fare revenue	\$ 168	\$ 542	\$ 541	\$ 3,339	\$ -	\$ -	\$ 4,590
Vehicle toll revenue	-	-	-	-	1,430	-	1,430
Rents, freight and other revenue	58	43	41	322	14	(41)	437
Total operating revenue	226	585	582	3,661	1,444	(41)	6,457
Total labor expenses	916	721	845	5,531	235	(26)	8,222
Total non-labor expenses	312	268	294	1,312	168	(47)	2,307
Depreciation	80	176	253	1,225	118	-	1,852
Total operating expenses	1,308	1,165	1,392	8,068	521	(73)	12,381
Operating (deficit) surplus	(1,082)	(580)	(810)	(4,407)	923	32	(5,924)
Subsidies and grants	628	-	-	237	6	(79)	792
Tax revenue	3,972	-	-	2,112	-	(1,746)	4,338
Interagency subsidy	573	280	578	197	-	(1,628)	-
Interest expense	(952)	-	-	(2)	(232)	(15)	(1,201)
Other	(1,071)	-	-	(1)	2	1,265	195
Total non-operating revenues (expenses)	3,150	280	578	2,543	(224)	(2,203)	4,124
Loss before appropriations	2,068	(300)	(232)	(1,864)	699	(2,171)	(1,800)
Appropriations, grants and other receipts externally restricted for capital projects	(915)	250	510	563	(570)	1,957	1,795
Change in net position	1,153	(50)	278	(1,301)	129	(214)	(5)
Net position, beginning of the period	(9,409)	3,746	3,874	21,435	(4,477)	(9,562)	5,607
Net position, end of period	\$ (8,256)	\$ 3,696	\$ 4,152	\$ 20,134	\$ (4,348)	\$ (9,776)	\$ 5,602
For the period ended September 30, 2017 (Unaudited)							
Net cash (used in) / provided by operating activities	\$ (985)	\$ (340)	\$ (615)	\$ (1,974)	\$ 1,036	\$ (49)	\$ (2,927)
Net cash provided by / (used in) non-capital financing activities	3,826	368	615	2,621	(560)	(2,537)	4,333
Net cash (used in) / provided by capital and related financing activities	(3,053)	(29)	(7)	(733)	(291)	2,536	(1,577)
Net cash provided by / (used in) investing activities	(205)	-	-	76	(293)	50	(372)
Cash at beginning of period	524	14	13	61	120	-	732
Cash at end of period	\$ 107	\$ 13	\$ 6	\$ 51	\$ 12	\$ -	\$ 189

16. SUBSEQUENT EVENTS

On October 4, 2018, MTA Bridges and Tunnels issued \$125 General Revenue Variable Rate Bonds, Series 2018D to (i) finance bridge and tunnel projects in the MTA Bridges and Tunnels approved Capital Program, and (ii) pay certain financing, legal, and miscellaneous expenses. The Series 2018D bonds mature on November 15, 2038.

On October 10, 2018, MTA issued \$900 Transportation Revenue Bond Anticipation Notes, Series 2018C consisting of \$450 Subseries 2018C-1, which mature on September 1, 2020, and \$450 Subseries C-2, which mature on September 1, 2021. The Series 2018C Notes were issued to (i) finance existing approved transit and commuter projects, (ii) pay interest on the Series 2018C Notes accruing through maturity, and (iii) pay certain financing, legal, and miscellaneous expenses.

On October 11, 2018, MTA extended the direct pay LOCs from TD Bank, N.A. that are associated with Transportation Revenue Variable Rate Bonds, Subseries 2002G-1g and Transportation Revenue Variable Rate Refunding Bonds, Subseries 2012G-2. The respective LOCs will be extended for three years to November 1, 2021.

On October 30, 2018, MTA executed a 2,831,934 gallon ultra-low sulfur diesel fuel hedge at an all-in price of \$2.2455 (whole dollars) per gallon. The hedge covers the period from October 2019 through September 2020.

On October 30, 2018, MTA effectuated a mandatory tender and remarketed \$163 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Series 2002F because the irrevocable direct-pay LOC relating to the Series 2002F bonds was expiring by its terms and was substituted with an irrevocable direct-pay LOC, which will expire on October 29, 2021.

On October 30, 2018, MTA effectuated a mandatory tender and remarketed \$38 of MTA Transportation Revenue Variable Rate Refunding Bonds, Series 2002G-1f and \$137 of MTA Transportation Revenue Variable Rate Refunding Bonds, Subseries 2005D-1 because their current interest rate periods were expiring by their terms. Both the Series 2002G-1f and 2005D-1 Bonds were remarketed in Term Rate Mode as Floating Rate Tender Notes ("FRNs") with a purchase date of July 1, 2021 and with an interest rate of 67% of 1-month LIBOR plus 0.65%.

On November 27, 2018, MTA executed a 3,023,197 gallon ultra-low sulfur diesel fuel hedge at an all-in price of \$1.9213 (whole dollars) per gallon. The hedge covers the period from November 2019 through October 2020.

On November 28, 2018, MTA effectuated a mandatory tender and remarketed \$83 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Refunding Bonds, Subseries 2005B-4c (Libor Floating Rate Tender Notes) and Subseries 2005B-4d (Floating Rate Tender Notes). Both Subseries 2005B-4c and Subseries 2005B-4d were converted from a Term Rate Mode to a Daily Mode.

On December 12, 2018, MTA Bridges and Tunnels issued \$148 General Revenue Variable Rate Refunding Bonds, Series 2018E to refund MTA Bridges and Tunnels Subordinate Revenue Bonds, Subseries 2013D-2a and Subseries 2013D-2b. The Series 2018D bonds mature on November 15, 2032.

On January 3, 2019, MTA executed a 2,856,019 gallon ultra-low sulfur diesel fuel hedge at an all-in price of \$1.7885 (whole dollars) per gallon. The hedge covers the period from December 2019 through November 2020.

METROPOLITAN TRANSPORTATION AUTHORITY

(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
Schedule of Changes in the MTA's Net Pension Liability and Related Ratios for Single Employer Pension Plans

(\$ in thousands)		Additional Plan			MaBSTOA Plan		
Plan Measurement Date (December 31):		2016	2015	2014	2016	2015	2014
Total pension liability:							
Service cost	\$	2,752	\$ 3,441	\$ 3,813	\$ 82,075	\$ 77,045	\$ 72,091
Interest		104,093	106,987	110,036	236,722	232,405	223,887
Effect of economic / demographic (gains) or losses		15,801	6,735	-	13,784	(68,997)	-
Differences between expected and actual experience		-	-	-	-	-	(1,596)
Benefit payments and withdrawals		(158,593)	(157,071)	(156,974)	(187,823)	(179,928)	(175,447)
Net change in total pension liability		(35,947)	(39,908)	(43,125)	144,758	60,525	118,935
Total pension liability—beginning		1,562,251	1,602,159	1,645,284	3,391,989	3,331,464	3,212,529
Total pension liability—ending (a)		1,526,304	1,562,251	1,602,159	3,536,747	3,391,989	3,331,464
Plan fiduciary net position:							
Employer contributions		81,100	100,000	407,513	220,697	214,881	226,374
Nonemployer contributions		70,000	-	-	-	-	-
Member contributions		884	1,108	1,304	18,472	16,321	15,460
Net investment income		58,239	527	21,231	212,260	(24,163)	105,084
Benefit payments and withdrawals		(158,593)	(157,071)	(156,974)	(187,823)	(179,928)	(175,447)
Administrative expenses		(611)	(1,218)	(975)	(186)	(88)	(74)
Net change in plan fiduciary net position		51,019	(56,654)	272,099	263,420	27,023	171,397
Plan fiduciary net position—beginning		726,198	782,852	510,753	2,292,316	2,265,293	2,093,896
Plan fiduciary net position—ending (b)		777,217	726,198	782,852	2,555,736	2,292,316	2,265,293
Employer's net pension liability—ending (a)-(b)	\$	749,087	\$ 836,053	\$ 819,307	\$ 981,011	\$ 1,099,673	\$ 1,066,171
Plan fiduciary net position as a percentage of the total pension liability		50.92%	46.48%	48.86%	72.26%	67.58%	68.00%
Covered-employee payroll	\$	29,312	\$ 39,697	\$ 43,267	\$ 716,527	\$ 686,674	\$ 653,287
Employer's net pension liability as a percentage of covered-employee payroll		2555.56%	2106.09%	1893.61%	136.91%	160.14%	163.20%

Note: Information was not readily available for periods prior to 2014. This schedule is intended to show information for ten years. Additional years will be displayed as they become available.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
Schedule of Changes in the MTA's Net Pension Liability and Related Ratios for Single Employer Pension Plans

(continued)

(\$ in thousands)	MNR Cash Balance Plan			MTA Defined Benefit Plan		
	2016	2015	2014	2016	2015	2014
Plan Measurement Date (December 31):						
Total pension liability:						
Service cost	\$ -	\$ -	\$ -	\$ 138,215	\$ 124,354	\$ 121,079
Interest	24	29	32	308,009	288,820	274,411
Effect of economic / demographic (gains) or losses	(15)	(10)	-	86,809	121,556	-
Effect of assumption changes or inputs	-	18	-	-	(76,180)	-
Effect of plan changes	-	-	-	73,521	6,230	-
Differences between expected and actual experience	-	-	-	-	-	2,322
Benefit payments and withdrawals	(77)	(113)	(88)	(209,623)	(199,572)	(191,057)
Net change in total pension liability	(68)	(76)	(56)	396,931	265,208	206,755
Total pension liability—beginning	634	710	766	4,364,946	4,099,738	3,892,983
Total pension liability—ending (a)	566	634	710	4,761,877	4,364,946	4,099,738
Plan fiduciary net position:						
Employer contributions	23	18	-	280,768	221,694	331,259
Member contributions	-	-	-	29,392	34,519	26,006
Net investment income	16	6	41	247,708	(45,122)	102,245
Benefit payments and withdrawals	(77)	(113)	(88)	(209,623)	(199,572)	(191,057)
Administrative expenses	-	3	(3)	(3,051)	(1,962)	(9,600)
Net change in plan fiduciary net position	(38)	(86)	(50)	345,194	9,557	258,853
Plan fiduciary net position—beginning	612	698	748	3,074,777	3,065,220	2,806,367
Plan fiduciary net position—ending (b)	574	612	698	3,419,971	3,074,777	3,065,220
Employer's net pension liability—ending (a)-(b)	\$ (8)	\$ 22	\$ 12	\$ 1,341,906	\$ 1,290,169	\$ 1,034,518
Plan fiduciary net position as a percentage of the total pension liability	101.41%	96.53%	98.36%	71.82%	70.44%	74.77%
Covered-employee payroll	\$ 846	\$ 1,474	\$ 2,274	\$ 1,784,369	\$ 1,773,274	\$ 1,679,558
Employer's net pension liability as a percentage of covered-employee payroll	-0.95%	1.49%	0.53%	75.20%	72.76%	61.59%

Note: Information was not readily available for periods prior to 2014. This schedule is intended to show information for ten years. Additional years will be displayed as they become available.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
Schedule of the MTA's Proportionate Share of the Net Pension Liabilities of Cost-Sharing Multiple-Employer Pension Plans

(\$ in thousands)

Plan Measurement Date:	NYCERS Plan			NYSLERS Plan		
	June 30, 2017	June 30, 2016	June 30, 2015	March 31, 2017	March 31, 2016	March 31, 2015
MTA's proportion of the net pension liability	24.096%	23.493%	23.585%	0.311%	0.303%	0.289%
MTA's proportionate share of the net pension liability	\$ 5,003,811	\$ 5,708,052	\$ 4,773,787	\$ 29,239	\$ 48,557	\$ 9,768
MTA's actual covered-employee payroll	\$ 3,154,673	\$ 3,064,007	\$ 2,989,480	\$ 96,583	\$ 87,670	\$ 87,315
MTA's proportionate share of the net pension liability as a percentage of the MTA's covered-employee payroll	158.616%	186.294%	159.686%	30.273%	55.386%	11.187%
Plan fiduciary net position as a percentage of the total pension liability	74.805%	69.568%	73.125%	94.703%	90.685%	97.947%

Note: Information was not readily available for periods prior to 2015. This schedule is intended to show information for ten years. Additional years will be displayed as they become available. The data provided in this schedule is based on the measurement date used by NYCERS and NYSLERS for the net pension liability.

METROPOLITAN TRANSPORTATION AUTHORITY

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REQUIRED SUPPLEMENTARY INFORMATION
Schedule of the MTA's Contributions for All Pension Plans for the Year Ended December 31,

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
	(\$ in thousands)									
Additional Plan*										
Actuarially Determined Contribution	\$ 76,523	\$ 83,183	\$ 82,382	\$ 112,513	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Employer Contribution	221,523	151,100	100,000	407,513	-	-	-	-	-	-
Contribution Deficiency (Excess)	\$ (145,000)	\$ (67,917)	\$ (17,618)	\$ (295,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 20,500	\$ 29,312	\$ 39,697	\$ 43,267	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions as a % of Covered Payroll	1080.62%	515.49%	251.91%	941.87%	N/A	N/A	N/A	N/A	N/A	N/A
MaBSTOA Plan										
Actuarially Determined Contribution	\$ 202,924	\$ 220,697	\$ 214,881	\$ 226,374	\$ 234,474	\$ 228,918	\$ 186,454	\$ 200,633	\$ 204,274	\$ 201,919
Actual Employer Contribution	202,684	220,697	214,881	226,374	234,474	228,918	186,454	200,633	204,274	201,919
Contribution Deficiency (Excess)	\$ 240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 749,666	\$ 716,527	\$ 686,674	\$ 653,287	\$ 582,081	\$ 575,989	\$ 579,696	\$ 591,073	\$ 569,383	\$ 562,241
Contributions as a % of Covered Payroll	27.04%	30.80%	31.29%	34.65%	40.28%	39.74%	32.16%	33.94%	35.88%	35.91%
Metro-North Cash Balance Plan*										
Actuarially Determined Contribution	\$ -	\$ 23	\$ -	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Employer Contribution	-	23	14	-	-	-	-	-	-	-
Contribution Deficiency (Excess)	\$ -	\$ -	\$ (14)	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 471	\$ 846	\$ 1,474	\$ 2,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions as a % of Covered Payroll	0.00%	2.68%	0.96%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
MTA Defined Benefit Plan*										
Actuarially Determined Contribution	\$ 316,916	\$ 290,415	\$ 273,700	\$ 271,523	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Employer Contribution	321,861	280,767	221,694	331,259	-	-	-	-	-	-
Contribution Deficiency (Excess)	\$ (4,945)	\$ 9,648	\$ 52,006	\$ (59,736)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 1,857,026	\$ 1,784,369	\$ 1,773,274	\$ 1,679,558	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions as a % of Covered Payroll	17.33%	15.73%	12.50%	19.72%	N/A	N/A	N/A	N/A	N/A	N/A

* For the MTA Defined Benefit Plan, Additional Plan and Metro-North Cash Balance Plan, information was not readily available for periods prior to 2014. This schedule is intended to show information for ten years. Additional years will be displayed as they become available.

METROPOLITAN TRANSPORTATION AUTHORITY
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REQUIRED SUPPLEMENTARY INFORMATION
Schedule of the MTA's Contributions for All Pension Plans for the Year Ended December 31,
(continued)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
	(\$ in thousands)									
NYCERS										
Actuarially Determined Contribution	\$ 800,863	\$ 797,845	\$ 736,212	\$ 741,223	\$ 736,361	\$ 731,983	\$ 657,771	\$ 574,555	\$ 548,721	\$ 499,603
Actual Employer Contribution	800,863	797,845	736,212	741,223	736,361	731,983	657,771	574,555	548,721	499,603
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 3,768,885	\$ 3,523,993	\$ 3,494,907	\$ 3,617,087	\$ 2,943,195	\$ 2,925,834	\$ 2,900,630	\$ 2,886,789	\$ 2,800,882	\$ 2,656,778
Contributions as a % of Covered Payroll	21.25%	22.64%	21.07%	20.49%	25.02%	25.02%	22.68%	19.90%	19.59%	18.80%
NYSLERS **										
Actuarially Determined Contribution	\$ 13,969	\$ 12,980	\$ 15,792	\$ 13,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Employer Contribution	13,969	12,980	15,792	13,816	-	-	-	-	-	-
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 103,787	\$ 94,801	\$ 86,322	\$ 84,041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions as a % of Covered Payroll	13.46%	13.69%	18.29%	16.44%	N/A	N/A	N/A	N/A	N/A	N/A

** For the NYSLERS plan, information was not readily available for periods prior to 2014. This schedule is intended to show information for ten years. Additional years will be displayed as they become available.

METROPOLITAN TRANSPORTATION AUTHORITY
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REQUIRED SUPPLEMENTARY INFORMATION
Notes to Schedule of the MTA's Contributions for All Pension Plans

	Additional Plan		
Valuation Dates:	January 1, 2016	January 1, 2015	January 1, 2014
Measurement Date:	December 31, 2016	December 31, 2015	December 31, 2014
Actuarial cost method:	Entry Age Normal Cost	Entry Age Normal Cost	Entry Age Normal Cost
Amortization method:	Period specified in current valuation report (closed 17 year period beginning January 1, 2016) with level dollar payments.	Period specified in current valuation report (closed 18 year period beginning January 1, 2015) with level dollar payments.	Period specified in current valuation report (closed 19 year period beginning January 1, 2014) with level dollar payments.
Asset Valuation Method:	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Salary increases:	3.00%	3.00%	3.00%
Actuarial assumptions:			
Discount Rate:	7.00%	7.00%	7.00%
Investment rate of return :	7.00%, net of investment expenses.	7.00%, net of investment expenses.	7.00%, net of investment expenses.
Mortality:	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA.	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA.	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA. As generational tables, they reflect mortality improvements both before and after the measurement date. Mortality assumption is based on a 2012 experience study for all MTA plans.
Pre-retirement:	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.
Post-retirement Healthy Lives:	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.
Post-retirement Disabled Lives:	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.50%; 3.50%	2.50%; 3.50%	2.50%; 3.50%
Cost-of-Living Adjustments:	N/A	N/A	N/A

METROPOLITAN TRANSPORTATION AUTHORITY
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REQUIRED SUPPLEMENTARY INFORMATION
Notes to Schedule of the MTA's Contributions for All Pension Plans

MaBSTOA Plan			
Valuation Dates:	January 1, 2016	January 1, 2015	January 1, 2014
Measurement Date:	December 31, 2016	December 31, 2015	December 31, 2014
Actuarial cost method:	Frozen Initial Liability (FIL)	Frozen Initial Liability (FIL)	Frozen Initial Liability (FIL)
Amortization method:	For FIL bases, period specified in current valuation 30-year level dollar. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population.	For FIL bases, period specified in current valuation 30-year level dollar. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population.	For FIL bases, period specified in current valuation 30-year level dollar. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population.
Asset Valuation Method:	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized Market value restart as of 1/1/96, then gains/losses over a 5-year period. Gains/losses are five-year moving average of market values based on market value of assets.
Salary increases:	Varies by years of employment and employment type.	Varies by years of employment and employment type.	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 15.0% for operating employees and 4.0% to 7.0% for nonoperating employees per year, depending on years of service.
Actuarial assumptions:			
Discount Rate:	7.00%	7.00%	7.00%
Investment rate of return :	7.00%, net of investment expenses.	7.00%, net of investment expenses.	7.00%, net of investment expenses.
Mortality:	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA.	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA.	Pre-retirement and post-retirement healthy annuitant rates are projected on a generational basis using Scale AA. As generational tables, they reflect mortality improvements both before and after the measurement date. Mortality assumption is based on a 2012 experience study for all MTA plans.
Pre-retirement:	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.
Post-retirement Healthy Lives:	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.
Post-retirement Disabled Lives:	75% of the rates from the RP-2000 Healthy Annuitant mortality table for males and females.	75% of the rates from the RP-2000 Healthy Annuitant mortality table for males and females.	75% of the rates from the RP-2000 Healthy Annuitant mortality table for males and females.
Inflation/Railroad Retirement Wage Base:	2.50%	2.50%	2.50%
Cost-of-Living Adjustments:	1.375% per annum	1.375% per annum	1.375% per annum

METROPOLITAN TRANSPORTATION AUTHORITY
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REQUIRED SUPPLEMENTARY INFORMATION
Notes to Schedule of the MTA's Contributions for All Pension Plans
(continued)

MNR Cash Balance Plan			
Valuation Dates:	January 1, 2017	January 1, 2016	January 1, 2014
Measurement Date:	December 31, 2016	December 31, 2015	December 31, 2014
Actuarial cost method:	Unit Credit Cost	Unit Credit Cost	Unit Credit Cost
Amortization method:	One-year amortization of the unfunded liability, if any.	One-year amortization of the unfunded liability, if any.	Period specified in current valuation report (closed 10 year period beginning January 1, 2008 - 4 year period for the January 1, 2014 valuation).
Asset Valuation Method:	Actuarial value equals market value.	Actuarial value equals market value.	Effective January 1, 2015, the Actuarially Determined Contribution (ADC) will reflect one-year amortization of the unfunded accrued liability in accordance with the funding policy adopted by the MTA.
Salary increases:	N/A	N/A	There were no projected salary increase assumptions used in the January 1, 2014 valuation as the participants of the Plan were covered under the Management Plan effective January 1, 1989. For participants of the Plan eligible for additional benefits, these benefits were not valued as the potential liability is de minimus.
Actuarial assumptions:			
Discount Rate:	4.00%	4.00%	4.50%
Investment rate of return :	4.00%, net of investment expenses.	4.00%, net of investment expenses.	4.50%, net of investment expenses.
Mortality:	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA. Mortality assumption is based on a 2012 experience study for all MTA plans.	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA. Mortality assumption is based on a 2012 experience study for all MTA plans.	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA. As generational tables, they reflect mortality improvements both before and after the measurement date. Mortality assumption is based on a 2012 experience study for all MTA plans.
Pre-retirement:	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.
Post-retirement Healthy Lives:	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.
Post-retirement Disabled Lives:	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.30%	2.30%	2.50%
Cost-of-Living Adjustments:	N/A	N/A	N/A

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
Notes to Schedule of the MTA's Contributions for All Pension Plans
(continued)

	MTA Defined Benefit Plan		
Valuation Dates:	January 1, 2016	January 1, 2015	January 1, 2014
Measurement Date:	December 31, 2016	December 31, 2015	December 31, 2014
Actuarial cost method:	Entry Age Normal Cost	Entry Age Normal Cost	Entry Age Normal Cost
Amortization method:	For Frozen Initial Liability ("FIL") bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group.	For Frozen Initial Liability ("FIL") bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group.	For Frozen Initial Liability ("FIL") bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group.
Asset Valuation Method:	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Salary increases:	Varies by years of employment, and employee group. 3.5% for MTA Bus hourly employees.	Varies by years of employment, and employee group. 3.5% for MTA Bus hourly employees.	Varies by years of employment, and employee group.
Actuarial assumptions:			
Discount Rate:	7.00%	7.00%	7.00%
Investment rate of return :	7.00%	7.00%	7.00%
Mortality:	Preretirement and postretirement healthy annuitant rates are projected on a generational basis using Scale AA. As a general table, it reflects mortality improvements both before and after the measurement date.	Preretirement and postretirement healthy annuitant rates are projected on a generational basis using Scale AA. As a general table, it reflects mortality improvements both before and after the measurement date.	Preretirement and postretirement healthy annuitant rates are projected on a generational basis using Scale AA, as recommended by the Society of Actuaries Retirement Plans Experience Committee. Mortality assumption is based on a 2012 experience study for all MTA plans.
Pre-retirement:	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments.
Post-retirement Healthy Lives:	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.	95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.
Post-retirement Disabled Lives:	75% of the rates from the RP-2000 Healthy Annuitant mortality table for males and females. At age 85 and later for males and age 77 and later for females, the disability rates are set to the male and females healthy rates, respectively.	75% of the rates from the RP-2000 Healthy Annuitant mortality table for males and females. At age 85 and later for males and age 77 and later for females, the disability rates are set to the male and females healthy rates, respectively.	75% of the rates from the RP-2000 Healthy Annuitant mortality table for males and females. At age 85 and later for males and age 77 and later for females, the disability rates are set to the male and females healthy rates, respectively.
Inflation/Railroad Retirement Wage Base:	2.50%; 3.50%	2.50%; 3.50%	2.50%; 3.00%
Cost-of-Living Adjustments:	55% of inflation assumption or 1.375%, if applicable.	55% of inflation assumption or 1.375%, if applicable.	55% of inflation assumption or 1.375%, if applicable.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
Notes to Schedule of the MTA's Contributions for All Pension Plans
(continued)

	NYCERS Plan		
Valuation Dates:	June 30, 2015	June 30, 2014	June 30, 2013
Measurement Date:	June 30, 2017	June 30, 2016	June 30, 2015
Actuarial cost method:	Entry Age Normal Cost	Entry Age Normal Cost	Entry Age Normal Cost
Amortization method:	Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfunded.	Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfunded.	Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfunded.
Asset Valuation Method:	Modified six-year moving average of market values with a Market Value Restart as of June 30, 2011	Modified six-year moving average of market values with a Market Value Restart as of June 30, 2011	Modified six-year moving average of market values with a Market Value Restart as of June 30, 2011.
Salary increases:	3% per annum.	3% per annum.	3% per annum.
Actuarial assumptions:			
Discount Rate:	7.00%	7.00%	7.00%
Investment rate of return :	7.00%, net of investment expenses.	7.00%, net of investment expenses.	7.00%, net of investment expenses.
Mortality:	Mortality tables for service and disability pensioners were developed from an experience study of NYCERS's pensioners. The mortality tables for beneficiaries were developed from an experience review of NYCERS' beneficiaries. The most recently completed study was published by Gabriel Roeder & Company ("GRS"), dated October 2015, and analyzed experience for Fiscal Years 2010 thorough 2013.	Mortality tables for service and disability pensioners were developed from an experience study of NYCERS's pensioners. The mortality tables for beneficiaries were developed from an experience review of NYCERS' beneficiaries. The most recently completed study was published by Gabriel Roeder & Company ("GRS"), dated October 2015, and analyzed experience for Fiscal Years 2010 thorough 2013.	Mortality tables for service and disability pensioners were developed from an experience study of NYCERS's pensioners. The mortality tables for beneficiaries were developed from an experience review of NYCERS' beneficiaries. The most recently completed study was published by Gabriel Roeder & Company ("GRS"), dated October 2015, and analyzed experience for Fiscal Years 2010 thorough 2013.
Pre-retirement:	N/A	N/A	N/A
Post-retirement Healthy Lives:	N/A	N/A	N/A
Post-retirement Disabled Lives:	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.50%	2.50%	2.50%
Cost-of-Living Adjustments:	1.5% per annum for Auto COLA and 2.5% per annum for Escalation.	1.5% per annum for Auto COLA and 2.5% per annum for Escalation.	1.5% per annum for Auto COLA and 2.5% per annum for Escalation.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
Notes to Schedule of the MTA's Contributions for All Pension Plans
(continued)

	NYSLERS Plan		
Valuation Dates:	April 1, 2016	April 1, 2015	April 1, 2014
Measurement Date:	March 31, 2017	March 31, 2016	March 31, 2015
Actuarial cost method:	Aggregate Cost method	Aggregate Cost method	Aggregate Cost method
Amortization method:	Evenly over the remaining working lifetimes of the active membership.	Evenly over the remaining working lifetimes of the active membership.	Evenly over the remaining working lifetimes of the active membership.
Asset Valuation Method:	5 year level smoothing of the difference between the actual gain and the expected gain using the assumed investment rate of return.	5 year level smoothing of the difference between the actual gain and the expected gain using the assumed investment rate of return.	5-year level smoothing of the difference between the actual gain and the expected gain using the assumed investment rate of return.
Salary increases:	3.80%	3.80%	4.90%
Actuarial assumptions:			
Discount Rate:	7.00%	7.00%	7.50%
Investment rate of return :	7.00%, net of investment expenses.	7.00%, net of investment expenses.	7.5%, net of investment expenses.
Mortality:	Annuitant mortality rates are based on NYSLERS's 2010 experience study of the period April 1, 2005 through March 31, 2010 with adjustments for mortality improvements based on the Society of Actuaries's Scale MP-2014.	Annuitant mortality rates are based on NYSLERS's 2010 experience study of the period April 1, 2005 through March 31, 2010 with adjustments for mortality improvements based on the Society of Actuaries's Scale MP-2014.	Annuitant mortality rates are based on NYSLERS's 2010 experience study of the period April 1, 2005 through March 31, 2010 with adjustments for mortality improvements based on the Society of Actuaries's Scale MP-2014.
Pre-retirement:	N/A	N/A	N/A
Post-retirement Healthy Lives:	N/A	N/A	N/A
Post-retirement Disabled Lives:	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.50%	2.50%	2.70%
Cost-of-Living Adjustments:	1.3% per annum.	1.3% per annum.	1.4% per annum.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION

Notes to Schedule of MTA's Contributions for All Pension Plans

(concluded)

Significant methods and assumptions used in calculating the actuarially determined contributions of an employer's proportionate share in Cost Sharing, Multiple-Employer pension plans, the NYCERS plan and the NYSLERS plan, are presented as notes to the schedule.

Factors that significantly affect trends in the amounts reported are changes of benefit terms, changes in the size or composition of the population covered by the benefit terms, or the use of different assumptions. Following is a summary of such factors:

Changes of Benefit Terms:

There were no changes of benefit terms in the June 30, 2015 valuation for the NYCERS plan.

There were no significant legislative changes in benefit for the April 1, 2015 valuation for the NYSLERS plan.

Changes of Assumptions:

There were no changes in benefit assumptions used in the June 30, 2015 valuation for the NYCERS plan.

There were changes in the economic and demographic assumptions used in the April 1, 2015 valuation for the NYSLERS plan.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS FOR THE MTA POSTEMPLOYMENT BENEFIT PLAN
(\$ in millions)

Year Ended	Actuarial Valuation Date	Actuarial Value of Assets {a}	Actuarial Accrual Liability (AAL) {b}	Unfunded Actuarial Accrual Liability (UAAL) {c} = {b} - {a}	Funded Ratio {a} / {b}	Covered Payroll {d}	Ratio of UAAL to Covered Payroll {c} / {d}
December 31, 2017	January 1, 2016	\$298	\$19,802	\$19,504	1.50 %	\$5,041.0	386.9 %
December 31, 2016	January 1, 2014	\$300	\$18,472	\$18,172	1.60 %	\$4,669.8	389.1 %
December 31, 2015	January 1, 2014	\$300	\$18,472	\$18,172	1.60 %	\$4,669.8	389.1 %

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

SUPPLEMENTARY INFORMATION
**SCHEDULE OF CONSOLIDATED RECONCILIATION BETWEEN FINANCIAL PLAN
AND FINANCIAL STATEMENTS FOR THE PERIOD ENDED SEPTEMBER 30, 2018**

(\$ in millions)

(Unaudited)

Category	Financial Plan Actual	Statement GAAP Actual	Variance
REVENUE:			
Farebox revenue	\$ 4,588	\$ 4,588	\$ -
Vehicle toll revenue	1,471	1,471	-
Other operating revenue	429	431	2
Total revenue	6,488	6,490	2
OPERATING EXPENSES:			
Labor:			
Payroll	3,840	3,854	14
Overtime	794	797	3
Health and welfare	963	966	3
Pensions	993	995	2
Other fringe benefits	687	686	(1)
Postemployment benefits	1,573	1,585	12
Reimbursable overhead	(396)	(411)	(15)
Total labor expenses	8,454	8,472	18
Non-labor:			
Electric power	356	357	1
Fuel	140	140	-
Insurance	(7)	(7)	-
Claims	282	282	-
Paratransit service contracts	332	332	-
Maintenance and other	489	456	(33)
Professional service contract	372	369	(3)
Pollution remediation project costs	4	4	-
Materials and supplies	478	478	-
Other business expenses	164	159	(5)
Total non-labor expenses	2,610	2,570	(40)
Depreciation	2,010	2,010	-
Total operating expenses	13,074	13,052	(22)
NET OPERATING LOSS	\$ (6,586)	\$ (6,562)	\$ 24

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

SUPPLEMENTARY INFORMATION
**SCHEDULE OF CONSOLIDATED SUBSIDY ACCRUAL RECONCILIATION BETWEEN
FINANCIAL PLAN AND FINANCIAL STATEMENTS FOR THE PERIOD ENDED SEPTEMBER 30, 2018**

(\$ in millions)

(Unaudited)

	Financial Plan Actual	Financial Statement GAAP Actual	Variance	
Accrued Subsidies				
Mass transportation operating assistance	\$ 1,687	\$ 1,687	\$ -	
Mass transit trust fund subsidies	475	475	-	{1}
Mortgage recording tax 1 and 2	327	327	-	{1}
MRT transfer	(4)	(4)	-	{1}
Urban tax	502	502	-	{1}
State and local operating assistance	341	408	67	{1}
Station maintenance	126	126	-	{1}
Connecticut Department of Transportation (CDOT)	93	95	2	{1}
Subsidy from New York City for MTA Bus and SIRTOA	378	358	(20)	{1}
NYS Grant for debt service	-	1	1	{3}
Build American Bonds Subsidy	45	47	2	{1}
Mobility tax	1,497	1,531	34	{1}
NYS/NYC Subway Action Plan	411	411	-	{1}
Other non-operating income	-	15	15	{2}
Total accrued subsidies	5,878	5,979	101	
Net operating deficit before subsidies and debt service	(6,586)	(6,562)	24	
Debt Service	(1,956)	(1,097)	859	
Conversion to Cash basis: Depreciation	2,010	-	(2,010)	
Conversion to Cash basis: OPEB Obligation	1,105	-	(1,105)	
Conversion to Cash basis: GASB 68 pension adjustment	(3)	-	3	
Conversion to Cash basis: Pollution & Remediation	4	-	(4)	
Total net operating surplus/(deficit) before appropriations, grants and other receipts restricted for capital projects	<u>\$ 452</u>	<u>\$ (1,680)</u>	<u>\$ (2,132)</u>	

{1} The Financial Plan records on a cash basis while the Financial Statement records on an accrual basis.

{2} The Financial Plan records do not include other non-operating income or changes in market value.

{3} The Financial Plan records do not include other non-operating subsidy or expense for the
refunding of NYS Service Contract Bonds.

METROPOLITAN TRANSPORTATION AUTHORITY
(A Component Unit of the State of New York)

SUPPLEMENTARY INFORMATION
SCHEDULE OF FINANCIAL PLAN TO FINANCIAL STATEMENTS RECONCILIATION
RECONCILING ITEMS
FOR THE PERIOD ENDED SEPTEMBER 30, 2018
(\$ in millions)

Financial Plan Actual Operating Loss at September 30, 2018	\$	(6,586)
The Financial Plan Actual Includes:		
1 Lower other operating revenues		2
2 Lower labor expense primarily from lower OPEB expense projections		(18)
Higher non-labor expense primarily from higher maintenance and professional contracts		
3 projections		40
4 Other expense adjustments		-
Total operating reconciling items		24
Financial Statements Operating Loss at September 30, 2018		(6,562)
Financial Plan Surplus after Subsidies and Debt Service		452
The Audited Financial Statements Includes:		
1 Higher dedicated taxes and subsidies		101
2 Lower debt service expense (excludes bond principal payments)		859
3 Adjustments for non-cash liabilities:		
Depreciation	(2,010)	
Unfunded OPEB Expense	(1,105)	
Unfunded GASB 68 Pension adjustment	3	
Unfunded Pollution Remediation Expense	(4)	(3,116)
4 Total operating reconciling items (from above)		24
Financial Statement Loss Before Capital Appropriations	\$	(1,680)

**MTA
EMPLOYEE BENEFIT PLANS
FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2017 AND 2016**

**MANAGEMENT'S REVIEW
AUDIT COMMITTEE MEETING
JANUARY 22, 2019**



MTA BENEFIT PLANS FINANCIAL STATEMENTS

JANUARY 1, 2018

(\$'s in Thousands)

#	BENEFIT PLAN NAME	TYPE	EMPLOYEES COVERED	TOTAL NET ASSETS	TOTAL MEMBERSHIP
1	MTA DEFINED BENEFIT PENSION PLAN	Defined Benefit Pension Plan	Covers certain LIRR non-represented and represented employees hired after December 31, 1987, MNCRR non-represented and certain represented employees, MTA Police, SIRTOA non-represented and represented employees, certain employees of MTA Bus and certain employees of the former LI Bus hired prior to January 23, 1983.	\$4,051,534	30,342
2	MANHATTAN and BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN	Defined Benefit Pension Plan	MaBSTOA employees of the Transit Authority who are specifically excluded from NYCERS.	\$2,922,588	15,268
3	LONG ISLAND RAILROAD COMPANY PLAN FOR ADDITIONAL PENSIONS	Defined Benefit Pension Plan	Long Island Railroad employees hired effective July 1, 1971 and prior to January 1, 1988.	\$951,327	6,007
4	METRO NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN	Defined Benefit Pension Plan	Metro North Railroad employees hired prior to June, 1983	\$523	43
5	MTA DEFERRED COMPENSATION PROGRAM	Defined Contribution Plans - (401K & 457)	All MTA non-represented employees and most represented employees.	\$6,486,464	401K = 54,757 457 = 41,418
6	MTA RETIREE WELFARE BENEFITS PLAN (OPEB PLAN)	Retiree Benefits Welfare Plan	The MTA Group's retired employees and their eligible spouses and dependents.	\$370,352	138,960



MTA BENEFIT PLANS FINANCIAL STATEMENTS

- The MTA's Benefit Plans Financial Statements are prepared in conformity with Generally Accepted Accounting Principles in the United States (GAAP) using accounting standards established by the Government Accounting Standards Board (GASB). They include 4 sections as follows:
 1. Managements' Discussion & Analysis (MD&A)
 2. The basic Financial Statements which include:
 - The Statement of Plan Net Position
 - The Statement of Changes in Net Position
 3. The Notes to the Financial Statements
 4. Required Supplementary Information (RSI)



NEW GASB ACCOUNTING STANDARD FOR FISCAL YEAR 2017

Standard #	Title	MTA Effective Date
GASB 73	Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statements 68, and Amendments to Certain Provisions of GASB Statements 67 and 68.	Fiscal Year 2017
GASB 74	Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans.	Fiscal year 2017



NEW GASB ACCOUNTING STANDARD FOR FISCAL YEAR 2017

GASB 73 Required Changes

Pension Plan Financial Statements

- ☐ Applicable to Pension Plans that do not have dedicated assets or assets that are in a trust.
- ☐ No impact on MTA's Pension Plan Financial Statements

GASB 74 Required Changes

OPEB Plan Financial Statements

- ☐ Replaces GASB 43
- ☐ Calculation of Net OPEB Liability to be reflected in the RSI
- ☐ Actuarial valuation timing – as of the plan's year-end
- ☐ Actuarial assumption changes



MTA PENSION PLANS-(Including Multi-Employer-Cost Sharing) and MTA OPEB PLAN

(\$'s in Thousands)

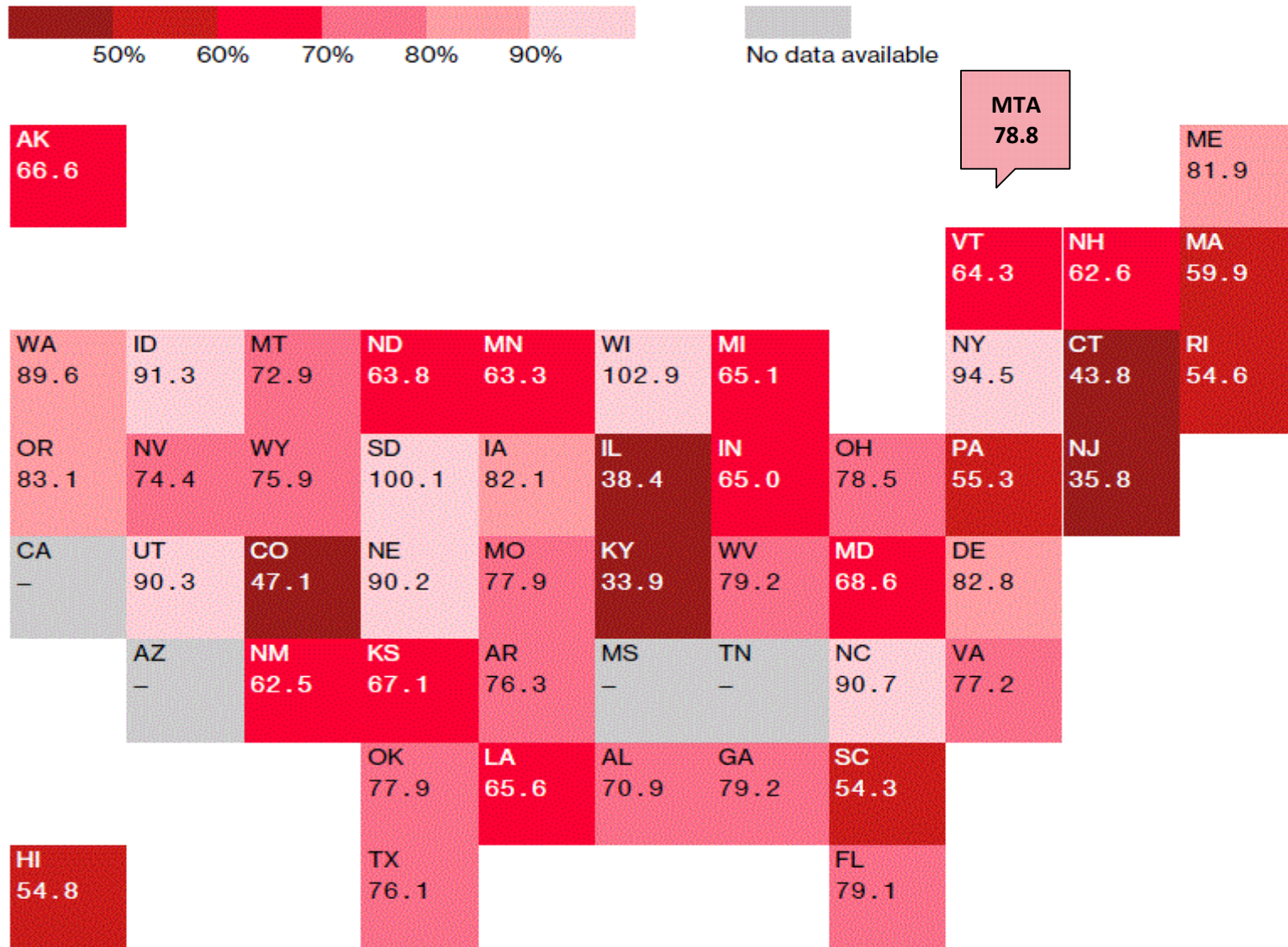
PENSION PLAN	Balances as of December 31, 2018				
	Pension Liability	Plan Net Assets	Net Pension Liability	Funded Ratio	FY17/FY18 Contributions
Single Employer					
1 MTADB PLAN (MTA Group)	(5,072,814)	4,051,534	(1,021,280)	79.9%	352,855
2 MABSTOA Plan	(3,676,476)	2,922,588	(753,888)	79.5%	222,397
3 LIRR Add'l Plan	(1,471,828)	951,327	(520,501)	64.6%	222,283
4 MNCRR Cash Balance Plan	(528)	523	(5)	99.1%	-
Total Single Employer Plans	\$ (10,221,646)	\$ 7,925,972	\$ (2,295,674)	77.5%	\$ 797,535
Multi-Employer- Cost Sharing					
5 NYSLERS - MTA % = 0.33%	(599,682)	589,129	(10,553)	98.2%	14,501
6 NYCERS - MTA % = 23.7%	(19,727,053)	15,550,112	(4,176,941)	78.8%	799,736
Total Multi Employer Plans	\$ (20,326,735)	\$ 16,139,241	\$ (4,187,494)	79.4%	\$ 814,237
TOTAL CONSOLIDATED PENSIONS	\$ (30,548,381)	\$ 24,065,213	\$ (6,483,168)	78.8%	\$ 1,611,772
OPEB PLAN					
	OPEB Liability	Plan Net Assets	Net OPEB Liability	Funded Ratio	FY18 Contributions
MTA Retiree Welfare Benefits Plan	\$ (21,379,903)	\$ 370,352	(21,009,551)	1.73%	\$ -



STATE PENSION PLAN FUNDING RATIOS

Public Employee Pension Funding Ratio by State

Assets as a percentage of liabilities, 2017 figures



STATE PENSION PLAN FUNDING RATIOS

Rank 2016	Rank 2017	State	Funding Ratio 2017 (%)	Funding Ratio 2016 (%)	Change, in % Points
2	1	Kentucky	33.9	31.4	2.5
1	2	New Jersey	35.8	30.9	4.9
3	3	Illinois	38.4	35.6	2.8
4	4	Connecticut	43.8	44.1	-0.3
5	5	Colorado	47.1	46.0	1.1
9	6	South Carolina	54.3	53.8	0.5
10	7	Rhode Island	54.6	55.3	-0.7
6	8	Hawaii	54.8	51.3	3.5
7	9	Pennsylvania	55.3	52.6	2.8
11	10	Massachusetts	59.9	57.5	2.4
20	11	New Mexico	62.5	65.4	-2.9
12	12	New Hampshire	62.6	58.3	4.3
8	13	Minnesota	63.3	53.2	10.1
21	14	North Dakota	63.8	65.9	-2.1
17	15	Vermont	64.3	64.3	-0.0
15	16	Indiana	65.0	63.0	2.0
16	17	Michigan	65.1	64.0	1.2
13	18	Louisiana	65.6	60.2	5.3
14	19	Alaska	66.6	62.7	3.9
19	20	Kansas	67.1	65.1	2.0
18	21	Maryland	68.6	64.9	3.7
22	22	Alabama	70.9	67.2	3.6
24	23	Montana	72.9	71.2	1.7
27	24	Nevada	74.4	72.3	2.2
30	25	Wyoming	75.9	73.3	2.7
29	26	Texas	76.1	73.0	3.0
33	27	Arkansas	76.3	76.9	-0.6
28	28	Virginia	77.2	72.4	4.8
32	29	Missouri	77.9	76.7	1.2
25	30	Oklahoma	77.9	71.9	6.0
23	31	Ohio	78.5	71.0	7.5
		MTA	78.8	73.2	5.6
35	32	Florida	79.1	79.1	-0.0
31	33	Georgia	79.2	75.8	3.5
26	34	West Virginia	79.2	72.1	7.1
34	35	Maine	81.9	77.3	4.6
38	36	Iowa	82.1	81.6	0.5
37	37	Delaware	82.8	81.1	1.7
36	38	Oregon	83.1	80.5	2.6
39	39	Washington	89.6	84.0	5.6
43	40	Nebraska	90.2	88.8	1.4
40	41	Utah	90.3	86.0	4.3
42	42	North Carolina	90.7	88.3	2.3
41	43	Idaho	91.3	87.7	3.5
44	44	New York	94.5	90.6	3.9
45	45	South Dakota	100.1	96.9	3.2
46	46	Wisconsin	102.9	99.1	3.8

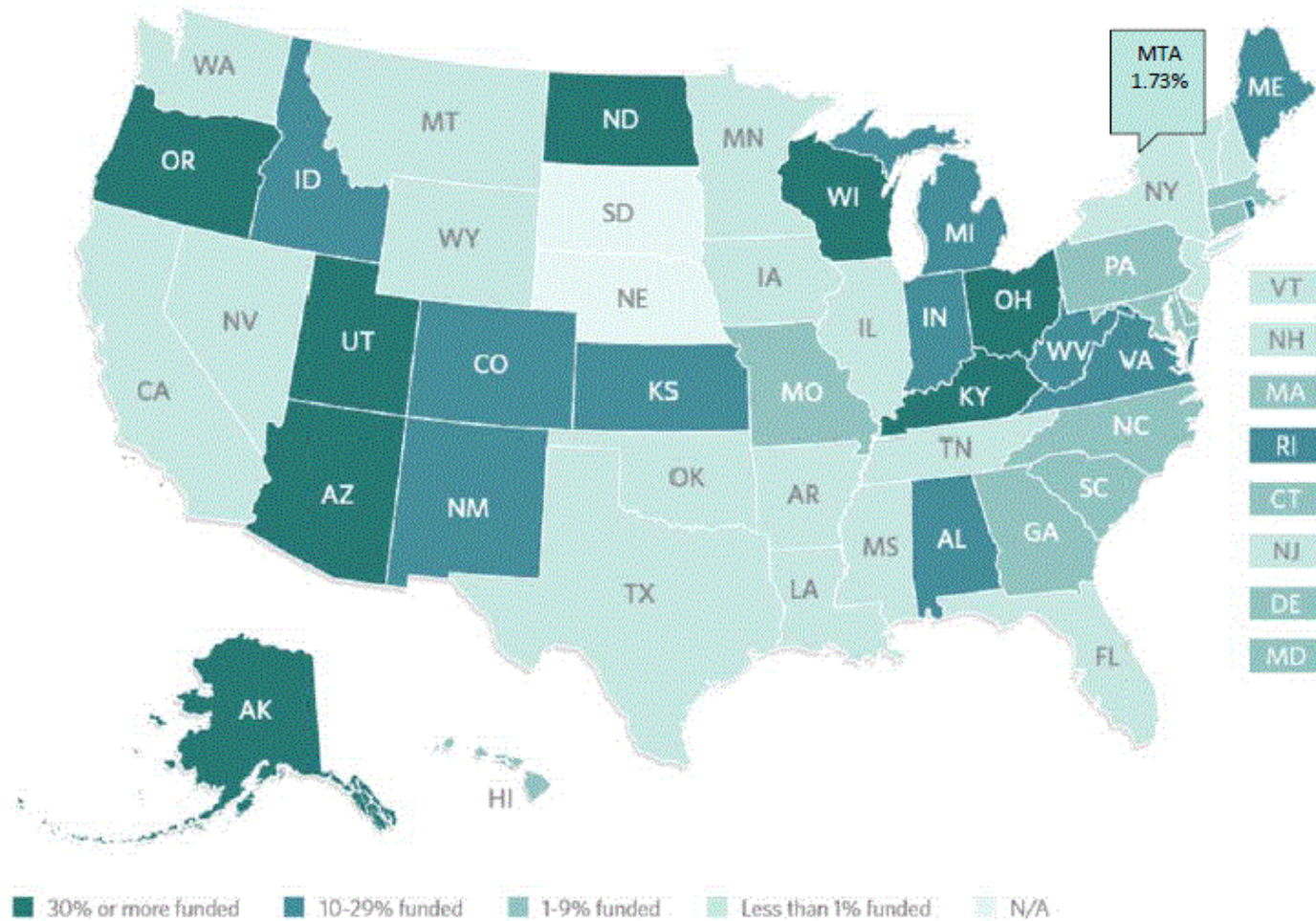


STATE OPEB PLAN FUNDING RATIOS

Figure 1

2016 State OPEB Funded Ratio Map

A majority of states have funded levels below 30%



Sources: State comprehensive annual financial reports, OPEB actuarial valuations, and state data verification responses

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Metropolitan Transportation Authority Deferred Compensation Program

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016, and
Independent Auditors' Report

METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

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INDEPENDENT AUDITORS' REPORT

To the Committee of the
Metropolitan Transportation Authority Deferred Compensation Program

Report on the Financial Statements

We have audited each of the accompanying statements of plan net position of the Metropolitan Transportation Authority Deferred Compensation Program, comprised of the Deferred Compensation Plan for Employees of the Metropolitan Transportation Authority, its Subsidiaries and Affiliates (the "457 Plan") and the Thrift Plan for Employees of the Metropolitan Transportation Authority, its Subsidiaries and Affiliates (the "401K Plan"), (collectively the "Plans") as of December 31, 2017 and 2016, and each of the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plans' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plans' preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plans' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, each of the Plans' financial statements referred to above present fairly, in all material respects, each of the Plans' net position as of December 31, 2017 and 2016, and the respective changes in each of the Plans' net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 20 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

January 22, 2019

METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) DECEMBER 31, 2017 AND 2016

The Deferred Compensation Program is comprised of the Deferred Compensation Plan for Employees of the Metropolitan Transportation Authority, its Subsidiaries and Affiliates (the “457 Plan”) and the Thrift Plan for Employees of the Metropolitan Transportation Authority, its Subsidiaries and Affiliates (the “401(k) Plan”), collectively known as the “Plans” and the “Metropolitan Transportation Authority Deferred Compensation Plans”. This management’s discussion and analysis of the Plans’ financial performance provides an overview of the Plans’ financial activities for the years ended December 31, 2017 and 2016. It is meant to assist the reader in understanding the Plans’ financial statements by providing an overall review of the financial activities during the year and the effects of significant changes. This discussion and analysis may contain opinions, assumptions, or conclusions by the MTA’s management that should not be considered a replacement for, and is intended to be read in conjunction with the Plans’ financial statements which begin on page 21.

OVERVIEW OF BASIC FINANCIAL STATEMENTS

The following discussion and analysis is intended to serve as an introduction to the financial statements. The basic financial statements are:

- **The Statement of Plans Net Position** — presents the financial position of the Plans at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at contract and net asset values (“NAV”). All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Plans Net Position** present the results of activities during the year. All changes affecting the assets and liabilities of the Plans are reflected on an accrual basis when the activity occurred regardless of the timing of the related cash flows. In that regard, changes in the contract and NAV of investments are included in the year’s activity as net appreciation (depreciation) in contract and NAV values of investments.
- **The Notes to Financial Statements** provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plans’ accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.

The financial statements are prepared in accordance with Governmental Accounting Standards Board (“GASB”) Pronouncements.

Financial Highlights

As a result of various Deferred Compensation Program changes, expanding participant eligibility through collective bargaining, a strong educational program and greater participant satisfaction, the Deferred Compensation Program has continued to grow. The assets of the 457 Plan exceeded its liabilities by \$2.719 billion and the assets of the 401(k) plan exceeded its liabilities by \$3.767 billion as of December 31,

2017. This net position restricted for benefits is held in trust for distribution to the Plans participants and/or beneficiaries.

The assets of the 457 Plan exceeded its liabilities by \$2.332 billion and the assets of the 401(k) plan exceeded its liabilities by \$3.212 billion as of December 31, 2016. This net position restricted for benefits is held in trust for distribution to the Plans participants and/or beneficiaries.

During 2017, the net positions held in trust for the 457 Plan and the 401(k) Plan increased by \$387.096 million and \$555.248 million, respectively, due primarily to net investment income and employer and employee contributions to the plans. This was offset by distributions to participants and plan expenses.

During 2016, the net positions held in trust for the 457 Plan and the 401(k) Plan increased by \$196.228 million and \$287.309 million, respectively, due primarily to net investment income and employer and employee contributions to the plans. This was offset by distributions to participants and plan expenses.

Deductions from the Plans' net position consist primarily of distributions to participant and transfers to other plans, and plan expenses in the amounts of \$102.243 million and \$101.769 million for the 457 Plan and \$145.334 million and \$136.773 million for the 401(k) Plan for the year ended December 31, 2017 and 2016, respectively.

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Plans Net Position
As of December 31,
(\$ In Thousands)

457 Plan

				Amount of Change		Percentage Change	
	2017	2016	2015	(2017 - 2016)	(2016 - 2015)	(2017 - 2016)	(2016 - 2015)
ASSETS:							
Investments	\$ 2,645,243	\$ 2,262,973	\$ 2,069,184	\$ 382,270	\$ 193,789	16.9%	9.4%
Participant loans receivable	74,607	69,815	67,361	4,792	2,454	6.9	3.6
Total assets	2,719,850	2,332,788	2,136,545	387,062	196,243	16.6	9.2
LIABILITIES:							
Administrative expense reimbursement	356	390	375	(34)	15	(8.7)	4.0
Total liabilities	356	390	375	(34)	15	(8.7)	4.0
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
	\$ 2,719,494	\$ 2,332,398	\$ 2,136,170	\$ 387,096	\$ 196,228	16.6%	9.2%

401K Plan

				Amount of Change		Percentage Change	
	2017	2016	2015	(2017 - 2016)	(2016 - 2015)	(2017 - 2016)	(2016 - 2015)
ASSETS:							
Investments	\$ 3,621,298	\$ 3,076,148	\$ 2,794,983	\$ 545,150	\$ 281,165	17.7%	10.1%
Participant loans receivable	146,347	136,075	129,902	10,272	6,173	7.5	4.8
Total assets	3,767,645	3,212,223	2,924,885	555,422	287,338	17.3	9.8
LIABILITIES:							
Administrative expense reimbursement	675	501	472	174	29	34.7	6.1
Total liabilities	675	501	472	174	29	34.7	6.1
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
	\$ 3,766,970	\$ 3,211,722	\$ 2,924,413	\$ 555,248	\$ 287,309	17.3%	9.8%

**Changes in Plans Net Position
For the Years Ended December 31,
(\$ In Thousands)**

457 Plan

				Amount of Change		Percentage Change	
	2017	2016	2015	(2017 - 2016)	(2016 - 2015)	(2017 - 2016)	(2016 - 2015)
ADDITIONS:							
Investment income:	\$ 292,040	\$ 117,182	\$ 36,997	\$ 174,858	\$ 80,185	149.2 %	216.7 %
Contributions and additional deposits	194,089	177,851	181,031	16,238	(3,180)	9.1	(1.8)
Loan repayments - interest	3,210	2,964	2,762	246	202	8.3	7.3
Total additions	489,339	297,997	220,790	191,342	77,207	64.2	35.0
DEDUCTIONS:							
Distribution to participants	53,784	50,120	47,642	3,664	2,478	7.3	5.2
Transfers to other plans	45,145	48,242	43,881	(3,097)	4,361	(6.4)	9.9
Net participant loan activity	1,938	1,735	1,778	203	(43)	11.7	(2.4)
Other	1,376	1,672	2,064	(296)	(392)	(17.7)	(19.0)
	102,243	101,769	95,365	474	6,404	0.5	6.7
Increase in net position	387,096	196,228	125,425	190,868	70,803	97.3	56.5
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
Beginning of year	2,332,398	2,136,170	2,010,745	196,228	125,425	9.2	6.2
End of year	\$ 2,719,494	\$ 2,332,398	\$ 2,136,170	\$ 387,096	\$ 196,228	16.6 %	9.2 %

401K Plan

				Amount of Change		Percentage Change	
	2017	2016	2015	(2017 - 2016)	(2016 - 2015)	(2017 - 2016)	(2016 - 2015)
ADDITIONS:							
Investment income:	\$ 416,584	\$ 164,042	\$ 49,879	\$ 252,542	\$ 114,163	153.9 %	228.9 %
Contributions and additional deposits	277,661	254,327	248,732	23,334	5,595	9.2	2.3
Loan repayments - interest	6,337	5,713	5,336	624	377	10.9	7.1
Total additions	700,582	424,082	303,947	276,500	120,135	65.2	39.5
DEDUCTIONS:							
Distribution to participants	73,733	63,287	58,729	10,446	4,558	16.5	7.8
Transfers to other plans	66,031	69,067	71,819	(3,036)	(2,752)	(4.4)	(3.8)
Net participant loan activity	2,789	2,379	2,548	410	(169)	17.2	(6.6)
Other	2,781	2,040	2,818	741	(778)	36.3	(27.6)
	145,334	136,773	135,914	8,561	859	6.3	0.6
Increase in net position	555,248	287,309	168,033	267,939	119,276	93.3	71.0
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
Beginning of year	3,211,722	2,924,413	2,756,380	287,309	168,033	9.8	6.1
End of year	\$ 3,766,970	\$ 3,211,722	\$ 2,924,413	\$ 555,248	\$ 287,309	17.3 %	9.8 %

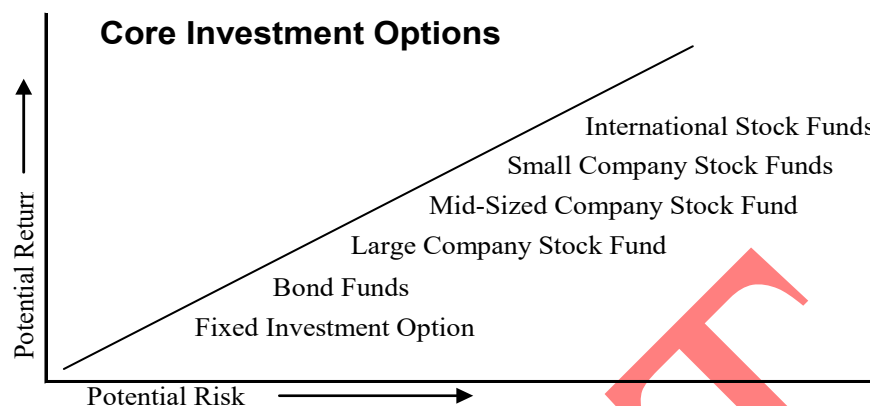
Investment Options

The MTA Plans offer twelve (12) Target-Year Lifecycle Funds, which provide a diversified mix of certain of the Plans' investment options and allow a participant to choose the fund closest to their anticipated withdrawal date. The Target-Year Lifecycle Funds are designed to provide an asset allocation strategy appropriate for an individual's risk and return preferences in a single fund through a diversified portfolio of the Plans' domestic stock funds, international stock funds and fixed income funds. Some components are not offered to participants outside of the Target-Year Lifecycle Funds. Allocations are automatically rebalanced to their targets on a quarterly basis.

<u>Fund Name</u>	<u>Asset Class</u>	<u>Portfolio Allocations</u>
MTA Target-Year Lifecycle 2015 Fund	Large Cap 12.00% Small - Mid Cap 3.60% Intl Equity 15.50% Market Bonds 17.10% Stable Value 41.30% Real Asset 10.50%	MTA Large Cap Equity Index Fund 6.00% MTA Large Cap Equity Fund 6.00% MTA Small-Mid Cap Equity Fund 3.6% MTA International Equity Fund 15.50% MTA Bond Fund 17.10% MTA Real Asset Fund 10.50% MTA Stable Value Fund 41.30%
MTA Target-Year Lifecycle 2020 Fund	Large Cap 16.30% Small - Mid Cap 4.20% Intl Equity 20.50% Market Bonds 18.20% Stable Value 30.80% Real Asset 10.00%	MTA Large Cap Equity Index Fund 8.20% MTA Large Cap Equity Fund 8.10% MTA Small-Mid Cap Equity Fund 4.20% MTA International Equity Fund 20.50% MTA Bond Fund 18.20% MTA Real Asset Fund 10.00% MTA Stable Value Fund 30.80%
MTA Target-Year Lifecycle 2025 Fund	Large Cap 21.20% Small - Mid Cap 5.80% Intl Equity 27.00% Market Bonds 18.20% Stable Value 17.80% Real Asset 10.00%	MTA Large Cap Equity Index Fund 12.70% MTA Large Cap Equity Fund 8.50% MTA Small-Mid Cap Equity Fund 5.80% MTA International Equity Fund 27.00% MTA Bond Fund 18.20% MTA Real Asset Fund 10.00% MTA Stable Value Fund 17.80%
MTA Target-Year Lifecycle 2030 Fund	Large Cap 24.90% Small - Mid Cap 9.00% Intl Equity 33.80% Market Bonds 13.70% Stable Value 8.60% Real Asset 10.00%	MTA Large Cap Equity Index Fund 15.40% MTA Large Cap Equity Fund 9.50% MTA Small-Mid Cap Equity Fund 9.00% MTA International Equity Fund 33.80% MTA Bond Fund 13.70% MTA Real Asset Fund 10.00% MTA Stable Value Fund 8.60%
MTA Target-Year Lifecycle 2035 Fund	Large Cap 26.40% Small - Mid Cap 11.60% Intl Equity 38.00% Market Bonds 12.60% Stable Value 1.40% Real Asset 10.00%	MTA Large Cap Equity Index Fund 14.80% MTA Large Cap Equity Fund 11.60% MTA Small-Mid Cap Equity Fund 11.60% MTA International Equity Fund 38.00% MTA Bond Fund 12.60% MTA Real Asset Fund 10.00% MTA Stable Value Fund 1.40%

<u>Fund Name</u>	<u>Asset Class</u>	<u>Portfolio Allocations</u>
MTA Target-Year Lifecycle 2040 Fund	Large Cap 26.20% Small - Mid Cap 14.00% Intl Equity 40.40% Market Bonds 9.40% Real Asset 10.00%	MTA Large Cap Equity Index Fund 12.10% MTA Large Cap Equity Fund 14.10% MTA Small-Mid Cap Equity Fund 14.00% MTA International Equity Fund 40.40% MTA Bond Fund 9.40% MTA Real Asset Fund 10.00%
MTA Target-Year Lifecycle 2045 Fund	Large Cap 26.60% Small - Mid Cap 15.60% Intl Equity 42.20% Market Bonds 5.60% Real Asset 10.00%	MTA Large Cap Equity Index Fund 11.00% MTA Large Cap Equity Fund 15.60% MTA Small-Mid Cap Equity Fund 15.60% MTA International Equity Fund 42.20% MTA Bond Fund 5.60% MTA Real Asset Fund 10.00%
MTA Target-Year Lifecycle 2050 Fund	Large Cap 26.70% Small - Mid Cap 15.80% Intl Equity 42.50% Market Bonds 5.00% Real Asset 10.00%	MTA Large Cap Equity Index Fund 9.30% MTA Large Cap Equity Fund 17.40% MTA Small-Mid Cap Equity Fund 15.80% MTA International Equity Fund 42.50% MTA Bond Fund 5.00% MTA Real Asset Fund 10.00%
MTA Target-Year Lifecycle 2055 Fund	Large Cap 26.70% Small - Mid Cap 15.80% Intl Equity 42.50% Market Bonds 5.00% Real Asset 10.00%	MTA Large Cap Equity Index Fund 8.90% MTA Large Cap Equity Fund 17.80% MTA Small-Mid Cap Equity Fund 15.80% MTA International Equity Fund 42.50% MTA Bond Fund 5.00% MTA Real Asset Fund 10.00%
MTA Target-Year Lifecycle 2060 Fund	Large Cap 27.70% Small - Mid Cap 15.80% Intl Equity 42.50% Market Bonds 5.00% Real Asset 10.00%	MTA Large Cap Equity Index Fund 8.90% MTA Large Cap Equity Fund 17.80% MTA Small-Mid Cap Equity Fund 15.80% MTA International Equity Fund 42.50% MTA Bond Fund 5.00% MTA Real Asset Fund 10.00%
MTA Target-Year Lifecycle 2065 Fund	Large Cap 27.70% Small - Mid Cap 15.80% Intl Equity 42.50% Market Bonds 5.00% Real Asset 10.00%	MTA Large Cap Equity Index Fund 8.90% MTA Large Cap Equity Fund 17.80% MTA Small-Mid Cap Equity Fund 15.80% MTA International Equity Fund 42.50% MTA Bond Fund 5.00% MTA Real Asset Fund 10.00%
MTA Income Fund	Large Cap 9.50% Small - Mid Cap 2.40% Intl Equity 11.90% Market Bonds 13.20% Stable Value 51.00% Real Asset 12.00%	MTA Large Cap Equity Index Fund 4.80% MTA Large Cap Equity Fund 4.70% MTA Small-Mid Cap Equity Fund 2.40% MTA International Equity Fund 11.90% MTA Bond Fund 13.20% MTA Real Asset Fund 12.00% MTA Stable Value Fund 51.00%

In addition to the ten Target-Year lifecycle funds, the Plans offer a spectrum of investment options that include two international funds, two small company stock funds, two mid-size company stock funds, two large company stock funds, two bond funds, and the Stable Value Income Fund (“Fixed Investment Option”).



The investment objective for each of the funds is described below. Additional information on each investment option, including a Fund Fact Sheet is available on the Plans’ website at www.Prudential.com/MTA.

International Equity Funds

MTA International Index Fund (Non-US Equity) - The fund invests wholly in State Street Global Advisors (“SSgA”) Global All Cap Equity ex U.S. Index Fund – Class K (the Collective Investment Trust C.I.T.). The C.I.T. Fund seeks to match as closely as possible, before expenses, the performance of the MSCI ACWI ex-USA IMI Index over the long term.

MTA International Equity Fund (International Stock-Blend) - The Portfolio is managed by two complementary, but independent managers. The balances in the investments are rebalanced regularly to maintain the 50%/50% split. By employing two managers, this portfolio offers improved diversification compared to having a single investment manager. The underlying investments are:

1. **William Blair International Growth Fund (International Stock-Growth)** - The fund seeks to provide long-term growth of capital. The fund invests in a diversified portfolio of equity securities, including common stocks and other forms of equity investments (e.g., securities convertible into common stocks), issued by companies of all sizes domiciled outside the U.S. that William Blair believes have above-average growth, profitability and quality characteristics. William Blair will vary sector and geographic diversification for the fund based upon its ongoing evaluation of economic, market and political trends throughout the world.
2. **Mondrian All Countries World Ex-U.S. Equity (International Stock-Value)** – The Collective Investment Trust Fund is advised by Mondrian Investment Partners. Mondrian employs an active, value-oriented approach to managing international equities, and invests in securities where rigorous dividend discount analysis identifies value in terms of the long term flow of income. The philosophy is built upon the assumption that dividend yield and future real growth are critical in determining a company’s total expected return and that the dividend component will be a meaningful portion of the expected return over time.

Small-Mid Cap Equity Fund

MTA Small-Mid Cap Equity Index Fund (Mid Cap Stock-Blend) - The Fund invests wholly in the underlying collective investment trust SSgA Russell Small/Mid Cap Non Lending Series- Class K (the “C.I.T.”). The underlying collective investment trust seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Russell Small Cap Completeness Index (the “Index”) over the long term.

MTA Small-Mid Cap Equity Fund (Mid Cap Stock-Blend) - The Fund is managed by four complementary, but independent managers. By employing four managers, this fund offers improved diversification compared to having a single investment manager. The underlying investments are:

1. **The William Blair Small-Mid Cap Growth Fund** (Small Growth) - is sub-advised by William Blair Investment Management, LLC. The strategy seeks capital appreciation to outperform its benchmark, the Russell 2500 Growth Index, and its peers over a full market cycle. The strategy is a diversified portfolio of 65-80 holdings, investing in common stocks of small and mid-cap quality companies that are expected to have solid growth in earnings.
2. **The DFA US Targeted Value I** (Small Value) – the fund is advised by Dimensional Fund Advisors LP. The investment seeks long-term capital appreciation. The fund, using a market capitalization weighted approach, purchases a broad and diverse group of the readily marketable securities of U.S. small and midcap companies that the Advisor determines to be value stocks. It may purchase or sell futures contracts and options on futures contracts for U.S. equity securities and indices, to adjust market exposure based on actual or expected cash inflows to or outflows from the fund. The fund does not intend to sell futures contracts to establish short positions in individual securities or to use derivatives for purposes of speculation or leveraging investment returns.
3. **AllianceBernstein US SMID Cap Value Equity Fund** (Small Value) – the fund is managed by AllianceBernstein. It seeks a deep-value service that invests in a portfolio of small and mid-capitalization stocks located primarily in the United States. Macroeconomic, industry or company-specific concerns often cause investors to react emotionally and overlook underlying company fundamentals, causing securities to become mispriced. Our investment strategy seeks to capitalize these short-term market inefficiencies created by enduring patterns of human behavior. The investment team employs a highly disciplined stock selection process that marries in-depth fundamental research with quantitative analysis to identify companies that are undervalued relative to their long-term earnings power and offer compelling return potential.
4. **Jackson Square Partners SMID Cap Growth Focus** (Small Value)- the fund is advised by Jackson Square Partners. They are growth investors. They seek superior returns through holding a concentrated portfolio of companies that they believe have advantaged business models and opportunities to generate consistent, long-term growth of intrinsic business value.

Large-Cap Equity Funds

MTA Large Cap Equity Index Fund (Large Cap Stock-Blend) - The Fund invests wholly in the Vanguard Institutional Index Fund Institutional Plus Shares. The investment seeks to track the performance of a benchmark index that measures the investment return of large capitalization stocks. The fund attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

MTA Large Cap Equity Fund (Large Cap Stock-Blend) - The Portfolio is managed by two complementary, but independent managers. The balances in the investments are rebalanced regularly to maintain the 50%/50% split. By employing two managers, this portfolio offers improved diversification compared to having a single investment manager. The underlying investments are:

1. **T. Rowe Price US Large Cap Value Equity Fund** (Large Cap Stock-Value) - The Separate Account is advised by T. Rowe Price Associates, Inc. and seeks to provide long-term capital appreciation by investing in common stocks believed to be undervalued. Income is a secondary objective.
2. **Jennison Large Cap Growth Fund** (Large Cap Stock-Growth) - The Separate Account is sub-advised by Jennison Associates LLC, following its Large Cap Growth Equity investment strategy. It seeks to outperform, over the long term, both the Russell 1000 Growth and S&P 500 Indexes and to be the best performing manager among its peers, with a consistent risk profile.

Bond Funds

MTA Bond Index Fund (Fixed Income-Domestic) - The Fund invests wholly in the SSgA US Bond Index Non-Lending – Class C (the Collective Investment Trust C.I.T.). The Fund seeks to match, as closely as possible, before expenses, the performance of the Bloomberg Barclays U.S. Aggregate Bond Index over the long term.

MTA Bond Fund (Fixed Income-Domestic) - The Portfolio is managed by three complementary, but independent managers. The balances in the investments are rebalanced regularly to maintain the 34%/33%/33% split. By employing three managers, this portfolio offers improved diversification compared to having a single investment manager. The underlying investments are:

1. **TCW Core Plus Fund** (Fixed Income-Domestic) - This separate account is sub-advised by Metropolitan West Asset Management, LLC. The Fund seeks to outperform the broad bond market by applying specialized management expertise to and allocating capital among US government, corporate, high yield and mortgage-backed sectors. In addition, exposure to international and emerging markets fixed income assets are opportunistically incorporated into portfolio positioning. The strategy seeks to outperform the Bloomberg Barclays Aggregate Bond Index.
2. **Loomis Sayles Core Plus Fixed Income Trust** (Fixed Income) - The Collective Investment Trust Fund seeks high total investment return through a combination of current income and capital appreciation and to outperform its benchmark, the Bloomberg Barclays US Aggregate Bond Index denominated in US dollars. This index is used for comparative purposes only and is not intended to parallel the risk or investment style of the fund.
3. **Wellington World Bond Portfolio** (Fixed Income) - The Collective Investment Trust Fund is sub-advised by Wellington Management Company, LLP. The objective of the World Bond approach is to generate consistent total returns over a full market cycle. World Bond investment process is designed to allocate capital to high quality sovereign countries while simultaneously identifying opportunistic investment ideas across a wide range of diversified fixed income strategies, and to transparently manage portfolio risk.

Stable Value Option

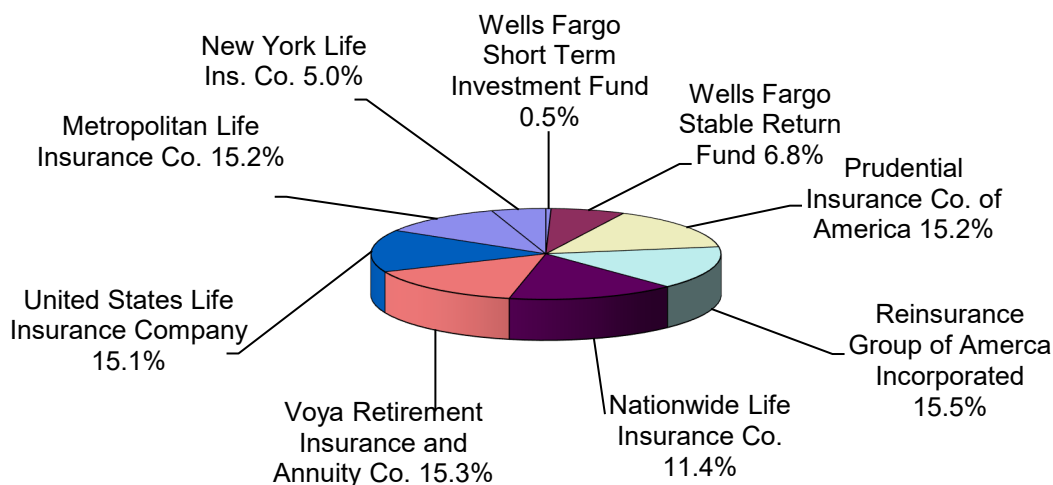
MTA Stable Value Fund (Stable Value) - The fund seeks to provide safety of principal and a stable credited rate of interest, while generating competitive returns over time compared to other comparable investments. The fund is managed by Galliard Capital Management and is primarily comprised of investment contracts issued by financial institutions and other eligible stable value investments. All contract issuers and securities utilized in the portfolio are rated investment grade by one of the Nationally Recognized Statistical Rating Organizations at time of purchase. The types of investment contracts in which the Fund may invest include Separate Account Guaranteed Investment Contracts (“GICs”) and Security Backed Investment Contracts. These types of investment contracts seek to provide participants with safety of principal and accrued interest as well as a stable crediting rate.

Separate Account GICs are GICs issued by an insurance company and are maintained within a separate account. Separate Account GICs are typically backed by segregated portfolios of fixed income securities.

Security Backed Investment Contracts are comprised of two components: 1) investment contracts issued by a financial institution and 2) underlying portfolios of fixed income securities (i.e. bonds) whose market prices fluctuate. The investment contract is designed to allow participants to transact at book value (principal plus accrued interest) without reference to the price fluctuations of the underlying fixed income securities.

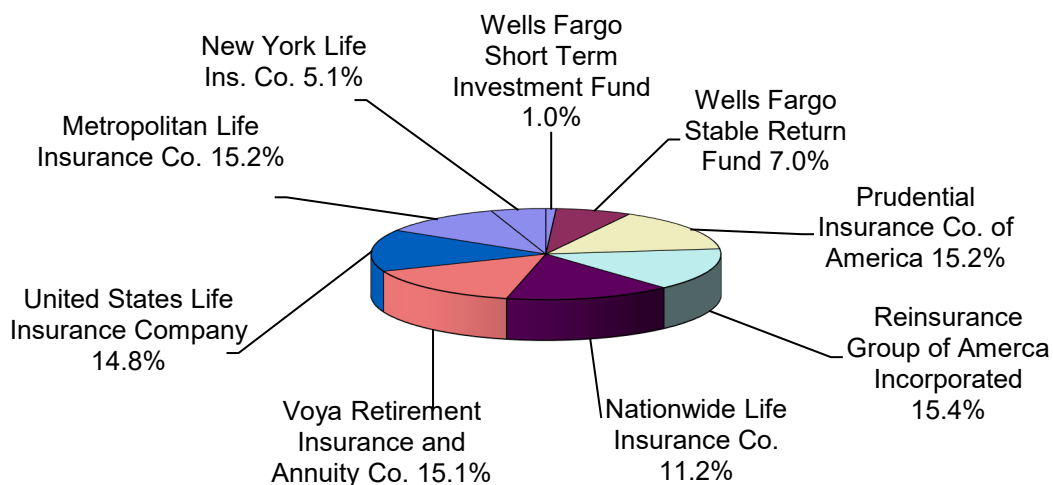
The following chart shows the underlying investments of the MTA Stable Value Fund as of December 31, 2017 and 2016.

Stable Income Fund Wrap Provider Distribution as of December 31, 2017



*The Wells Fargo Stable Return Fund W and Wells Fargo/BlackRock STIF are not a part of the wrapped portfolio.

Stable Income Fund Wrap Provider Distribution as of December 31, 2016



Stable Return Fund W and Wells Fargo/BlackRock STIF are not a part of the wrapped portfolio.

*The Wells Fargo

The MTA Plans' investment options performance is outlined in the following tables. The Plans, with the assistance of its independent investment consultant, continuously monitors the investment options in conformance with the investment policy for the Plans. Below each Fund listed below is the benchmark used to compare the investment results.

Performance Summary

Year ended December 31, 2017

Stable Value

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Stable Value	0.5%	2.0%	2.0%	2.0%	2.3%
Galliard 3YrCMT+50bps	0.6%	2.1%	1.8%	1.8%	1.8%

Fixed Income

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA Aggregate Bond Index Fund	0.4%	3.5%	2.2%	2.1%	3.2%
Barclays U.S. Aggregate	0.4%	3.5%	2.2%	2.1%	3.2%
Loomis Sayles Core Plus Bond	0.8%	5.4%	NA	NA	NA
Barclays U.S. Aggregate	0.4%	3.5%	2.2%	2.1%	3.2%
TCW MetWest Core Plus Fixed Income	0.4%	3.4%	NA	NA	NA
Barclays U.S. Aggregate	0.4%	3.5%	2.2%	2.1%	3.2%
Wellington World Bond Fund	0.6%	2.7%	NA	NA	NA
Citigroup World Government Bond	1.0%	7.5%	1.7%	0.1%	1.2%

Domestic Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
Vanguard Institutional Index Fund Institutional Plus	6.6%	21.8%	11.4%	15.8%	13.8%
S&P 500	6.6%	21.8%	11.4%	15.8%	13.8%
T Rowe Price Large Cap Value Fund (Prudential Separate Account)	5.5%	16.9%	9.5%	NA	NA
Russell 1000 Value	5.3%	13.7%	8.7%	14.0%	12.5%
Jennison Large Cap Growth (Prudential Separate Account)	6.8%	36.1%	14.9%	17.9%	15.0%
Russell 1000 Growth	7.9%	30.2%	13.8%	17.3%	14.8%
SSgA Small/Mid Cap Index Fund	4.9%	18.2%	10.0%	14.6%	12.3%
Russell Small Cap Completeness Index	4.9%	18.3%	10.0%	14.7%	12.3%
AB US SMID Cap Value Equity (Separate Account)	6.0%	12.9%	10.0%	14.8%	11.8%
Russell 2500 Value Index	4.3%	10.4%	9.3%	13.3%	11.5%
DFA US Targeted Value Fund (MTA)	4.5%	9.6%	9.4%	14.1%	11.6%
Russell 2500 Value Index	4.3%	10.4%	9.3%	13.3%	11.5%
William Blair SMID Growth (Separate Account)	5.6%	29.0%	13.1%	17.4%	14.0%
Russell 2500 Growth Index	6.3%	24.5%	10.9%	15.5%	13.0%
Jackson Square SMID Cap Growth Focus (Separate Account)	5.6%	21.1%	12.1%	15.5%	13.8%
Russell 2500 Growth Index	6.3%	24.5%	10.9%	15.5%	13.0%

Performance Summary

Year ended December 31, 2017 (continued)

International Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA MSCI ACWI ex-U.S. IMI Index	5.2%	28.1%	8.8%	7.2%	NA
MSCI AC Wld ex US IMI Net	5.2%	27.8%	8.4%	7.2%	5.2%
William Blair Institutional International Growth Fund	5.1%	30.6%	8.4%	8.1%	6.7%
MSCI AC Wld ex U.S. Growth Net WHT	6.0%	32.2%	9.7%	8.3%	5.8%
Mondrian ACWI ex US CIT	3.8%	22.3%	NA	NA	NA
MSCI AC Wld ex US Value Net WHT	4.2%	22.7%	6.3%	5.6%	4.2%

Diversified Inflation

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA Real Asset	3.8%	8.6%	2.1%	0.1%	1.0%
SSgA Custom Real Asset Index	3.8%	8.6%	2.2%	0.2%	1.1%

Lifecycle

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Income	2.0%	7.7%	4.5%	3.8%	4.3%
MTA Income Composite Index	2.2%	7.7%	4.4%	3.8%	4.3%
MTA 2015	2.4%	10.0%	5.2%	5.0%	5.2%
MTA 2015 Composite Index	2.5%	10.0%	5.1%	5.0%	5.2%
MTA 2020	2.8%	11.9%	5.8%	5.8%	5.8%
MTA 2020 Composite Index	3.0%	11.8%	5.7%	5.8%	5.8%
MTA 2025	3.4%	14.7%	6.8%	7.3%	6.9%
MTA 2025 Composite Index	3.7%	14.7%	6.8%	7.2%	6.9%
MTA 2030	4.1%	16.5%	7.4%	7.9%	7.3%
MTA 2030 Composite Index	4.3%	16.5%	7.4%	7.8%	7.3%
MTA 2035	4.4%	18.0%	7.9%	8.5%	7.8%
MTA 2035 Composite Index	4.7%	18.0%	7.9%	8.4%	7.8%
MTA 2040	4.6%	20.3%	8.8%	10.0%	8.7%
MTA 2040 Composite Index	4.9%	19.8%	8.7%	9.9%	8.7%
MTA 2045	4.7%	21.7%	9.2%	10.9%	9.2%
MTA 2045 Composite Index	5.1%	21.1%	9.0%	10.7%	9.1%
MTA 2050	4.7%	21.8%	9.2%	11.1%	9.3%
MTA 2050 Composite Index	5.1%	21.1%	8.9%	10.8%	9.2%
MTA 2055	4.7%	21.8%	NA	NA	NA
MTA 2055 Composite Index	5.1%	21.1%	8.9%	10.8%	9.2%
MTA 2060	NA	NA	NA	NA	NA
MTA 2060 Composite Index	5.1%	NA	NA	NA	NA
MTA 2065	NA	NA	NA	NA	NA
MTA 2065 Composite Index	5.1%	NA	NA	NA	NA

Performance Summary

Year ended December 31, 2016

Stable Value

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Stable Value	0.5%	2.0%	1.9%	2.2%	2.5%
Galliard 5YrCMT+50bps	0.4%	1.5%	1.8%	1.7%	1.8%

Fixed Income

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA Aggregate Bond Index Fund	-3.0%	2.6%	3.0%	2.2%	3.6%
Barclays U.S. Aggregate	-3.0%	2.6%	3.0%	2.2%	3.6%
Loomis Sayles Core Plus Bond	-2.3%	7.0%	NA	NA	NA
Barclays U.S. Aggregate	-3.0%	2.6%	3.0%	2.2%	3.6%
TCW MetWest Core Plus Fixed Income	-2.6%	2.6%	NA	NA	NA
Barclays U.S. Aggregate	-3.0%	2.6%	3.0%	2.2%	3.6%
Wellington World Bond Fund	-1.4%	2.1%	NA	NA	NA
Citigroup World Government Bond	-8.5%	1.6%	-0.8%	-1.0%	0.9%

Domestic Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
Vanguard Institutional Index Fund Institutional Plus	3.8%	12.0%	8.9%	14.7%	12.8%
S&P 500	3.8%	12.0%	8.9%	14.7%	12.8%
T Rowe Price Large Cap Value Fund (Prudential Separate Account)	5.4%	16.0%	8.3%	14.9%	12.3%
Russell 1000 Value	6.7%	17.3%	8.6%	14.8%	12.7%
Jennison Large Cap Growth (Prudential Separate Account)	-1.8%	0.4%	7.0%	14.3%	11.8%
Russell 1000 Growth	1.0%	7.1%	8.6%	14.5%	13.0%
SSgA S&P 400 Mid Cap Index	7.4%	20.7%	9.0%	15.3%	14.2%
S&P 400 MidCap	7.4%	20.7%	9.0%	15.3%	14.2%
Vanguard Selected Value Fund Investor	8.8%	16.3%	6.0%	14.3%	13.0%
Russell Midcap Value	5.5%	20.0%	9.5%	15.7%	14.3%
Frontier Mid Cap Growth (Prudential Separate Account)	-0.3%	5.5%	6.5%	13.8%	12.3%
Russell Midcap Growth	0.5%	7.3%	6.2%	13.5%	12.9%
SSgA Russell 2000 Index	8.8%	21.3%	6.7%	14.4%	13.2%
Russell 2000	8.8%	21.3%	6.7%	14.5%	13.2%
Denver Small Cap Value (Separate Account)	16.4%	31.5%	9.2%	NA	NA
Russell 2000 Value	14.1%	31.7%	8.3%	15.1%	13.1%
Conestoga Small Cap Growth (Separate Account)	5.2%	14.9%	4.4%	NA	NA
Russell 2000 Growth	3.6%	11.3%	5.1%	13.7%	13.2%

Performance Summary

Year ended December 31, 2016 (continued)

International Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA MSCI ACWI ex-U.S. IMI Index	-1.6%	5.2%	-1.3%	5.5%	NA
MSCI AC Wld ex US IMI Net	-1.6%	4.4%	-1.4%	5.3%	3.3%
William Blair Institutional International Growth Fund	-4.2%	-2.7%	-1.8%	7.0%	5.5%
MSCI AC Wld ex U.S. Growth Net WHT	-5.8%	0.1%	-1.0%	5.6%	3.8%
Mondrian ACWI ex US CIT	-1.7%	4.1%	NA	NA	NA
MSCI AC Wld ex US Value Net WHT	3.3%	8.9%	-2.4%	4.6%	2.3%

Diversified Inflation

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA Real Asset	0.4%	14.2%	-1.0%	-0.1%	NA
SSgA Custom Real Asset Index	0.5%	14.3%	-0.9%	0.0%	NA

Lifecycle

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Income	0.1%	4.8%	2.9%	3.7%	4.2%
MTA Income Composite Index	0.0%	5.3%	3.0%	3.5%	4.0%
MTA 2015	0.0%	4.7%	3.0%	4.7%	5.3%
MTA 2015 Composite Index	-0.2%	5.7%	3.2%	4.5%	5.2%
MTA 2020	-0.1%	4.7%	3.0%	5.4%	5.7%
MTA 2020 Composite Index	-0.2%	6.0%	3.3%	5.2%	5.6%
MTA 2025	-0.1%	5.3%	3.3%	6.7%	6.6%
MTA 2025 Composite Index	-0.1%	7.0%	3.7%	6.4%	6.6%
MTA 2030	-0.1%	5.6%	3.4%	7.1%	6.8%
MTA 2030 Composite Index	-0.2%	7.5%	3.8%	6.8%	7.2%
MTA 2035	-0.1%	5.8%	3.5%	7.7%	7.2%
MTA 2035 Composite Index	-0.2%	8.0%	4.0%	7.3%	7.1%
MTA 2040	0.3%	6.0%	3.7%	9.0%	7.9%
MTA 2040 Composite Index	0.7%	9.0%	4.3%	8.7%	8.0%
MTA 2045	0.5%	6.1%	3.6%	9.8%	8.5%
MTA 2045 Composite Index	1.3%	9.5%	4.1%	9.6%	8.5%
MTA 2050	0.5%	6.1%	3.5%	10.0%	8.6%
MTA 2050 Composite Index	1.3%	9.5%	3.9%	9.8%	8.6%
MTA 2055	0.5%	6.1%	NA	NA	NA
MTA 2055 Composite Index	1.3%	9.5%	3.9%	9.8%	8.6

The table below summarizes the Plans' investments by category at December 31, 2017:

FUND INVESTMENT SUMMARY

Investment at Contract and NAV Values	457		401k	
	Allocation		Allocation	
Target-Year Lifecycle Funds	\$419,330,251	15.85%	\$623,334,937	17.21%
International Equity Funds	169,649,376	6.41	246,458,903	6.81
Small-Mid Cap Equity Funds	356,271,176	13.47	472,377,231	13.05
Large-Cap Equity Funds	672,142,635	25.41	966,983,440	26.70
Bond Funds	127,315,865	4.81	190,275,365	5.25
Stable Income Fund	897,665,767	33.94	1,117,748,970	30.87
Self-Directed Investment Option	2,867,973	0.11	4,118,703	0.11
Total Investments	\$2,645,243,043	100%	\$3,621,297,549	100%

The table below summarizes the Plans' investments by category at December 31, 2016:

FUND INVESTMENT SUMMARY

Investment at Contract and NAV Values	457		401k	
	Allocation		Allocation	
Target-Year Lifecycle Funds	\$337,361,658	14.91%	\$511,083,782	16.61%
International Equity Funds	116,728,024	5.16	171,361,857	5.57
Small-Cap Equity Funds	118,205,125	5.22	166,365,725	5.41
Mid-Cap Equity Funds	173,715,288	7.68	225,750,953	7.34
Large-Cap Equity Funds	521,273,769	23.03	756,369,579	24.59
Bond Funds	108,333,099	4.79	159,628,660	5.19
Stable Income Fund	884,832,829	39.10	1,082,051,737	35.18
Self-Directed Investment Option	2,522,819	0.11	3,535,728	0.11
Total Investments	\$2,262,972,611	100%	\$3,076,148,021	100%

At December 31, 2017, the investment option holding the largest portion of participants' funds in both the 457 and 401(k) Plans was the Stable Income Funds with 33.94% and 30.87% of invested funds, respectively. This was followed by the Large-Cap Equity Funds with 25.41% and 26.70% of invested 457 and 401(k) funds, respectively.

At December 31, 2016, the investment option holding the largest portion of participants' funds in both the 457 and 401(k) Plans was the Stable Income Funds with 39.10% and 35.18% of invested funds, respectively. This was followed by the Large-Cap Equity Funds with 23.03% and 24.59% of invested 457 and 401(k) funds, respectively.

Economic Factors

Market Overview and Outlook – 2017

The equity markets continued to outperform in 2017, with foreign equities finally joining the decade-long success enjoyed by United States (“U.S.”) markets. Arriving at new highs, the S&P 500 Index generated positive performance for the ninth straight year and has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory. Outside the U.S., developed market equities were up 25% in 2017, according to the Morgan Stanley Country Index Europe Australasia Far East. And after a somewhat disappointing stretch over the past 5 years, it was emerging market equities that really outperformed last year, with returns of 38%. Not to be left out, high-yield debt and dollar-denominated emerging market bonds outperformed within credit investment space. Thus, transcending that risk-taking remained a rewarding proposition for investors.

2017 was another banner year for global equities amid optimism that U.S. corporate tax cuts would spur further fundamental performance in corporate America and that the acceleration and synchronization of global economic growth would continue unabated. Investors would be well reminded that eventually the Bull markets end and that investors have not completely abandoned the caution and vigilance necessary to survive the next downturn, whenever it may occur.

Macro Themes

- Headwinds in Emerging Markets
- Rising interest rates
- Trade uncertainty
- High valuations and increasing leverage

The macro picture was framed by higher global growth in 2017. Developed and emerging markets all saw an uptick in growth for the year. Developed markets remained mired in relatively weak growth, with Gross Domestic Product (“GDP”) growth posting its highest level (+2.5%) since 2010. This may indicate a peak level of growth as the International Monetary Fund (“IMF”) forecasts lower economic performance over the coming five years. Emerging markets posted their best GDP performance since 2013, with +4.9% growth for the year. Unlike developed markets, the IMF expects growth in emerging markets to remain buoyant through the next five years. Inflation remains subdued across the developed markets while currency depreciation and devaluations in emerging markets have led to spikes in inflation.

In 2017, a continued rise in populism globally led to a continued backlash against globalization and the liberal economic tenets that underpinned the global economy since World War II. Discontent over economic policies that produced an uneven economic recovery led to a continued questioning of the viability of the institutions of the European Union and the euro. The political stability that Europe has largely enjoyed since World War II has been eroded by elections in key countries where populist parties, on both the right and the left, have gained influence at the expense of the established broad, centrist political parties. The global trade and political regime seems to have shifted from one of cooperation and coordination to one of confrontation and competition. Large scale trade agreements, such as Trans-Pacific Partnership and North American Free Trade Agreement, will be replaced by bi-lateral agreements, raising the risk of weak implementation, confusion, and non-compliance.

The U.S. is now entering its ninth year of economic expansion following the financial crisis. Measured gains in GDP and robust job growth provided strong underpinnings for domestic equities. The U.S. economy will likely continue to grow, supported by accommodative financial conditions, including tax cuts and regulatory changes. At the same time, the excess economic capacity will provide fuel to the ongoing expansion. There is no doubt that the U.S. Federal Bank Reserve (“Fed’s”) slow pace of raising interest rates has bolstered easy financial conditions. The Fed’s will likely remain relatively accommodative, barring surprises in inflation or the labor market. The moderate unwinding of the Fed’s balance sheet and the untested impact on capital markets will continue to influence investors’ calculus of risk and reward.

Outside the United States, gradualism is the policy of choice for other major central banks: The European Central Bank's quantitative easing program continues to expand (now at a slower rate), while the Bank of Japan is carrying on its accommodative monetary policy. Europe continues to be impacted by high levels of public debt, fractious politics and low economic growth. Like emerging markets, a significant portion of Europe's export engine is tied to Chinese demand and growth. Lower growth in China will place pressures on Europe, in particular net exporters, such as Germany. Debt levels have not yet moderated post-financial crisis and flare-ups in periphery countries, such as in Greece, Portugal, Italy, and Spain, are likely to continue as growth remains challenged and reforms and austerity lose support. Banks will continue their deleveraging cycle should new rules (Basel III) on risk capital be implemented. In Japan, where banks are in better health, high public debt, low growth, a weakening regional economic picture, and aging demographics will challenge the government in delivering their growth and inflation targets.

Emerging markets posted solid returns in 2017 as the impact of capital flows due to the U.S. interest rate increases were much lower than expected. All eyes will continue to be on China. So far, China's move towards an economy emphasizing services and innovation over manufacturing has taken place with minimal disruptions. We expect the country's careful restraint over its monetary and fiscal policies to offer a smooth path for China's massive economic evolution. That said, the world's second largest economy remains at risk to world markets due to its sizable contribution to global growth.

United States

Markets in the U.S. were strong for the year and were amongst the best performers in 2017. U.S. equities outperformed in 2017 achieving new highs, the S&P 500 Index spent its ninth straight year in the black. The flagship U.S. index has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory.

Large Cap stocks were strongly positive, with the S&P 500 and Russell 1000 indices posting returns of (+21.8%) and (+21.7%), respectively. Small Cap and Mid Cap indices underperformed large cap. Small Cap, as measured by the Russell 2000 Index, returned (+14.6%). The Russell Mid Cap Index lagged but still posted a (+18.5%) return. Of note, growth oriented investments outperformed the value counterpart with the Russell 1000 Growth (+30.2%) outpacing the Russell 1000 Value (+13.6%).

Fixed income markets took the three rate hikes by the Fed's in stride in 2017. Treasuries returned (+2.3%) for the year, with the assets strongest quarter coming in second quarter of 2017. Credit outperformed Treasuries for the year, with (+6.2%), posting positive returns for four straight quarters. Following strong results in 2016, high yield high yield continued its upward trend and performing well in 2017, returning (+7.5%).

International Developed

International equity markets posted strong results in 2017 and outpaced U.S. equity markets for the first time since 2012. In U.S. dollars, both Europe and Japan equities posted positive performance in 2017 with MSCI Europe returning (+25.5%) and MSCI Japan returning (+24.0%). Strong returns in Europe were driven by positive market performance and a weakening US dollar. The small cap portion of international developed markets posted even stronger returns in 2017, (+33.0%).

Fixed income markets in Europe and Japan are largely centered on government bonds, with corporate and asset-backed issuance making up a fraction of the overall markets. Global Treasuries were positive in 2017, following a slightly positive year in 2016.

Emerging Markets

Emerging markets posted strong performance in 2017 and outpaced both U.S. and international developed markets across equity and debt. The broad emerging markets index returned (+37.3%) for the year. China, a significant exposure within the emerging market index, was a strong performer, returning (+54.3%) for the year. Performance of the bond markets of emerging markets was encouraging. Both hard currency and local currency bond posted solid years in performance. Hard currency bonds, which are predominately issued in U.S.

dollar, returned (+10.3%) in 2017. Local currency bonds, which are issued in the local currency, returned (+15.2%) for the year.

Commodities

Commodities posted positive performance in 2017, with the broad Bloomberg Commodity Index up (+1.7%). Industrial metals and precious metals posted strong performance for the year while agriculture was negative. Oil continued its positive rebound from 2016 with another positive year in 2017.

Contact Information

This financial report is designed to provide a general overview of the Metropolitan Transportation Authority Deferred Compensation Program's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Deferred Compensation Department, Metropolitan Transportation Authority, 2 Broadway 10th Floor, New York, NY 10004.

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DRAFT

**METROPOLITAN TRANSPORTATION AUTHORITY
DEFERRED COMPENSATION PROGRAM**

**STATEMENTS OF PLANS NET POSITION
AS OF DECEMBER 31, 2017 AND DECEMBER 31, 2016
(\$ In THOUSANDS)**

	2017		2016	
	457	401K	457	401K
ASSETS:				
Investments at contract value	\$ 971,709	\$ 1,224,190	\$ 942,288	\$ 1,165,593
Investments at fair value- net asset value	1,673,534	2,397,108	1,320,685	1,910,555
Total investments	2,645,243	3,621,298	2,262,973	3,076,148
Other plan investments:				
Participant loans receivable	74,607	146,347	69,815	136,075
Total other plan investments	74,607	146,347	69,815	136,075
Total assets	2,719,850	3,767,645	2,332,788	3,212,223
LIABILITIES:				
Administrative expense reimbursement	356	675	390	501
Total liabilities	356	675	390	501
TOTAL NET POSITION				
RESTRICTED FOR BENEFITS	\$ 2,719,494	\$ 3,766,970	\$ 2,332,398	\$ 3,211,722

See notes to financial statements.

**METROPOLITAN TRANSPORTATION AUTHORITY
DEFERRED COMPENSATION PROGRAM**

**STATEMENTS OF CHANGES IN PLANS NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016**

(\$ In THOUSANDS)

	2017		2016	
	457	401K	457	401K
ADDITIONS:				
Investment income:				
Net appreciation in fair value of investments	\$ 292,040	\$ 416,584	\$ 117,182	\$ 164,042
Total investment income	292,040	416,584	117,182	164,042
Contributions:				
Employee contributions, net	186,703	251,122	172,395	229,329
Participant rollovers	7,386	22,430	5,456	21,025
Employer contributions	-	4,109	-	3,973
Total contributions	194,089	277,661	177,851	254,327
Other additions:				
Loan repayments - interest	3,210	6,337	2,964	5,713
Total additions	489,339	700,582	297,997	424,082
DEDUCTIONS:				
Distribution to participants	53,784	73,733	50,121	63,286
Transfers to other plans	45,145	66,031	48,242	69,068
Net loan initiations/repayments	(91)	(196)	(126)	(152)
Loan defaults/offsets	2,029	2,985	1,861	2,531
Loan fees transfers to other plans	242	556	225	517
Other deductions	778	1,550	1,056	1,022
Administrative expense	356	675	390	501
Total deductions	102,243	145,334	101,769	136,773
Increase in net position	387,096	555,248	196,228	287,309
TOTAL NET POSITION				
RESTRICTED FOR BENEFITS				
Beginning of year	2,332,398	3,211,722	2,136,170	2,924,413
End of year	\$ 2,719,494	\$ 3,766,970	\$ 2,332,398	\$ 3,211,722

See notes to financial statements.

METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

(\$ in Thousands)

1. PLANS BACKGROUND AND DESCRIPTION

Description – The Deferred Compensation Program consists of two defined contribution plans that provide benefits based solely on the amounts contributed to each participant's account(s), plus or minus any income, expenses and gains/losses. The Deferred Compensation Program is comprised of the Deferred Compensation Plan For Employees of the Metropolitan Transportation Authority ("MTA"), its Subsidiaries and Affiliates ("457 Plan") and the Thrift Plan For Employees of the Metropolitan Transportation Authority, its Subsidiaries and Affiliates ("401(k) Plan"). Certain MTA Related Groups employees are eligible to participate in both deferred compensation plans. Both Plans are designed to have participant charges, including investment and other fees, cover the costs of administering the Deferred Compensation Program.

In 1984, the MTA established the 457 Plan to provide benefits competitive with private industry. Only managerial employees were permitted to participate in the Plan and investment options were limited to five funds: a Guaranteed Interest Fund, a Common Stock Fund, a Money Market Fund, a Managed Fund, and a Stock Index Fund. Pursuant to Internal Revenue Code ("Code") Section 457, the MTA has established a trust or custodial account to hold plan assets for the exclusive benefit of the participants and their beneficiaries. Participation in the 457 Plan is now available to non-represented employees and, after collective bargaining, most represented employees. All amounts of compensation deferred under the 457 Plan, and all income attributable to such compensation, less expenses and fees, are held in trust for the exclusive benefit of the participants and their beneficiaries. Accordingly, the 457 Plan is not reflected on the MTA's consolidated statements of net position.

In 1985, the MTA Board adopted the 401(k) Plan, a tax-qualified plan under section 401(k) of the Code. The 401(k) Plan remained dormant until 1988 when an IRS ruling "grandfathered" the plan under the Tax Reform Act of 1986. Participation in the 401(k) Plan is now available to non-represented employees and, after collective bargaining, most represented employees. All amounts of compensation deferred under the 401(k) Plan, and all income attributable to such compensation, less expenses and fees, are held in trust for the exclusive benefit of the participants and their beneficiaries. Accordingly, the 401(k) Plan is not reflected in the MTA consolidated statements of net position. The 401(k) Plan received a favorable determination letter from the Internal Revenue Service dated October 27, 2016.

As the Deferred Compensation Program's asset base and contribution flow increased, participants' investment options were expanded by the Deferred Compensation Committee with the advice of its Financial Advisor to provide greater diversification and flexibility. In 1988, after receiving an IRS determination letter for the 401(k) Plan, the MTA offered its managers the choice of either participating in the 457 Plan or the 401(k) Plan. By 1993, the MTA offered eight investment funds: a Guaranteed Interest Account Fund, a Money Market Fund, a Common Stock Fund, a Managed Fund, a Stock Index Fund, a Government Income Fund, an International Fund and a Growth Fund.

In 1998, the Deferred Compensation Committee approved the unbundling of the Plans. In 2008, the Plans' investment choices were re-structured to set up a four-tier strategy:

- Tier 1 – The MTA Asset Allocation Programs offer two options for those participants who would like to make retirement investing easy – the MTA Target Year Funds and Goalmaker. Investments will be automatically diversified among a range of investment options.
- Tier 2 - The MTA Index Funds offer a tier of index funds, which invest in the securities of companies that are included in a selected index, such as the Standard & Poor's 500 (large cap) Index or Barclays Capital U.S. Aggregate (bond) index. The typical objective of an index fund is to achieve approximately the same return as that specific market index. Index funds provide investors with lower-cost investments because they are less expensive to administer than actively managed funds.
- Tier 3 – The MTA Actively Managed Portfolios, which are comprised of actively managed portfolios that are directed by one or a team of professional managers who buy and sell a variety of holdings in an effort to outperform a selected indices. The funds provide a diversified array of distinct asset classes, with a single option in each class. They combine the value and growth disciplines to create a 'core' portfolio for the mid-cap and international categories.
- Tier 4 – Self-Directed Mutual Fund Option is designed for the more experienced investors. Offers access to an expanded universe of mutual funds from hundreds of well-known mutual fund families. Participants may invest only a portion of their account balances in this Tier.

The two Plans offer the same array of investment options. Eligible participants in the Deferred Compensation Program include employees (and in the case of Metropolitan Suburban Bus Authority, former employees) of:

- MTA
- The Long Island Rail Road Company ("MTA Long Island Rail Road")
- Triborough Bridge and Tunnel Authority ("MTA Bridges and Tunnels")
- Metropolitan Suburban Bus Authority ("MTA Long Island Bus")
- Metro-North Commuter Railroad Company ("MTA Metro-North Railroad")
- New York City Transit Authority ("MTA New York City Transit")
- Staten Island Rapid Transit Operating Authority ("MTA Staten Island Rapid Transit")
- MTA Capital Construction Company ("MTA Capital Construction")
- MTA Bus Company ("MTA Bus")

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The Deferred Compensation Program's ("Program") financial statements are prepared on the accrual basis of accounting under which deductions are recorded when the liability is incurred and revenues are recognized in the accounting period in which they are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plans. Contributions from members are recorded when the employer makes payroll deductions from plans' members. Additions to the Plans consist of contributions (member and employer) and net investment income. Investment purchases and sales are recorded as of trade date.

For financial reporting purposes, The MTA adheres to accounting principles generally accepted in the United States of America. The MTA Deferred Compensation Program applies all applicable pronouncements of the Governmental Accounting Standards Board (“GASB”).

New Accounting Standards Adopted – The Plans have not adopted any new GASB Statement(s) for this financial reporting period. GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68*, and *Amendments to Certain Provisions of GASB Statements 67 and 68* had no impact on the Program financial statements.

Recent Accounting Pronouncements — Not yet adopted

GASB Statement No.	GASB Accounting Standard	MTA DC Program Required Year of Adoption
84	<i>Fiduciary Activities</i>	2019
85	<i>Omibus 2017</i>	2018

Use of Estimates - The preparation of the Program’s financial statements in conformity with accounting principles generally accepted in the United States of America as prescribed by Government Accounting Standards Board (“GASB”). These principles require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates which include fair market value of investments.

Investment Valuation and Income Recognition - Investments are stated at contract and NAV values as reported by Prudential (the “Trustee”). Net asset value is determined to be a practical expedient for measuring fair value. All investments are registered, with securities held by the Plans’ Trustee, in the name of the Plans. The values of the Plans’ investments are adjusted to contract and NAV values as of the last business day of the Plans’ year. Gains and losses on investments that were sold during the year are included in net appreciation/(depreciation) in contract and NAV values of investments.

3. INVESTMENTS

Investment Objective - The primary investment objective of the Program is to offer a set of investment options such that:

- Sufficient options are offered to allow participants to build portfolios consistent with their investment risk/return preferences.
- Each option is adequately diversified.
- Each option has a risk profile consistent with its position in the overall structure.
- Each option is managed so as to implement the desired risk profile of the asset class it represents.

Investment Guidelines - The Deferred Compensation Committee selects and executes agreements with qualified investment managers and/or funds which fulfill the criteria of the identified investment option. The Program is participant-directed and participants select from among the available investment options.

The investment options used to fund the various asset classes may be separately managed portfolios, commingled funds, or mutual funds. The Committee may from time to time modify the number and characteristics of the investment vehicles to be made available to participants within each investment option.

The specific investment vehicles chosen by the Committee must have appropriate investment characteristics and be managed by organizations which, by their record and experience, have demonstrated their investment expertise.

Such investment vehicles also should:

- Have sufficient assets under management so that the MTA account is not more than 10% of total strategy assets; strategy is defined as assets in all vehicles (separate accounts, collective trusts and mutual funds),
- Be well diversified,
- Have a minimum of three years of verifiable investment performance information,
- Have acceptable volatility in line with investment philosophy and process,
- Have the liquidity and/or marketability to pay benefit amounts to participants due under the terms of the Program, and
- Have a reasonable expense ratio.

Concentration of Credit Risk - Individual investments held by the Plans that represent 5.0% or more of the Plans' net position available for benefits at December 31, 2017 and 2016 are as follows:

Investment at contract value – December 31, 2017	457 Value	401(k) Value
MTA Stable Value Fund	\$897,665,768	\$1,117,748,971
Investment at NAV – December 31, 2017	457 Value	401(k) Value
MTA Large-Cap Core Portfolio	\$361,001,732	\$523,266,729
MTA Large-Cap Core Index Fund	311,140,903	443,716,711
MTA Small-Mid Cap Equity	243,343,575	340,756,221
MTA International Portfolio	144,536,799	215,207,216
<hr/>		
Investment at contract value – December 31, 2016	457 Value	401(k) Value
MTA Stable Value Fund	\$884,832,828	\$1,082,051,737
Investment at NAV – December 31, 2016	457 Value	401(k) Value
MTA Large-Cap Growth Portfolio	\$280,530,154	\$406,804,304
MTA Large-Cap Core Index Fund	240,743,614	349,565,275
MTA Mid-Cap Core Portfolio	118,951,820	162,505,459

The following table shows the contract and NAV values of investment in the various investment options at December 31, 2017 and 2016.

Investments at Contract and NAV Values at December 31, 2017

<u>Target-Year Lifecycle Funds</u>	<u>457 Value</u>	<u>401k Value</u>
MTA Target-Year Lifecycle 2015 Fund	\$ 44,162,152	\$63,373,256
MTA Target-Year Lifecycle 2020 Fund	39,353,130	56,067,904
MTA Target-Year Lifecycle 2025 Fund	99,905,559	151,105,187
MTA Target-Year Lifecycle 2030 Fund	37,156,645	56,991,883
MTA Target-Year Lifecycle 2035 Fund	71,322,343	114,855,869
MTA Target-Year Lifecycle 2040 Fund	21,836,250	33,388,279
MTA Target-Year Lifecycle 2045 Fund	38,476,400	61,975,198
MTA Target-Year Lifecycle 2050 Fund	22,249,815	25,152,601
MTA Target-Year Lifecycle 2055 Fund	1,881,412	2,159,684
MTA Target-Year Lifecycle 2060 Fund	87,721	29,297
MTA Target-Year Lifecycle 2065 Fund	336,563	210,492
MTA Income Fund	42,562,260	58,025,287
<u>International Equity Funds</u>		
MTA International Portfolio	144,536,799	215,207,217
MTA International Index Fund	25,112,577	31,251,686
<u>Small- Mid Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	243,343,576	340,756,222
MTA Small-Mid Cap Index	112,927,600	131,621,009
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	361,001,732	523,266,729
MTA Large Cap Core Index Fund	311,140,903	443,716,711
<u>Bond Funds</u>		
MTA Bond Core Plus Portfolio	109,178,205	168,338,190
MTA Bond Aggregate Index Fund	18,137,660	21,937,174
<u>Fixed Investment Option</u>		
MTA Stable Value Fund	897,665,768	1,117,748,971
<u>Self-Directed Investment Account</u>	2,867,973	4,118,703
Total	\$ 2,645,243,043	\$ 3,621,297,549

Investments at Contract and NAV Values at December 31, 2016

<u>Target-Year Lifecycle Funds</u>	<u>457 Value</u>	<u>401k Value</u>
MTA Target-Year Lifecycle 2015 Fund	\$ 41,439,321	\$60,269,953
MTA Target-Year Lifecycle 2020 Fund	33,271,385	46,676,589
MTA Target-Year Lifecycle 2025 Fund	80,062,230	123,544,760
MTA Target-Year Lifecycle 2030 Fund	28,287,285	46,085,679
MTA Target-Year Lifecycle 2035 Fund	56,214,370	92,402,080
MTA Target-Year Lifecycle 2040 Fund	15,416,531	24,323,413
MTA Target-Year Lifecycle 2045 Fund	29,634,556	48,967,006
MTA Target-Year Lifecycle 2050 Fund	17,177,246	18,804,565
MTA Target-Year Lifecycle 2055 Fund	426,527	314,097
MTA Income Fund	35,432,209	49,695,641
<u>International Equity Funds</u>		
MTA International Portfolio	104,700,421	155,594,670
MTA International Index Fund	12,027,603	15,767,187
<u>Small-Cap Equity Funds</u>		
MTA Small Cap Core Portfolio	82,828,552	123,467,355
MTA Small Cap Core Index	35,376,572	42,898,369
<u>Mid-Cap Equity Funds</u>		
MTA Mid Cap Core Portfolio	118,951,820	162,505,459
MTA Mid Cap Core Index Fund	54,763,467	63,245,494
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Core Index Fund	240,743,614	349,565,275
MTA Large Cap Portfolio	280,530,155	406,804,304
<u>Bond Funds</u>		
MTA Bond Core Plus Portfolio	90,567,141	138,523,476
MTA Bond Aggregate Index Fund	17,765,958	21,105,184
<u>Fixed Investment Option</u>		
MTA Stable Value Fund	884,832,829	1,082,051,737
<u>Self-Directed Investment Account</u>	2,522,819	3,535,728
Total	\$ 2,262,972,611	\$ 3,076,148,021

The following tables show the interest and/or dividends earned on investments and net appreciation/ (depreciation) for the years ended December 31, 2017 and 2016.

457 Investments at December 31, 2017

<u>Target-Year Lifecycle Funds</u>	<u>Cash Earnings</u>	<u>Appreciation/Depreciation In Fair Market Value - Net</u>
MTA Target-Year Lifecycle 2015 Fund	\$ -	\$4,052,728
MTA Target-Year Lifecycle 2020 Fund	-	4,077,533
MTA Target-Year Lifecycle 2025 Fund	-	12,255,066
MTA Target-Year Lifecycle 2030 Fund	-	4,975,535
MTA Target-Year Lifecycle 2035 Fund	-	10,613,612
MTA Target-Year Lifecycle 2040 Fund	-	3,383,477
MTA Target-Year Lifecycle 2045 Fund	-	6,515,291
MTA Target-Year Lifecycle 2050 Fund	-	3,799,618
MTA Target-Year Lifecycle 2055 Fund	-	194,991
MTA Target-Year Lifecycle 2060 Fund	-	2,451
MTA Target-Year Lifecycle 2065 Fund	-	10,850
MTA Income Fund	(32)	2,895,302
<u>International Equity Funds</u>		
MTA International Portfolio	-	28,478,383
MTA International Index Fund	-	4,214,019
<u>Small-Mid-Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	-	22,211,261
MTA Small-Mid Cap Index Fund	-	9,823,723
MTA Small Cap Core Portfolio	-	4,674,966
MTA Small Cap Core Index	-	1,904,992
MTA Mid Cap Core Portfolio	(452)	14,136,064
MTA Mid Cap Core Index Fund	-	3,499,431
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	-	73,986,281
MTA Large Cap Index Fund	-	53,978,392
<u>Bond Funds</u>		
MTA Bond Portfolio	-	3,667,169
MTA Bond Index Fund	-	574,868
<u>Fixed Investment Option</u>		
MTA Stable Value Fund	590	17,739,251
<u>Self-Directed Investment Account</u>		
	-	375,144
Total	\$106	\$292,040,398

457 Investments at December 31, 2016

<u>Target-Year Lifecycle Funds</u>	<u>Cash Earnings</u>	<u>Appreciation/Depreciation In Fair Market Value - Net</u>
MTA Target-Year Lifecycle 2015 Fund	\$ -	\$1,907,176
MTA Target-Year Lifecycle 2020 Fund	-	1,492,000
MTA Target-Year Lifecycle 2025 Fund	-	4,000,485
MTA Target-Year Lifecycle 2030 Fund	-	1,450,686
MTA Target-Year Lifecycle 2035 Fund	-	3,065,539
MTA Target-Year Lifecycle 2040 Fund	-	870,303
MTA Target-Year Lifecycle 2045 Fund	-	1,695,872
MTA Target-Year Lifecycle 2050 Fund	-	982,301
MTA Target-Year Lifecycle 2055 Fund	-	3,867
MTA Income Fund	-	1,573,909
<u>International Equity Funds</u>		
MTA International Portfolio	2	(1,363,178)
MTA International Index Fund	-	543,032
<u>Small-Cap Equity Funds</u>		
MTA Small Cap Core Portfolio	2	15,688,043
MTA Small Cap Core Index	-	5,626,671
<u>Mid-Cap Equity Funds</u>		
MTA Mid Cap Core Portfolio	1	11,761,464
MTA Mid Cap Core Index Fund	-	8,858,418
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Core Index Fund	3	25,580,298
MTA Large Cap Portfolio	2	22,663,970
MTA Large Cap Value Portfolio	-	2,267,800
MTA Large Cap Growth Portfolio	-	(11,279,032)
<u>Bond Funds</u>		
MTA Bond Core Plus Portfolio	5	2,773,516
MTA Bond Aggregate Index Fund	-	246,700
<u>Fixed Investment Option</u>		
MTA Stable Value Fund	5	16,658,539
<u>Self-Directed Investment Account</u>	-	113,252
Total	\$20	\$117,181,631

401(k) Investments at December 31, 2017

<u>Target-Year Lifecycle Funds</u>	<u>Cash Earnings</u>	<u>Appreciation/Depreciation in Fair Market Value - Net</u>
MTA Target-Year Lifecycle 2015 Fund	\$ -	\$5,879,723
MTA Target-Year Lifecycle 2020 Fund	-	5,710,028
MTA Target-Year Lifecycle 2025 Fund	-	18,595,814
MTA Target-Year Lifecycle 2030 Fund	-	7,891,204
MTA Target-Year Lifecycle 2035 Fund	-	17,110,203
MTA Target-Year Lifecycle 2040 Fund	-	5,219,254
MTA Target-Year Lifecycle 2045 Fund	-	10,710,957
MTA Target-Year Lifecycle 2050 Fund	-	4,279,846
MTA Target-Year Lifecycle 2055 Fund	-	212,408
MTA Target-Year Lifecycle 2060 Fund	-	2,804
MTA Target-Year Lifecycle 2065 Fund	-	3,093
MTA Income Fund	291	3,969,445
<u>International Equity Funds</u>		
MTA International Portfolio	(112)	42,378,226
MTA International Index Fund	152	5,289,746
<u>Small-Mid Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	26	31,126,551
MTA Small-Mid Cap Index Fund	16	11,521,852
MTA Small Cap Core Portfolio	-	6,973,340
MTA Small Cap Core Index	-	2,309,598
MTA Mid Cap Core Portfolio	(56)	19,139,073
MTA Mid Cap Core Index Fund	-	4,094,206
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	(5,389)	107,585,793
MTA Large Cap Core Index Fund	(117)	77,775,644
<u>Bond Funds</u>		
MTA Bond Portfolio	10	5,646,930
MTA Bond Index Fund	3	704,006
<u>Fixed Investment Option</u>		
MTA Stable Value Fund	(1,246)	21,908,722
<u>Self-Directed Investment Account</u>		
	-	545,928
Total	(\$6,422)	\$416,584,394

401(k) Investments at December 31, 2016

<u>Target-Year Lifecycle Funds</u>	<u>Cash Earnings</u>	<u>Appreciation/Depreciation in Fair Market Value - Net</u>
MTA Target-Year Lifecycle 2015 Fund	\$ -	\$2,802,273
MTA Target-Year Lifecycle 2020 Fund	-	2,121,748
MTA Target-Year Lifecycle 2025 Fund	-	6,227,084
MTA Target-Year Lifecycle 2030 Fund	-	2,390,027
MTA Target-Year Lifecycle 2035 Fund	10	5,026,975
MTA Target-Year Lifecycle 2040 Fund	-	1,365,778
MTA Target-Year Lifecycle 2045 Fund	-	2,864,989
MTA Target-Year Lifecycle 2050 Fund	-	1,056,316
MTA Target-Year Lifecycle 2055 Fund	-	24,944
MTA Income Fund	-	2,153,425
<u>International Equity Funds</u>		
MTA International Portfolio	2	(2,078,681)
MTA International Index Fund	-	739,269
<u>Small-Cap Equity Funds</u>		
MTA Small Cap Core Portfolio	(42)	23,418,178
MTA Small Cap Core Index	-	6,783,924
<u>Mid-Cap Equity Funds</u>		
MTA Mid Cap Core Portfolio	(72)	16,078,358
MTA Mid Cap Core Index Fund	(19)	10,375,050
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Core Index Fund	(42)	37,044,450
MTA Large Cap Portfolio	(113)	32,862,868
MTA Large Cap Value Portfolio	(33)	3,509,906
MTA Large Cap Growth Portfolio	45	(15,799,263)
<u>Bond Funds</u>		
MTA Bond Core Plus Portfolio	(26)	4,239,295
MTA Bond Aggregate Index Fund	-	348,844
<u>Fixed Investment Option</u>		
MTA Stable Value Fund	(566)	20,297,512
<u>Self-Directed Investment Account</u>		
	-	189,658
Total	(\$856)	\$164,042,927

Credit Risk – The investment alternatives offered under the Program are not guaranteed by any governmental body, including the MTA, and are not risk-free. The safety of funds invested in the various investment accounts is based upon the performance and stability of the securities in the underlying portfolios. Investment in these funds can be expected to increase or decrease in value depending upon market conditions. The Deferred Compensation Committee (the “Committee”), with the assistance of its independent investment consultant continuously monitors the program funds pursuant to investment policy and objectives. When funds are determined to not be meeting the investment policy and objectives, they are closed and replaced.

At December 31, 2017, the following credit quality rating has been assigned by a nationally recognized rating organization to the Fixed Income Portfolio of the Plans:

<u>Quality Rating</u>	<u>457</u>	<u>457 Percentage of Fixed Income Portfolio</u>	<u>401(k)</u>	<u>401(k) Percentage of Fixed Income Portfolio</u>
AAA	\$ 469,594,684	39.47%	\$ 615,206,323	39.40%
AA	71,494,230	6.01	93,214,177	5.97
A	189,845,683	15.96	247,553,852	15.85
BBB	139,889,488	11.76	182,374,091	11.68
BB	9,536,646	0.80	14,561,400	0.93
Below BB	<u>9,498,940</u>	<u>0.80</u>	<u>14,647,426</u>	<u>0.94</u>
Credit Risk Debt Securities	889,859,671	74.80	1,167,557,269	74.77
U.S. Government Bonds	<u>299,826,616</u>	<u>25.20</u>	<u>394,031,513</u>	<u>25.23</u>
Total fixed income securities	1,189,686,287	<u>100.00%</u>	1,561,588,782	<u>100.00%</u>
Other securities not rated - equity, international funds and corporate bonds	<u>1,455,556,756</u>		<u>2,059,708,767</u>	
Total investments	<u>\$ 2,645,243,043</u>		<u>\$ 3,621,297,549</u>	

At December 31, 2016, the following credit quality rating has been assigned by a nationally recognized rating organization to the Fixed Income Portfolio of the Plans:

<u>Quality Rating</u>	<u>457</u>	<u>457</u> Percentage of Fixed Income Portfolio	<u>401(k)</u>	<u>401(k)</u> Percentage of Fixed Income Portfolio
AAA	\$ 508,196,244	42.87%	\$ 664,957,825	43.12%
AA	78,691,151	6.64	101,629,089	6.59
A	163,177,729	13.76	209,551,011	13.59
BBB	132,771,937	11.20	171,855,686	11.14
BB	11,519,025	0.97	17,304,407	1.12
Below BB	<u>7,788,409</u>	<u>0.66</u>	<u>12,093,848</u>	<u>0.78</u>
Credit Risk Debt Securities	902,144,495	76.10	1,177,391,866	76.34
U.S. Government Bonds	<u>283,367,025</u>	<u>23.90</u>	<u>364,860,700</u>	<u>23.66</u>
Total fixed income securities	1,185,511,520	<u>100.00%</u>	1,542,252,566	<u>100.00%</u>
Other securities not rated - equity, international funds and corporate bonds	<u>1,077,461,091</u>		<u>1,533,895,455</u>	
Total investments	<u>\$ 2,262,972,611</u>		<u>\$ 3,076,148,021</u>	

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates will adversely affect the contract and NAV values of the investment. Duration is a measure of interest rate risk. The greater the duration of a portfolio, the greater its price volatility will be in response to a change in interest rate risk and vice versa. Duration is an indicator of bond price's sensitivity to 100 basis point change in interest rates.

2017

<u>Investment Type</u>	<u>457</u>	<u>401(k)</u>	<u>Total</u>	<u>Duration</u>
Stable Value Fund	\$ 897,665,768	\$ 1,117,748,970	\$ 2,015,414,738	2.99 *
Loomis Sayles	36,028,808	55,551,603	91,580,411	5.95
TCW Group	37,120,588	57,234,985	94,355,573	5.68
SSgA Aggregate Bond Index Fund	18,137,660	21,937,174	40,074,834	5.94
SSgA Real Asset Fund	43,005,081	63,810,866	106,815,947	7.67
Wellington World Bond Fund	36,028,807	55,551,603	91,580,410	1.51
Total Fixed Income				
Portfolio Modified Duration	1,067,986,712	1,371,835,201	2,439,821,913	
Investment with no duration reported	1,557,256,331	2,249,462,348	3,806,718,679	
Total investments	\$ 2,625,243,043	\$ 3,621,297,549	\$ 6,246,540,592	

* Average Duration - the price sensitivity to yield and the rate of change of price with respect to yield due to the passage of time.

2016

<u>Investment Type</u>	<u>457</u>	<u>401(k)</u>	<u>Total</u>	<u>Duration</u>
Stable Value Fund	\$ 884,832,829	\$ 1,082,051,737	\$ 1,966,884,566	3.02 *
Loomis Sayles	29,887,157	45,712,747	75,599,904	6.16
TCW Group	30,792,828	47,097,982	77,890,810	5.57
SSgA BC Aggregate Fund	17,765,958	21,105,184	38,871,142	5.82
SSgA Real Asset Fund	37,045,207	55,792,472	92,837,679	7.83
Wellington World Bond Fund	29,887,156	45,712,747	75,599,903	1.54
Total Fixed Income				
Portfolio Modified Duration	1,030,211,135	1,297,472,869	2,327,684,004	
Investment with no duration reported	1,232,761,476	1,778,675,152	3,011,436,628	
Total investments	\$ 2,262,972,611	\$ 3,076,148,021	\$ 5,339,120,632	

* Average Duration - the price sensitivity to yield and the rate of change of price with respect to yield due to the passage of time.

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the contract and NAV values of an investment or deposit. The Program has an indirect exposure to foreign currency fluctuations for the Plans' investments are as follows:

2017	457	401(k)	Total
Currency	Holdings in U.S. Dollars	Holdings in U.S. Dollars	Holdings in U.S. Dollars
Australian Dollar	\$ 4,371,594	\$ 6,153,851	\$ 10,525,445
Bermudian Dollar	1,557	1,906	3,463
Brazil Cruzeiro Real	2,457,448	3,706,592	6,164,040
British Pound Sterling	48,864,611	72,679,843	121,544,454
Canadian Dollar	21,597,869	31,619,714	53,217,583
Chilean Peso	(7,946)	(16,553)	(24,499)
Chinese Yuan Renminbi	420,469	636,531	1,057,000
Colombian Peso	85,195	120,473	205,668
Czech Krone	29,543	45,482	75,025
Danish Krone	8,789,516	13,249,489	22,039,005
Egyptian Pound	516	650	1,166
Euro	75,260,037	111,343,273	186,603,310
Hong Kong Dollar	13,520,765	20,243,745	33,764,510
Hungarian Forint	(1,537)	(7,701)	(9,238)
Indian Rupee	2,224,363	3,361,740	5,586,103
Indonesia Rupiah	624,592	942,698	1,567,290
Israeli Shekel	384,422	544,508	928,930
Japanese Yen	47,044,922	69,617,801	116,662,723
Malaysian Ringgit	2,132,147	3,220,675	5,352,822
Mexican Peso	2,190,765	3,317,046	5,507,811
New Zealand Dollar	(137,376)	(225,304)	(362,680)
Norwegian Krone	2,392,576	3,630,896	6,023,472
Panamanian Balboa	11,342	13,881	25,223
Peruvian Nuevo Sol	65,548	98,022	163,570
Philippine Peso	31,085	38,625	69,710
Polish Zloty	1,424,107	2,189,430	3,613,537
Qatar Riyal	562,504	850,498	1,413,002
Russian Ruble	119,052	183,559	302,611
Singapore Dollar	6,690,302	10,037,539	16,727,841
South African Rand	2,066,093	3,114,835	5,180,928
South Korean Won	4,706,825	7,100,085	11,806,910
Swedish Krona	12,339,870	18,611,548	30,951,418
Swiss Franc	16,322,702	23,987,762	40,310,464
New Taiwan Dollar	2,547,361	3,849,592	6,396,953
Thai Baht	1,100,413	1,664,793	2,765,206
Turkish Lira	694,143	1,036,541	1,730,684
United Arab Emirates Dirham	452,373	684,076	1,136,449
Uruguayan Pesos	83,079	125,141	208,220
Total	<u>\$ 281,462,847</u>	<u>\$ 417,773,282</u>	<u>\$ 699,236,129</u>

2016	457	401(k)	Total
<u>Currency</u>	<u>Holdings in</u> <u>U.S. Dollars</u>	<u>Holdings in</u> <u>U.S. Dollars</u>	<u>Holdings in</u> <u>U.S. Dollars</u>
Australian Dollar	\$ 6,476,036	\$ 9,722,088	\$ 16,198,125
Bermudian Dollar	1,377	1,657	3,033
Brazil Cruzeiro Real	2,967,944	4,484,853	7,452,797
British Pound Sterling	37,059,647	55,964,750	93,024,396
Canadian Dollar	14,025,322	20,980,045	35,005,367
Chilean Peso	139,095	200,545	339,640
Chinese Yuan Renminbi	5,142,674	7,687,577	12,830,251
Colombian Peso	42,413	52,584	94,997
Czech Krone	4,959	6,586	11,545
Danish Krone	3,632,390	5,559,545	9,191,935
Egyptian Pound	4,959	6,586	11,545
Euro	53,545,552	80,572,968	134,118,521
Hong Kong Dollar	5,758,314	8,697,029	14,455,343
Hungarian Forint	204,319	304,116	508,436
Indian Rupee	2,851,831	4,301,066	7,152,897
Indonesia Rupiah	1,380,973	2,091,763	3,472,736
Israeli Shekel	127,703	174,459	302,163
Japanese Yen	35,517,104	53,714,855	89,231,959
Malaysian Ringgit	1,388,595	2,103,663	3,492,257
Mexican Peso	3,117,015	4,742,554	7,859,570
New Zealand Dollar	(417,079)	(659,692)	(1,076,771)
Norwegian Krone	648,657	970,958	1,619,614
Panamanian Balboa	11,248	13,536	24,784
Peruvian Nuevo Sol	21,167	26,707	47,874
Philippine Peso	722,394	1,092,893	1,815,287
Polish Zloty	363,672	551,561	915,233
Qatar Riyal	707,710	1,074,462	1,782,172
Russian Ruble	113,400	150,947	264,347
Singapore Dollar	285,759	410,134	695,893
South African Rand	4,675,375	7,089,314	11,764,689
South Korean Won	4,040,394	6,072,874	10,113,269
Swedish Krona	8,958,161	13,646,666	22,604,827
Swiss Franc	14,377,692	21,776,803	36,154,495
New Taiwan Dollar	3,484,687	5,244,446	8,729,132
Thai Baht	1,261,810	1,910,747	3,172,557
Turkish Lira	167,976	242,372	410,348
United Arab Emirates Dirham	626,207	950,159	1,576,366
Uruguayan Pesos	10,505	12,641	23,146
Total	<u>\$ 213,447,957</u>	<u>\$ 321,946,817</u>	<u>\$ 535,394,774</u>

In year 2015, the MTA Deferred Compensation Program adopted GASB Statement No. 72 ("GASB 72"), *Fair Value Measurement and Application*. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements.

**Investments measured at Contract and NAV values
(In thousands)**

	2017			
	December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
457 Plan				
Equity Securities:				
Comingled large-cap equity funds	\$ 759,673	\$ -	Daily	None
Comingled Small-mid cap equity funds	112,928	-	Daily	None
Separate Manager Account: Small-Mid cap equity funds	186,233	-	Daily	None
Small-Mid cap equity mutual fund	91,727	-	Daily	None
Comingled international equity fund	158,435	-	Daily	None
Separate Manager Account: International equity mutual fund	133,322	-	Daily	None
Total equity securities	1,442,318	-		
Debt Securities				
Comingled debt funds	128,493	-	Daily	None
Separate Manager Account: debt funds	56,850	-	Daily	None
Total debt securities	185,343	-		
Real assets				
Comingled real asset equity fund	43,005	-	Daily	None
Total real assets	43,005	-		
Other:				
Self direct investment option	2,868	-	Daily	None
Total other	2,868	-		
Total investments measured at the NAV	1,673,534	-		
Investments measured at Contract Value	971,709	-		
Total investments	\$ 2,645,243	\$ -		

**Investments measured at Contract and NAV values
(In thousands)**

	2017			
	December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
401k Plan				
Equity Securities:				
Comingled large-cap equity funds	\$ 1,098,377	\$ -	Daily	None
Comingled Small-mid cap equity funds	131,621	-	Daily	None
Separate Manager Account: Small-Mid cap equity funds	263,107	-	Daily	None
Small-Mid cap equity mutual fund	129,590	-	Daily	None
Comingled international equity fund	230,496	-	Daily	None
Separate Manager Account: International equity mutual fund	199,244	-	Daily	None
Total equity securities	2,052,435	-		
Debt Securities				
Comingled debt funds	190,109	-	Daily	None
Separate Manager Account: debt funds	86,634	-	Daily	None
Total debt securities	276,743	-		
Real assets				
Comingled real asset equity fund	63,811	-	Daily	None
Total real assets	63,811	-		
Other:				
Self direct investment option	4,119	-	Daily	None
Total other	4,119	-		
Total investments measured at the NAV	2,397,108	-		
Investments measured at Contract Value	1,224,190	-		
Total investments	\$ 3,621,298	\$ -		

**Investments measured at Contract and NAV values
(In thousands)**

457 Plan

Equity Securities:

Comingled large-cap equity funds
Large-cap equity mutual fund
Comingled mid-cap equity funds
Mid-cap equity mutual fund
Comingled small-cap equity funds
Comingled international equity fund
International equity mutual funds

Total equity securities

Debt Securities

Comingled debt funds

Total debt securities

Real assets

Comingled real asset equity fund

Total real assets

Other:

Self direct investment option

Total other

Total investments measured at the NAV

Investments measured at Contract Value

Total investments

2016				
December 31, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period	
\$ 311,453	\$ -	Daily	None	
274,680	-	Daily	None	
120,765	-	Daily	None	
66,001	-	Daily	None	
131,256	-	Daily	None	
12,028	-	Daily	None	
194,235	-	Daily	None	
1,110,418	-			
170,699	-	Daily	None	
170,699	-			
37,045	-	Daily	None	
37,045	-			
2,523	-	Daily	None	
2,523	-			
1,320,685	-			
942,288	-			
\$ 2,262,973	\$ -			

**Investments measured at Contract and NAV values
(In thousands)**

401k Plan

Equity Securities:

Comingled large-cap equity funds
Large-cap equity mutual fund
Comingled mid-cap equity funds
Mid-cap equity mutual fund
Comingled small-cap equity funds
Comingled international equity fund
International equity mutual funds

Total equity securities

Debt Securities

Comingled debt funds

Total debt securities

Real assets

Comingled real asset equity fund

Total real assets

Other:

Self direct investment option

Total other

Total investments measured at the NAV

Investments measured at Contract Value

Total investments

2016				
December 31, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period	
\$ 453,635	\$ -	Daily	None	
401,826	-	Daily	None	
154,476	-	Daily	None	
91,230	-	Daily	None	
186,321	-	Daily	None	
15,767	-	Daily	None	
292,437	-	Daily	None	
1,595,692	-			
255,535	-	Daily	None	
255,535	-			
55,792	-	Daily	None	
55,792	-			
3,536	-	Daily	None	
3,536	-			
1,910,555	-			
1,165,593	-			
\$ 3,076,148	\$ -			

Commingled Funds - The fair values of the investments of this type have been determined using the NAV per share of the investments. The commingled equity funds are comprised of large cap, mid-cap, small-cap and international funds that invest in core indices across all industries, growth and value respectively. The commingled debt funds are comprised of corporate, treasuries and international fixed income securities.

Real Assets – The fund represents an optimal solution for an inflation hedging strategy and incorporates a diversified multi asset class approach. The fund strategic weights which are rebalanced monthly are as follows: 25% Bloomberg Roll Select Commodity Index; 25% Standard and Poor's (r) Global

LargerMidCap Commodity & Resources Index; 10% Standard and Poor's Global Infrastructure Equity Index; 15% Dow Jones US Select REIT Index and 25% Barclays US TIPS Index. The fair values of the investments of this type have been determined using the NAV per share of the investments.

Self-Direct Brokerage Accounts – The Deferred Compensation program allows participants the option to invest up to twenty (20) percent of their account in over 500 mutual fund families comprising of more than 15,000 individual mutual funds. All investments under this option are in mutual funds and are measured at the respective fund NAVs.

4. CONTRIBUTIONS

Matching Contributions - MTA Bus, on behalf of certain MTA Bus employees, MTA Metro-North Railroad on behalf of certain MNR employees who opted-out of participation in the MTA Defined Benefit Pension Plan and MTA on behalf of certain represented MTA Business Service Center employees, make contributions to the 401(k) Plan. The rate for the employer contribution varies.

MTA Bus - Certain members who were employed by Queens Surface Corporation on February 26, 2005, and who became employees of MTA Bus on February 27, 2005, receive a matching contribution equal to 50% of member's before-tax contributions provided that the maximum matching contribution shall not exceed 3% of the member's base pay. MTA Bus also makes a basic contribution equal to 2% of the member's compensation. These contributions vest as follows:

Years of Service	Vested Percentage
Less than 2	0%
2	20%
3	40%
4	60%
5	80%
6 or more	100%

MTA Metro-North Railroad – MNR employees represented by certain unions and who elected to opt-out of participation in the MTA Defined Benefit Pension Plan receive an annual employer contribution equal to 4% of the member's compensation. Effective on the first full pay period following the nineteenth anniversary date of an eligible MNR member's continuous employment, MTA Metro-North Railroad contributes an amount equal to 7% of the member's compensation. Eligible MNR members vest in these employer contributions as set forth below:

Years of Service	Vested Percentage
Less than 5	0%
5 or more	100%

MTA Headquarters - Police - For each plan year, the MTA shall make contributions to the Account of each eligible MTA Police Benevolent Association member in the amounts required by the collective bargaining agreement ("CBA") and subject to the contribution limits set forth in the CBA. These contributions shall be made monthly and shall be considered MTA Police contributions. Members are immediately 100% vested in these employer contributions.

MTA Headquarters – Commanding Officers - For each plan year, the MTA shall make contributions to the Account of each eligible MTA Police Department Commanding Officers Association Benevolent Association member in the amounts required by the collective bargaining agreement ("CBA") and subject to the contribution limits set forth in the CBA. These contributions shall be made monthly and shall be considered MTA Police contributions. Members are immediately 100% vested in these employer contributions.

MTA Headquarters – Business Services Center- Effective January 1, 2011, all newly hired MTA Business Services Center employees represented by the Transportation Communications Union are eligible

to receive a matching contribution, up to a maximum of 3% of the participant's compensation. A participant's right to the balance in his or her matching contributions shall upon the first of the following to occur:

1. Completing 5 years of service,
2. Attaining the Normal Retirement Age of 62 while in continuous employment, or
3. Death while in continuous employment.

Additional Deposits (Incoming Rollover or Transfers) - Participants in the Deferred Compensation Program are eligible to roll over both their before-tax and after-tax assets from other eligible retirement plans into the 401(k) and 457 Plans.

Status - As of December 31, 2017 and 2016, 38.9% and 34.2% of the eligible employees were enrolled in the 457 Plan and 55.7% and 48.93% of the eligible employees were enrolled in the 401(k) Plan, respectively. There are 31,806 and 30,557 active participants in the 457 Plan and 44,631 and 42,189 active participants in the 401(k) Plan. The average account balance in the 457 Plan is \$63,859 and \$57,423 and in the 401(k) Plan is \$65,772 and \$59,705 in 2017 and 2016, respectively.

5. DISTRIBUTIONS

In-Service Withdrawals - A 457 Plan participant who experiences an unforeseeable emergency (as defined by the Code) may apply for a withdrawal. A 401(k) Plan participant who experiences an immediate and heavy financial need (as defined by the Code) may apply for a withdrawal by filing a hardship application. Distributions are subject to applicable taxes and penalties.

Direct Transfer for Purchasing Permissive Service Credit - Participants in the 457 or 401(k) Plans are eligible to use their Plan assets as a source of funding for the purchase of certain permissive service credits (as defined by the Code) in certain defined benefit plan or pension systems, via a direct transfer.

Distribution of Benefits - Upon a participant's severance from the MTA, the participant is entitled to receive an amount equal to the value of his or her vested account, to be paid in accordance with one of the methods described below. Participants can choose to remain in the Plans and are not required to withdraw, roll over or transfer their account upon severance.

Commencement date - Subject to required minimum distribution rules, a participant may elect any commencement date after severance. A participant has the option to cancel or change their distribution schedule at any time upon proper notice to the Plans Record-keeper. Upon reaching the later of April 1st of the calendar year following: (1) the calendar year he or she reaches age 70 ½, or (2) the calendar year in which he or she severs from the MTA, participants are required to receive a minimum distribution from their account.

Method of Distribution for Direct Payment - If a participant chooses to take direct payments; the following methods of distribution are available under the Plans:

- Full lump sum payment; or
- Substantially equivalent monthly, quarterly, semi-annual or annual installment payments; or

Election of Length of Distribution - If a participant elects installment payments, he or she may specify either:

- the total number of installment payments, or
- the dollar amount of each payment.

In either case, distributions cannot be paid over a period of time which exceeds the life expectancy of the participant or, in certain circumstances, the joint life expectancy of the participant and a "designated beneficiary" (as defined by the Code). Installment payments will be recalculated annually and will be paid only until the account is exhausted.

Rollovers or Transfers Out of the Plans - If a participant chooses to transfer or roll over his or her Deferred Compensation account, or a portion thereof, it must be to an eligible retirement plan (401(a), 457, 401(k), 403(b) or rollover IRA). 457 Plan and 401(k) Plan participants are eligible to roll over or transfer their account balance(s) upon severance from service.

6. LOANS

The MTA Deferred Compensation Program offers participants the opportunity to borrow from either one or both Plans simultaneously. The MTA Plans permit one loan from the 457 Plan and up to two loans from the 401(k) Plan. However, participants are limited to a total of two loans. Thus, as a participant of both the 401(k) and the 457 Plans, a participant can have either two 401(k) loans or the combination of a 401(k) loan and a 457 loan. The MTA offers two types of loans: the first is a "General Purpose Loan", which is a five year loan and can be for any purpose. The second is a "Residential Loan", which is a loan for a primary residence and is a 20-year loan. For the Residential Loan, a signed contract to purchase the residence is necessary. Loan re-payment is made through payroll deduction. If a participant with an outstanding loan leaves the employment of the MTA, the participant may request to make coupon payments.

The minimum loan amount is \$1,000. The maximum amount of an approved loan may not exceed the lesser of: (i) 50 percent of the participant's 457 or 401(k) Plan account balance; or (ii) \$50,000 less the combined balance of all outstanding loans that a participant may have under the Program. All loans are subject to interest at prime rate plus 1 percent. A loan origination fee of \$75.00 is deducted from the approved loan amount. Active MTA employee participants may not borrow from amounts attributable to Metro-North contributions, MTA Police contributions, MTA Police Commanding Officers' Association contributions, MTA Business Service Center, Matching Contributions and Roth Elective Deferrals. The net loans outstanding for the 457 plan is \$74.61 million and \$69.82 million at December 31, 2017 and 2016, respectively, and for the 401(k) plan was \$146.35 million and \$136.07 million at December 31, 2017 and 2016, respectively.

7. ADDITIONAL PLAN INFORMATION

Participation - Eligible employees are allowed to participate in the 401(k) Plan and/or the 457 Plan upon employment with the MTA and its affiliates or subsidiaries. The record-keeper/trustee maintains a website, along with a telephone voice response system, or participants may use paper enrollment forms, for Program activities. Participants may make or suspend deferrals; may increase or decrease, in multiples of 1 percent, the percentage of wages to be deferred or any whole dollar amount; may change the investment option of future deferrals or initiate account transfers between investment options in multiples of 1 percent or any dollar amount. There is no restriction on the number of times a participant may change the amount of future deferrals. An employee participating in both the 457 Plan and 401(k) Plan who wishes to make any changes must do so independently for each Plan. An employee who has severed service from the MTA may rejoin the 457 Plan, the 401(k) Plan, or both and become an active participant after returning to service to the MTA by following the procedures set forth above.

Excessive Trading Policy - MTA has an Excessive Trading policy in place for the Plans. This policy monitors trading activity in investment options, utilizing criteria such as frequency of trades, dollar amount of the trades, and number of buys and sells performed by the participant. Activity exceeding established thresholds can be deemed excessive trading. The Excessive Trading policy defines excessive trading as one or more trades into and out of the same investment option within a rolling 30-day period when each trade is over \$25,000. Automatic or system-driven transactions are not considered excessive trading. This includes contributions or loan repayments by payroll deductions, re-mapping transactions, hardship withdrawals, regularly scheduled or periodic distributions or periodic rebalancing through a systematic rebalancing program that is not initiated by the Program.

Maximum Deferrals - A participant in the 457 Plan could have deferred up to \$18,000 plus an additional \$6,000 for participants age 50 and over in calendar years 2017 and 2016. However, under certain circumstances, a participant may double the annual maximum contribution during each of the last three years prior to reaching his or her designated "Normal Retirement Age" ("Retirement Catch-Up Amount")

if less than the maximum was deferred during earlier years. Alternatively, participants age 50 and over could have deferred an additional \$18,000 in 2017 and 2016, irrespective of prior contributions (“Age 50 Catch-Up”). Participants may not make both the Retirement Catch-Up and the Age 50 Catch-Up to the 457 Plan in the same year.

Participants in both the 457 Plan and the 401(k) Plan are permitted to contribute the maximum to each Plan.

Membership – As of December 31, 2017 and 2016, the Plans' membership with balances consisted of:

	2017	457	401(k)
Active employees		31,806	44,631
Terminated/Inactive employees		<u>9,612</u>	<u>10,369</u>
Total active and inactive members		<u>41,418</u>	<u>55,000</u>
Vested employees		41,418	54,757

	2016	457	401(k)
Active employees		30,557	42,189
Terminated/Inactive employees		<u>8,839</u>	<u>9,259</u>
Total active and inactive members		<u>39,396</u>	<u>51,448</u>
Vested employees		39,396	51,258

Maintenance of Accounts - For both the 457 Plan and the 401(k) Plan, the record-keeper establishes an account for each participant to which any amounts deferred, transferred or distributed under the Plans are credited or charged, including, as specified in the Participation Agreement or any amendment thereto, any increase or decrease in the value of the investment options. The Plans are not responsible for any decrease in the value of a participant's account.

Plans' Funding and Expense Payment - The MTA Deferred Compensation Program charges participants' quarterly administrative fees. These fees cover participant directed activities, communications, and administrative expenses. They also cover the cost of the Program's third-party administrator, the investment advisor, outside legal counsel, in-house legal counsel and staff salaries and benefits.

8. TRUSTEE AND OTHER PROFESSIONAL SERVICES

The Trustee for the MTA is Prudential Bank & Trust, Federal Savings Bank. Record-keeper and/or Administrative Services are provided by Prudential Retirement Insurance & Annuity Company (“PRIAC”). Investment management services are provided by PRIAC and Galliard Capital Management: separate accounts are managed by Denver Investment Advisors, Conestoga Capital Advisors, and TCW-Metropolitan West Asset Management. The Financial Advisor is Mercer Investment Consulting Inc., which reviews the investment policies adopted by the Investment Committee, the Plans' portfolio and the Investment Managers' performance.

9. SUBSEQUENT EVENTS

On January 11, 2018, the 401(k) Plan was amended to allow certain eligible Metro North employees who receive retroactive pay adjustments to receive related employer contributions after their last day of employment.

On June 21, 2018, the 401(k) Plan was amended to adopt rules applicable to distributions on account of a “hardship,” pursuant to the Bipartisan Budget Act of 2018. Effective January 1, 2019, a Participant will not be required to cease regular payroll contributions for six months after taking a hardship distribution. Further,

a Participant will not be required to take a loan prior to taking a hardship distribution. Hardship withdrawals may be taken from before-tax contribution accounts, including earnings and losses.

* * * * *

DRAFT

Metro-North Commuter Railroad Company Cash Balance Plan

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016,
Supplemental Schedules, and
Independent Auditors' Report

DRAFT

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

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INDEPENDENT AUDITORS' REPORT

To the Board of Managers of Pensions of the
Metro-North Commuter Railroad Company Cash Balance Plan

Report on the Financial Statements

We have audited the accompanying statements of plan net position of the Metro-North Commuter Railroad Company Cash Balance Plan (the "Plan") as of December 31, 2017 and 2016, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position as of December 31, 2017 and 2016, and the respective changes in plan net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 7, Schedule of Changes in the Employer's Net Pension Liability and Related Ratios - Schedule I on page 22, Schedule of Employer Contributions - Schedule II on pages 23 through 24, and Schedule of Investment Returns - Schedule III on page 25 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

January 22, 2019

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

DECEMBER 31, 2017 AND 2016

This narrative discussion and analysis of the Metro-North Commuter Railroad Company Cash Balance Plan (the "Plan") financial performance provides an overview of the Plan's financial activities for the years ended December 31, 2017 and 2016. It is meant to assist the reader in understanding the Plan's financial statements by providing an overall review of the financial activities during the past two years and the effects of significant changes, as well as a comparison with the prior year's activity and results. This discussion and analysis is intended to be read in conjunction with the Plan's financial statements which begin on page 8.

Overview of Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Plan's financial statements. The basic financial statements are:

- **The Statements of Fiduciary Net Position** presents the financial position of the Plan at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Fiduciary Net Position** present the results of activities during the year. All changes affecting the assets and liabilities of the Plan are reflected on an accrual basis when the activity occurred, regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- **The Notes to Financial Statements** provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.
- **Required Supplementary Information**, as required by the Government Accounting Standards Board ("GASB") includes the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Investment Returns.

Financial Highlights

The Plan is a single employer, defined benefit pension plan. The Plan covers non-collectively bargained employees, formerly employed by Conrail, who joined Metro-North Commuter Railroad Company ("MNCR") as management employees between January 1 and June 30, 1983, and were still employed as of December 31, 1988. Effective January 1, 1989, these employees were covered under the Metro-North Commuter Railroad Defined Contribution Plan for Management Employees (the "Management Plan") and the Plan was closed to new participants. The assets of the Management Plan have been merged with the Metropolitan Transportation Authority Defined Benefit Plan for Non-Represented Employees as of the asset transfer date of July 14, 1995.

FINANCIAL ANALYSIS

Fiduciary Net Position

December 31, 2017, 2016, and 2015

(Dollars in thousands)

	2017	2016	2015	Increase/(Decrease)	
				2017-2016	2016-2015
Cash	\$ -	\$ -	\$ 3	\$ -	\$ (3)
Investments, at fair value	527	571	606	(44)	(35)
Accrued interest	3	3	3	-	-
Receivable from investment securities sold	3	30	10	(27)	20
Total assets	533	604	622	(71)	(18)
Payable for investment securities purchased	10	30	10	(20)	20
Total liabilities	10	30	10	(20)	20
Net position - restricted for pension benefits	\$ 523	\$ 574	\$ 612	\$ (51)	\$ (38)

December 31, 2017 versus December 31, 2016

Investments at December 31, 2017 were \$527 thousand, a decrease of \$44 thousand from 2016. The decrease is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and accrued interest at December 31, 2017 were \$6 thousand, a net decrease of \$27 thousand from 2016. The decrease is the result of a decrease in net securities sold at the end of 2017.

Payables at December 31, 2017 were \$10 thousand, a decrease of \$20 thousand from 2016. The decrease is the result of a decrease in net securities purchased at the end of 2017.

Net position restricted for pension benefits at December 31, 2017 was \$523 thousand, a decrease of \$51 thousand from 2016 as a result of the changes noted above.

December 31, 2016 versus December 31, 2015

Cash and investments at December 31, 2016 were \$571 thousand, a decrease of \$38 thousand from 2015. The decrease is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and accrued interest at December 31, 2016 were \$33 thousand, a net increase of \$20 thousand from 2015. The increase is the result of an increase in net securities sold at the end of 2016.

Payables at December 31, 2016 were \$30 thousand, an increase of \$20 thousand from 2015. The increase is the result of an increase in net securities purchased at the end of 2016.

Net position restricted for pension benefits at December 31, 2016 were \$574 thousand, a decrease of \$38 thousand from 2015 as a result of the changes noted above.

Changes in Fiduciary Net Position For the Years Ended December 31, 2017, 2016 and 2015 (Dollars in thousands)

	2017	2016	2015	Increase/(Decrease)	
				2017-2016	2016-2015
Additions:					
Net investment income	\$ 20	\$ 16	\$ 6	\$ 4	\$ 10
Employer contributions	-	23	-	(23)	23
Other	-	-	7	-	(7)
Total additions	<u>20</u>	<u>39</u>	<u>13</u>	<u>(19)</u>	<u>26</u>
Deductions:					
Benefits paid to participants	71	77	113	(6)	(36)
Other	<u>-</u>	<u>-</u>	<u>7</u>	<u>-</u>	<u>(7)</u>
Total deductions	<u>71</u>	<u>77</u>	<u>120</u>	<u>(6)</u>	<u>(43)</u>
Net decrease in net position	<u>(51)</u>	<u>(38)</u>	<u>(107)</u>	<u>(13)</u>	<u>69</u>
Net position-restricted for pension benefits:					
Beginning of year	<u>574</u>	<u>612</u>	<u>719</u>	<u>(38)</u>	<u>(107)</u>
End of year	<u>\$ 523</u>	<u>\$ 574</u>	<u>\$ 612</u>	<u>\$ (51)</u>	<u>\$ (38)</u>

CHANGES IN FIDUCIARY NET POSITION

The Plan is a closed plan and has 2 active members as of January 1, 2018. Investments are primarily in bonds and asset backed securities to minimize exposure to market fluctuations. The net position is held in trust for the payment of future benefits to members and beneficiaries.

December 31, 2017 versus December 31, 2016

Net investment income increased by \$4 thousand in 2017 due to net investment gains of \$20 thousand in 2017 versus net investment gains of \$16 thousand in 2016.

Contributions decreased by \$23 thousand in 2017 compared to 2016 as a result of the Actuarial Determined Contributions (“ADC”) for 2017.

Benefit payments decreased by \$6 thousand in 2017 compared to 2016. In 2017, there were less retirees taking lump sum distributions when compared to 2016.

December 31, 2016 versus December 31, 2015

Net investment income increased by \$10 thousand in 2016 due to net investment gains of \$16 thousand in 2016 versus net investment gains of \$6 thousand in 2015.

Contributions increased by \$23 thousand in 2016 compared to 2015 as a result of the Actuarial Determined Contributions (“ADC”) for 2016.

Other additions decreased by \$7 thousand in 2016 compared to 2015 primarily due the receipt of securities in-kind made in 2015.

Benefit payments decreased by \$36 thousand in 2016 compared to 2015. In 2016, there were less retirees taking lump sum distributions when compared to 2015.

Other deductions decreased by \$7 thousand in 2016 compared to 2015 primarily due the disbursement of securities in-kind made in 2015.

INVESTMENTS

The table below summarizes the Plan's investment allocations and investment returns.

Investment Summary (Dollars in thousands)

Type of Investment	Fair Value	Allocation	Current Year Return
December 31, 2017			
U.S. government & agency securities	\$ 263	50.0 %	2.6 %
Corporate bonds & asset backed securities	223	42.4 %	3.5 %
U.S. Treasury bills	17	3.2 %	0.0 %
Short-term investments	12	2.2 %	0.8 %
Other bonds & fixed income securities	12	2.2 %	4.7 %
Total	<u>\$ 527</u>	<u>100.0 %</u>	<u>2.9 %</u>
December 31, 2016			
U.S. government & agency securities	\$ 325	56.8 %	2.3 %
Corporate bonds & asset backed securities	221	38.7 %	3.9 %
U.S. Treasury bills	6	1.1 %	0.0 %
Short-term investments	8	1.4 %	0.3 %
Other bonds & fixed income securities	11	2.0 %	4.8 %
Total	<u>\$ 571</u>	<u>100.0 %</u>	<u>2.9 %</u>
December 31, 2015			
U.S. government & agency securities	\$ 346	57.1 %	2.6 %
Corporate bonds & asset backed securities	225	37.0 %	4.2 %
U.S. Treasury bills	22	3.6 %	0.0 %
Short-term investments	2	0.4 %	0.1 %
Other bonds & fixed income securities	11	1.9 %	4.9 %
Total	<u>\$ 606</u>	<u>100.0 %</u>	<u>3.1 %</u>

Contact Information

This financial report is designed to provide a general overview of the Metro-North Commuter Railroad Company Cash Balance Plan's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Comptroller, Metropolitan Transportation Authority, 2 Broadway, 16th Floor, New York, NY 10004.

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

STATEMENTS OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2017 AND 2016

	2017	2016
ASSETS:		
Investments, at fair value:		
U.S. government & agency securities	\$ 263,261	\$ 324,479
Corporate bonds & asset backed securities	223,205	220,709
U.S. Treasury bills	16,995	5,999
Other bonds & fixed income securities	11,680	11,474
Short-term investments	<u>11,722</u>	<u>8,250</u>
Total investments	<u>526,863</u>	<u>570,911</u>
Accrued interest	2,604	3,165
Receivable from investment securities sold	<u>3,238</u>	<u>29,585</u>
Total assets	<u>532,705</u>	<u>603,661</u>
LIABILITIES:		
Payable for investment securities purchased	<u>9,942</u>	<u>29,497</u>
Total liabilities	<u>9,942</u>	<u>29,497</u>
NET POSITION - restricted for pension benefits	<u>\$ 522,763</u>	<u>\$ 574,164</u>

See notes to financial statements.

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017	2016
ADDITIONS:		
Investment income:		
Interest	\$ 15,863	\$ 17,415
Net appreciation/(depreciation) in fair value of investments	<u>3,745</u>	<u>(1,667)</u>
Total investment income	19,608	15,748
Contributions:		
Employer	-	22,721
Other	<u>52</u>	<u>1</u>
Total additions	<u>19,660</u>	<u>38,470</u>
DEDUCTIONS:		
Benefits paid to participants	71,061	76,746
Other	<u>-</u>	<u>10</u>
Total deductions	<u>71,061</u>	<u>76,756</u>
NET DECREASE IN NET POSITION	(51,401)	(38,286)
NET POSITION - restricted for pension benefits		
Beginning of year	<u>574,164</u>	<u>612,450</u>
End of year	<u>\$ 522,763</u>	<u>\$ 574,164</u>

See notes to financial statements.

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

1. PLAN DESCRIPTION

The following description of the Metro-North Commuter Railroad Company Cash Balance Plan provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan is a single employer, defined benefit pension plan administered by Metro-North Commuter Railroad ("MNCR"). The Plan covers non-collectively bargained employees, formerly employed by Conrail, who joined MNCR as management employees between January 1 and June 30, 1983, and were still employed as of December 31, 1988. Effective January 1, 1989, these employees were covered under the Metro-North Commuter Railroad Defined Contribution Plan for Management Employees (the "Management Plan") and the Plan was closed to new participants. The assets of the Management Plan have been merged with the Metropolitan Transportation Authority Defined Benefit Plan for Non-Represented Employees as of the asset transfer date of July 14, 1995. The Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) and 501(a) of the Internal Revenue Code. Accordingly, the Plan is tax-exempt and is not subject to the provisions of the Employee Retirement Income Security Act ("ERISA") of 1974.

Plan Administration

The MTA Board of Trustees shall appoint a Board of Managers of Pensions consisting of five individuals who may, but need not, be officers or employees of the company. The members of the Board of Managers shall hold office at discretion of the MTA Board, each to serve until his successor is appointed. The Board of Managers shall be the agent for the service of legal process with respect to the Plan. No bond or other security is required in any jurisdiction of the Board of Managers or any member thereof except as required by law.

The Board of Managers shall control and manage the operation and administration of the Plan. It shall have all the powers that within its judgment may be necessary or appropriate for that purpose, including, but not by way of limitation, power to adopt any rules consistent with the provisions of the Plan deemed necessary to effectuate the Plan, to conduct the affairs of the Board of Managers, to administer the Plan, to interpret the Plan, to determine the eligibility, status and rights of all persons under the Plan and, in general, to decide any dispute.

Benefits Provided

Pension Benefits - Participants of the Plan obtain a nonforfeitable right to their accrued benefit upon the earlier of (a) the completion of five years of service with the MTA Metro-North Railroad or (b) the attainment of age sixty-two. Vested participants are entitled to receive pension benefits commencing at age sixty-five. Vested participants may elect to receive early retirement benefits upon the attainment of age fifty-five through age sixty-four.

Participants may elect to receive the value of their accumulated plan benefits as a lump-sum distribution upon retirement or they may elect to receive their benefits as a life annuity payable monthly from retirement. Participants may also elect to receive their pension benefits in the form of a joint and survivor annuity.

Prior to a participant's annuity commencement date, each Participant's account balance shall be increased each month by a factor, which when compounded monthly for 12 months, would produce the benefit escalator for the applicable plan year.

The benefit escalator is defined as the Pension Benefit Guaranty Corporation immediate annuity rate in effect for December of the year preceding the year for which the determination is being made.

Death Benefits — Benefits are paid to vested participants' beneficiaries in the event of a participants' death. The amount of benefits payable is the participant's account balance at the date of his or her death.

Membership

Membership of the Plan consisted of the following as of January 1, 2018, the date of the latest actuarial valuation:

Active Plan Members	2
Retirees and beneficiaries receiving benefits	26
Vested formerly active members not yet receiving benefits	15
Total	<u>43</u>

Contributions

Funding for the Plan is provided by MNCR which is a public benefit corporation that receives funding for its operations and capital needs from the Metropolitan Transportation Authority ("MTA") and the Connecticut Department of Transportation ("CDOT"). Certain funding by MTA is made to MNCR on a discretionary basis. The continuance of funding for the Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

MNCR's funding policy with respect to the Plan was to contribute the full amount of the pension benefit obligation ("PBO") of approximately \$2.977 million to the trust fund in 1989. As participants retire, distributions from the Plan have been made by the Trustee. MNCR anticipated that no further contributions would be made to the Plan. However, due to changes in actuarial assumptions and market performance, additional unfunded pension liabilities were paid to the Plan in several subsequent years. Per the January 1, 2016 valuation, the unfunded total pension liability was \$22 thousand and paid to the Plan in 2016. Per the January 1, 2017 valuation, the actuarial value of assets exceeded the actuarial accrued liability and as a result no payment is required for 2017. Per the January 1, 2018 valuation, the unfunded total pension liability was \$5 thousand and paid to the Plan in 2018.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Plan's financial statements are prepared on the accrual basis of accounting.

Use of Estimates

The preparation of the Plan's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates include the determination of the fair market value of investments, the actuarial determined contribution and the total pension liability.

Investment Valuation and Income Recognition

Fair value for the publicly traded government bonds and notes, corporate bonds and mortgage/asset backed securities represents the quoted market prices of a national securities exchange. Gains and losses on investments that were sold during the year are included in net appreciation or depreciation in fair value of investments. Interest income on the government and corporate bonds is recorded when earned. The Plan's investments are held in trust by Wells Fargo Bank (the "Trustee"), in the name of the Plan.

Benefits

Benefits are recognized when paid.

Administrative Expenses

The administrative expenses of the Plan are paid by MNCR. Administrative expenses were \$18 thousand and \$17 thousand for the years ended December 31, 2017 and 2016, respectively.

Federal Income Tax Status

The Internal Revenue Service ("IRS") has determined and informed the MNCR by a letter dated January 10, 1997, that the Plan and related trust were designed in accordance with the applicable regulations of the IRC. The Plan has been amended since receiving the determination letter. The MNCR believes that the Plan is currently designed and operated in compliance with the applicable requirements of the IRC and the Plan and related trust continue to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

New Accounting Standards Adopted

The Plan adopted the following GASB Statements for the year-ended December 31, 2017:

GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement No. 67, and Amendments to Certain Provisions of GASB Statements 67 and 68*, establishes requirements for defined benefit pension plans and defined contribution plans that are not within the scope of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. GASB Statement No. 73 extends the approach to accounting and financial reporting established in GASB Statement No. 68 to all pensions to reflect that for accounting and financial reporting purposes, any assets accumulated for pensions that are provided through pension plans that are not administered through trusts that meet the criteria specified in GASB Statement No. 68, should not be considered pension plan assets. It also requires that information similar to that required by GASB Statement No. 68 be included in notes to financial statements and required supplementary information by all similarly situated employers and nonemployer contributing entities. The requirements of this Statement are effective for fiscal years beginning after June 15, 2016. The adoption of this Statement had no impact on the Plan's financial statements.

Accounting Standards Issued but Not Yet Adopted

GASB has issued the following pronouncements that may affect the future financial position, results of operations, or financial presentation of the Plan upon implementation. The Plan has not yet evaluated the effect of implementation of these standards.

GASB Statement No.	GASB Accounting Standard	MNCR Pension Plan Required Year of Adoption
84	<i>Fiduciary Activities</i>	2019
85	<i>Omnibus 2017</i>	2018

Subsequent Events

As of January 22, 2019, there were no materially significant subsequent events.

3. INVESTMENTS

A professional investment management firm manages the Plan. The Plan utilizes various investment securities including U.S. government securities and corporate debt instruments. The investment guideline is included within the investment management agreement agreed to by the MTA Board of Trustees. The guideline grants the investment manager full discretion to buy, sell, invest and reinvest the Plan's assets in domestic fixed income investments. The investment objective is to achieve consistent, positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation. Investment securities, in general, are exposed to various risks, such as interest rate risk, credit risk, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the financial statements.

The investment management firm is required to maintain a diversified portfolio. All investment managers are expected to perform their fiduciary duties as prudent people would and to conform to all state and federal statutes governing the investment of retirement funds. Securities managers must be registered advisors under the Investment Advisors Act of 1940. The investment managers must comply with the risk management guidelines per the Investment Management Agreement.

Investment managers may not purchase inverse floating rate bonds, structured notes, commodities, securities on margin, sell short, lend securities, invest in private placements, commingled funds (except Short-Term Investment Funds), real estate investments, and oil, gas & mineral exploration investments without the written consent of the Plan. The Plan's fixed-income assets shall be invested in domestic marketable, fixed-income securities.

Fixed-income managers are expected to adhere to the following guidelines as a means of limiting credit risk:

- Commercial Paper, Eurodollar Commercial Paper and Variable Rate Notes rated P-1 by Moody's, A1 by Standard and Poor's, or F1 by Fitch.

- Certificates of Deposit and Bankers Acceptances of institutions whose long-term debt is rated Baa or better by Moody's Investor's Service or equivalent by Standard & Poor's.
- United States Treasury Bonds, Notes and Bills.
- Debt instruments of the U.S. Government or its Agencies and Instrumentalities.
- Marketable corporate debt, Yankee bonds, Eurodollar bonds, non-agency mortgage-backed securities, asset backed securities and taxable municipal securities rated the equivalent of Baa or better by Moody's Investors Services, Standard & Poor's, or Fitch Investor's Services, for an overall portfolio average of A or better. In the case of split ratings, the higher rating applies.
- Collateralized Mortgage Obligations ("CMO's") backed by pools of agency or non-agency mortgages including those that are re-constructed in their original proportions from the same pool (such as IO's/PO's, and floaters/inverse floaters). Companion tranches and support tranches are limited to 3% of the book value of the portfolio.
- 144A Privates (non-registered debt issued by corporations), non-convertible preferred stock and fully hedged non-dollar bonds rated A or better by Moody's Investors Services, Standard & Poor's, or Fitch Investor's Services are limited to 20% of the book value of the portfolio.
- Securities downgraded subsequent to purchase resulting in violation of quality guidelines may be held at the manager's discretion.
- Managers may not hold more than 5% at book value and 10% at market value of the portfolios in any one issuer's securities other than direct or moral obligations of the U.S. Government.
- Unrated securities other than those issued by the U.S. Government or its Agencies and Instrumentalities may not be purchased without the prior consent of the Plan.

GASB 72 Disclosure

In fiscal year 2015, the Plan adopted GASB Statement No. 72 ("GASB 72"), *Fair Value Measurement and Application*. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements. The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Plan has the following recurring fair value measurements as of December 31, 2017 and December 31, 2016:

GASB 72 Disclosure
(in thousands)

	2017			
INVESTMENTS - fair value level	Level 1	Level 2	Level 3	Total
Debt securities:				
U.S government agency	\$ 145	\$ 118	\$ -	\$ 263
Corporate bonds	-	203	-	203
U.S treasury securities	17	-	-	17
Commerical mortgage-backed securities	-	20	-	20
Other bonds	-	12	-	12
Total debt securities	162	353	-	515
Total investments by fair value level	162	353	-	515

INVESTMENTS- measured at the net asset value (NAV)

Short-term other				12
Total investments measured at the NAV				12
Total investments by fair value level	\$ 162	\$ 353	\$ -	\$ 527

	2016			
INVESTMENTS - fair value level	Level 1	Level 2	Level 3	Total
Debt securities:				
U.S government agency	\$ 198	\$ 127	\$ -	\$ 325
Corporate bonds	-	200	-	200
U.S treasury securities	6	-	-	6
Commerical mortgage-backed securities	-	21	-	21
Other bonds	-	11	-	11
Total debt securities	204	359	-	563
Total investments by fair value level	204	359	-	563

INVESTMENTS- measured at the net asset value (NAV)

Short-term other				8
Total investments measured at the NAV				8
Total investments by fair value level	\$ 204	\$ 359	\$ -	\$ 571

Equity and Fixed Income Securities

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using prices determined by the use of matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 are securities whose stated market price is unobservable by the market place; many of these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.

Money-Weighted Rate of Return

For the years ended December 31, 2017 and December 31, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, for the Plan was 3.67% and 2.75%, respectively.

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the beginning of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

Net appreciation/(depreciation) in Fair Value of Investments as Determined by Quoted Market Prices

The Plan's investments (including gains and losses on investments sold during the year) appreciated /(depreciated) in value as follows:

	Year Ended December 31,	
	2017	2016
U.S. government & agency securities	\$ 600	\$ (2,572)
Corporate bonds & asset backed securities	2,939	695
Other bonds & fixed income securities	206	210
	<u>\$ 3,745</u>	<u>\$ (1,667)</u>

Credit Risk

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2017 and December 31, 2016, respectively, are as follows:

December 31, 2017 Quality Rating	Fair Value	Percentage of Portfolio
AAA	\$ 37,761	7.17%
AA	4,937	0.94
A+	5,111	0.97
A	17,477	3.32
AA-	6,557	1.24
A-	21,178	4.02
BBB+	88,066	16.27
BBB	35,601	6.76
BBB-	10,177	1.93
NR	<u>19,741</u>	<u>3.75</u>
Total credit risk debt securities	246,607	
U.S. government & agency securities*	<u>280,256</u>	<u>53.19</u>
Total investment portfolio	<u>\$ 526,863</u>	<u>100.00%</u>

December 31, 2016	Fair	Percentage of
Quality Rating	Value	Portfolio
AAA	\$ 18,693	3.27%
AA+	5,041	0.88
AA	4,939	0.87
A+	5,022	0.88
A	12,569	2.20
AA-	11,457	2.01
A-	29,137	5.10
BBB+	81,471	14.27
BBB	46,467	8.14
BBB-	5,187	0.91
NR	20,450	3.58
Total credit risk debt securities	240,433	
U.S. government & agency securities*	330,478	57.89
Total investment portfolio	\$ 570,911	100.00%

*Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk and do not have purchase limitations.

Custodial Credit Risk

The Plan does not have a general policy addressing custodial risk, but it is the practice of the Plan that all investments are registered or held by the Plan or its agent in the Plan's name. Deposits are to be registered or collateralized with securities held at fiscal agents in the Plan's name.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice-versa. Duration is an indicator of bond price's sensitivity to 100 basis point change in interest rates.

December 31, 2017	Fair	Percentage of	Duration
Investment Type	Value	Portfolio	(Years)
U.S. government & agency securities	\$ 263,261	49.97%	5.44
Corporate bonds & asset backed securities	223,205	42.36	6.64
U.S. treasury bills	16,995	3.23	0.03
Other bonds & fixed income securities	11,680	2.22	5.98
Short-term investments	11,722	2.22	0.00
Total investment	\$ 526,863	100.00%	
Portfolio average duration			<u>5.66</u>

December 31, 2016			
Investment Type	Fair Value	Percentage of Portfolio	Duration (Years)
U.S. government & agency securities	\$ 324,479	56.84%	6.21
Corporate bonds & asset backed securities	220,709	38.66	5.55
U.S. treasury bills	5,999	1.05	0.03
Other bonds & fixed income securities	11,474	2.01	6.63
Short-term investments	8,250	1.44	0.00
Total investment	<u>\$ 570,911</u>	<u>100.00%</u>	
Portfolio average duration			<u>5.81</u>

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Plan assets are invested in domestic fixed-income securities denominated in U.S. dollars and accounted for at fair market value. The Plan has no exposure to foreign currency fluctuation.

4. NET PENSION LIABILITY (ASSET)

The components of the net pension liability of the Employer at December 31, 2017 and 2016, for the Plan, were as follows:

	2017	2016
Total pension liability	\$ 527,998	\$ 566,265
Plan's fiduciary net position	<u>522,763</u>	<u>574,164</u>
Employer's net pension liability	<u>\$ 5,235</u>	<u>\$ (7,899)</u>
Plan's fiduciary net position as a percentage of the total pension liability	99.01%	101.39%

The total pension liability was determined by an actuarial valuation as of the measurement date, calculated based on the discount rate and actuarial assumptions below.

Discount Rate

The plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return.

	2017	2016
Discount rate	4.00%	4.00%
Long-term expected rate of return net of investment expense	4.00%	4.00%
Municipal Bond Rate	N/A	N/A

Other Key Actuarial Methods and Assumptions for the years ended December 31, 2017 and December 31, 2016 were as follows:

The actuarial assumptions that determined the total pension liability as of December 31, 2017 was based on an experience study for the period January 1, 2011 - January 1, 2016. The actuarial assumptions that determined the total pension liability as of December 31, 2016 was based on the results of an actuarial experience study for the period January 1, 2006 - December 31, 2011.

	2017	2016
Valuation date:	January 1, 2018	January 1, 2017
Measurement date:	December 31, 2017	December 31, 2016
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Actuarial assumptions:		
Asset valuation method:	Market Value of Plan Asset	Market Value of Plan Asset
Projected salary increases:	N/A	N/A
COLAs:	N/A	N/A
Inflation:	2.50%	2.30%
Interest:	4.0% per annum, compounded annually	4.0% per annum, compounded annually
Benefit escalator:	3.0% per annum, compounded annually	3.0% per annum, compounded annually
Provision for Expenses:	None assumed from Plan assets	None assumed from Plan assets

Additional Actuarial Assumptions:

Termination: Withdrawal rates vary by age. The termination assumption has no impact on liabilities since all active members are retirement eligible. Illustrative rates shown below are for years 2017 and 2016:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	11.46%	45	0.67%
25	6.29	50	0.63
30	3.43	55	0.59
35	1.73	60	0.55
40	0.90	64	0.00

Retirement Assumption: Retirement rates vary by age. The retirement assumption is based on the eligibility provisions of this plan and on professional judgement. Illustrative rates shown below are for years 2017 and 2016:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55	12.0%	61	15.0%
56	8.0	62	35.0
57-58	6.0	63-64	20.0
59-60	7.0	65+	100.0

Mortality: The mortality assumption is based on a 2017 experience study for all MTA plans combined.

Pre-termination: RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments, projected on a generational basis using Scale AA.

Post-termination: 95% of the rates from the RP-2000 Healthy Annuitant Mortality Table for Males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant Mortality Table for Females, both projected on a generational basis using Scale AA. As generational tables, they reflect mortality improvements both before and after the measurement date.

Form of Payment for Cash Balance Account: For active participants, lump sum at decrement. For terminated vested participants, lump sum on the valuation date. This is based on the majority of participants electing a lump sum upon retirement.

Benefits not valued: The Additional Benefit was not valued as the potential liability for this benefit is de minimus.

Changes in Actuarial Assumptions Since Prior Valuation: None.

Long-Term Expected Rate of Return

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2017 and 2016.

Asset Class	Index	Target Allocation	2017	2016
Core Fixed Income	Barclays Aggregate	100.00%	1.41%	1.17%
Assumed Inflation - Mean			2.50%	2.50%
Assumed Inflation - Standard Deviation			1.85%	1.85%
Portfolio Nominal Mean Return			3.92%	3.69%
Portfolio Standard Deviation			4.55%	4.55%
Long-Term Expected Rate of Return selected by MTA			4.00%	4.00%

Sensitivity Analysis

The following presents the net pension liability of the Metro-North Commuter Railroad Company Cash Balance Plan as of December 31, 2017 and 2016, respectively, calculated using the discount rate of 4.00%, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (3.00%) or 1 percentage point higher (5.00%) than the current rate.

	December 31, 2017			December 31, 2016		
	1% Decrease 3.00%	Discount Rate 4.00%	1% Increase 5.00%	1% Decrease 3.00%	Discount Rate 4.00%	1% Increase 5.00%
Net Pension Liability	\$35,109	\$5,235	(\$21,154)	\$25,200	(\$7,899)	(\$37,092)

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

Schedule I

Required Supplementary Information (Unaudited)

Schedule of Changes in the Employer's Net Pension Liability and Related Ratios (\$ in Thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability:				
Service Cost	\$ -	\$ -	\$ -	\$ -
Interest	21	24	29	32
Changes of benefit terms	-	-	-	-
Difference between expected and actual experience	-	-	-	-
Changes of economic/demographic (gains) or losses	12	(15)	(10)	-
Changes of assumptions	-	-	18	-
Benefit payments	(71)	(77)	(113)	(88)
Net change in total pension liability	(38)	(68)	(76)	(56)
Total pension liability - beginning	566	634	710	766
Total pension liability - ending (a)	<u>\$ 528</u>	<u>\$ 566</u>	<u>\$ 634</u>	<u>\$ 710</u>
Fiduciary Net Position:				
Employer contributions	\$ -	\$ 23	\$ 18	\$ -
Member contributions	-	-	-	-
Net investment income	20	16	6	41
Benefit payments	(71)	(77)	(113)	(88)
Administrative expenses	-	-	3	(3)
Net change in plan fiduciary net position	(51)	(38)	(86)	(50)
Fiduciary net position - beginning	574	612	698	748
Fiduciary net position - ending (b)	<u>523</u>	<u>574</u>	<u>612</u>	<u>698</u>
Net pension liability - ending (a) - (b)	<u>\$ 5</u>	<u>\$ (8)</u>	<u>\$ 22</u>	<u>\$ 12</u>
 Fiduciary net position as a percentage of the total pension liability	 99.01%	 101.39%	 96.56%	 98.36%
Covered payroll	\$ 268	\$ 649	\$ 995	\$ 2,080
Net pension liability as a percentage of covered payroll	<u>1.95%</u>	<u>-1.22%</u>	<u>2.20%</u>	<u>0.56%</u>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

Schedule II

Required Supplementary Information (Unaudited)
Schedule of Employer Contributions

Fiscal Year Ending December 31	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of covered Payroll
2008	13,683	13,683	-	6,798,416	0.20%
2009	330	330	-	5,936,288	0.01%
2010	1,837	11,875	(10,038)	4,496,148	0.26%
2011	-	-	-	-	N/A
2012	-	-	-	-	N/A
2013	-	-	-	-	N/A
2014	4,977	14,124	(9,147)	2,080,077	0.68%
2015	-	-	-	-	N/A
2016	22,721	22,721	-	648,524	3.50%
2017	-	-	-	268,488	0.00%

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**METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN**

Schedule II (continued)

**Notes to Required Supplementary Information (Unaudited)
Schedule of Employer Contributions**

Actuarial Methods and Assumptions

The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Date	January 1, 2018	January 1, 2017	January 1, 2016	January 1, 2014
Valuation Timing	Actuarially determined contributions calculated as of December 31 for the fiscal year.	Actuarially determined contributions calculated as of December 31 for the fiscal year.	Actuarially determined contributions calculated as of December 31 for the fiscal year.	Actuarially determined contributions calculated as of December 31 for the fiscal year.
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Unit Credit
Amortization Method	One-year amortization of the unfunded liability, if any.	One-year amortization of the unfunded liability, if any.	One-year amortization of the unfunded liability, if any.	Period specified in current valuation (closed 10 year period beginning January 1, 2008 - 4 year period for the January 1, 2014 valuation).
Asset Valuation Method	Actuarial value equals market value.	Actuarial value equals market value.	Actuarial value equals market value.	Effective January 1, 2015, the Actuarially Determined Contribution (ADC) will reflect one-year amortization of the unfunded accrued liability in accordance with the funding policy adopted by the MTA.
Inflation	2.50%	2.30%	2.30%	2.50%
Salary Increases	N/A	N/A	N/A	N/A - There were no projected salary increase assumptions used in the January 1, 2014 valuation as participants of the Plan were covered under the Management Plan effective January 1, 1989. For participants of the Plan eligible for additional benefits, these benefits were not valued as the potential liability is de minimus.
Investment Rate of Return	4.00%, net of investment expenses	4.00%, net of investment expenses	4.00%, net of investment expenses	4.50%, net of investment expenses
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

Schedule III

Required Supplementary Information (Unaudited)
Schedule of Investment Returns

The following table displays annual money-weighted rate of return, net of investment expense.

<u>Fiscal Year</u> <u>Ending</u> <u>December 31</u>	<u>Net</u> <u>Money-Weighted</u> <u>Rate of Return</u>
2008	N/A
2009	N/A
2010	N/A
2011	N/A
2012	N/A
2013	N/A
2014	5.96%
2015	0.93%
2016	2.75%
2017	3.67%

Schedule is intended to show information for 10 years. Information was not readily available for periods prior to 2014. Additional years will be displayed as they become available.

Metropolitan Transportation
Authority Retiree Welfare
Benefits Plan
("Other Postemployment
Benefits Plan" or "OPEB Plan")

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016
Supplemental Schedules, and
Independent Auditors' Report

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POST EMPLOYMENT BENEFITS PLAN

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INDEPENDENT AUDITORS' REPORT

To the Board of Managers of the
Metropolitan Transportation Authority Retiree Welfare Benefits Plan

Report on the Financial Statements

We have audited the accompanying statements of plan net position of the Metropolitan Transportation Authority Retiree Welfare Benefits Plan (the "Plan") as of December 31, 2017 and 2016, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position as of December 31, 2017 and 2016, and the respective changes in plan net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 3, in 2017, the Plan adopted Governmental Accounting Standards Board ("GASB") Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 9, the Schedule of Changes in Employers' Net OPEB Liability and Related Ratios- Schedule I on page 29, the Schedule of Employer Contributions- Schedule II on page 30 and the Schedule of Investment Returns- Schedule III on page 31 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

January 22, 2019

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

The purpose of the Metropolitan Transportation Authority ("MTA") Retiree Welfare Benefits Plan ("Other Postemployment Benefits Plan" or "OPEB Plan" or the "Plan") and the related Trust Fund is to provide a vehicle for the MTA organization to set aside funds to assist it in providing health and other welfare benefits to eligible retirees and their beneficiaries. The Plan and the Trust Agreement are exempt from federal income taxation under Section 115(1) of the Code. The MTA is not required by law or contractual agreement to provide funding for the Plan, other than the "pay-as-you-go" cost of providing current benefits to current eligible retirees, spouses and dependents ("Pay-Go").

This management's discussion and analysis of the Plan's financial performance provides an overview of the Plan's financial activities for the years ended December 31, 2017 and 2016. It is meant to assist the reader in understanding the Plan's financial statements by providing an overall review of the financial activities during the year and the effects of significant changes. This discussion and analysis may contain opinions, assumptions, or conclusions by the MTA's management that should not be considered a replacement for, and is intended to be read in conjunction with, the Plan's financial statements which begin on page 10.

Overview of Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the financial statements. The basic financial statements are:

- **The Statements of Plan Net Position** — presents the financial position of the Plan at year end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Plan Net Position** — present the results of activities during the year. All changes affecting the assets and liabilities of the Plan are reflected on an accrual basis when the activity occurred regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation/(depreciation) in fair value of investments.
- **The Notes to Financial Statements** — provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.
- **Required Supplementary Information** as required by the Governmental Accounting Standards Board ("GASB") is presented after the management discussion and analysis, the statement of Plan net position, the statement of changes in Plan net position and the notes to the combined financial statements.

The accompanying financial statements of the Plan are presented in conformity with accounting principles generally accepted in the United States of America as prescribed by the GASB.

Financial Highlights

Plan net position is held in trust for the payment of future benefits to members and beneficiaries. The assets of the Plan exceeded its liabilities by \$370 million, \$323.0 million, and \$297.5 million as of December 31, 2017, 2016, and 2015, respectively. The increase in 2017 and 2016 is primarily a result of net appreciation on fair value of investments held offset by investment fees charged to the Plan.

Plan Net Position December 31, 2017, 2016, and 2015 (Dollars in thousands)

	2017	2016	2015	Amount of Change		Percentage Change	
				(2017 - 2016)	(2016 - 2015)	(2017 - 2016)	(2016 - 2015)
ASSETS:							
Investments	\$ 370,595	\$ 323,199	\$ 297,783	\$ 47,396	\$ 25,416	14.7	8.5
Receivables and other assets	8	3	1	5	2	166.7	200.0
TOTAL ASSETS	370,603	323,202	297,784	47,401	25,418	14.7	8.5
LIABILITIES:							
Benefits payable and accrued expenses	251	220	236	31	(16)	14.1	(6.8)
TOTAL LIABILITIES	251	220	236	31	(16.00)	14.1	(6.8)
PLAN NET POSITION HELD IN TRUST FOR OTHER							
POSTEMPLOYMENT BENEFITS	\$ 370,352	\$ 322,982	\$ 297,548	\$ 47,370	\$ 25,434	14.7	8.5

Changes in Plan Net Position
For the Years Ended December 31, 2017, 2016, and 2015
(Dollars in thousands)

				Amount of Change		Percentage Change	
	2017	2016	2015	(2017 - 2016)	(2016 - 2015)	(2017 - 2016)	(2016 - 2015)
ADDITIONS:							
Total investment income/(loss)	\$ 49,231	\$ 27,177	\$ (4,758)	\$ 22,054	\$ 31,935	81.2	671.2
Less:							
Investment expenses	1,861	1,743	883	118	860	6.8	97.4
Net investment income/(loss)	47,370	25,434	(5,641)	21,936	31,075	86.2	550.9
Add:							
Employer contributions	579,893	551,013	503,371	28,880	47,642	5.2	9.5
Implicit rate subsidy contribution	71,101	-	-	71,101	-	100	-
Total additions	698,364	576,447	497,730	121,917	78,717	21.2	9.6
DEDUCTIONS							
Benefit payments	579,893	551,013	503,371	28,880	47,642	5.2	9.5
Implicit rate subsidy payments	71,101	-	-	71,101	-	100	-
Total deductions	650,994	551,013	503,371	99,981	47,642	18.1	9.5
Net increase/(decrease) in Plan net position	47,370	25,434	(5,641)	21,936	31,075	86.2	550.9
PLAN NET POSITION HELD IN TRUST FOR OTHER POSTEMPLOYMENT BENEFITS							
Beginning of year	322,982	297,548	303,189	25,434	(5,641)	8.5	(1.9)
End of year	\$ 370,352	\$ 322,982	\$ 297,548	\$ 47,370	\$ 25,434	14.7	8.5

The Plan's net position held in trust increased by \$47.4 million during 2017, and \$25.4 million during 2016. In 2017 and 2016, the Plan's net appreciation in fair market values were \$47.4 and \$27.2 and the investment fees were \$1.9 and \$1.7 million respectively.

Investments — The table below summarizes the Plan's investment allocations.

December 31, 2017 (Dollars in thousands)	Fair Value	Allocation
Type of Investments		
Investment measured at the NAV	<u>\$ 370,595</u>	<u>100.00 %</u>
	<u><u>\$ 370,595</u></u>	<u><u>100.00 %</u></u>

December 31, 2016 (Dollars in thousands)	Fair Value	Allocation
Type of Investments		
Investment measured at the NAV	<u>\$ 323,199</u>	<u>100.00 %</u>
	<u><u>\$ 323,199</u></u>	<u><u>100.00 %</u></u>

Economic Factors

Market Overview and Outlook – 2017

The equity markets continued to outperform in 2017, with foreign equities finally joining the decade-long success enjoyed by United States (“U.S.”) markets. Arriving at new highs, the S&P 500 Index generated positive performance for the ninth straight year and has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory. Outside the U.S., developed market equities were up 25% in 2017, according to the Morgan Stanley Country Index Europe Australasia Far East. And after a somewhat disappointing stretch over the past 5 years, it was emerging market equities that really outperformed last year, with returns of 38%. Not to be left out, high-yield debt and dollar-denominated emerging market bonds outperformed within credit investment space. Thus, transcending that risk-taking remained a rewarding proposition for investors.

2017 was another banner year for global equities amid optimism that U.S. corporate tax cuts would spur further fundamental performance in corporate America and that the acceleration and synchronization of global economic growth would continue unabated. Investors would be well reminded that eventually the Bull markets end and that investors have not completely abandoned the caution and vigilance necessary to survive the next downturn, whenever it may occur.

Macro Themes

- Headwinds in Emerging Markets
- Rising interest rates
- Trade uncertainty
- High valuations and increasing leverage

The macro picture was framed by higher global growth in 2017. Developed and emerging markets all saw an uptick in growth for the year. Developed markets remained mired in relatively weak growth, with Gross Domestic Product (“GDP”) growth posting its highest level (+2.5%) since 2010. This may indicate a peak level of growth as the International Monetary Fund (“IMF”) forecasts lower economic performance over the coming five years. Emerging markets posted their best GDP performance since 2013, with +4.9% growth for the year. Unlike developed markets, the IMF expects growth in emerging markets to remain buoyant through the next five years. Inflation remains subdued across the developed markets while currency depreciation and devaluations in emerging markets have led to spikes in inflation.

In 2017, a continued rise in populism globally led to a continued backlash against globalization and the liberal economic tenets that underpinned the global economy since World War II. Discontent over economic policies that produced an uneven economic recovery led to a continued questioning of the viability of the institutions of the European Union and the euro. The political stability that Europe has largely enjoyed since World War II has been eroded by elections in key countries where populist parties, on both the right and the left, have gained influence at the expense of the established broad, centrist political parties. The global trade and political regime seems to have shifted from one of cooperation and coordination to one of confrontation and competition. Large scale trade agreements, such as Trans-Pacific Partnership and North American Free Trade Agreement, will be replaced by bi-lateral agreements, raising the risk of weak implementation, confusion, and non-compliance.

The U.S. is now entering its ninth year of economic expansion following the financial crisis. Measured gains in GDP and robust job growth provided strong underpinnings for domestic equities. The U.S. economy will likely continue to grow, supported by accommodative financial conditions, including tax cuts and regulatory changes. At the same time, the excess economic capacity will provide fuel to the ongoing expansion. There is no doubt that the U.S. Federal Bank Reserve (“Fed’s”) slow pace of raising interest rates has bolstered easy financial conditions. The Fed’s will likely remain relatively

accommodative, barring surprises in inflation or the labor market. The moderate unwinding of the Fed's balance sheet and the untested impact on capital markets will continue to influence investors' calculus of risk and reward.

Outside the United States, gradualism is the policy of choice for other major central banks: The European Central Bank's quantitative easing program continues to expand (now at a slower rate), while the Bank of Japan is carrying on its accommodative monetary policy. Europe continues to be impacted by high levels of public debt, fractious politics and low economic growth. Like emerging markets, a significant portion of Europe's export engine is tied to Chinese demand and growth. Lower growth in China will place pressures on Europe, in particular net exporters, such as Germany. Debt levels have not yet moderated post-financial crisis and flare-ups in periphery countries, such as in Greece, Portugal, Italy, and Spain, are likely to continue as growth remains challenged and reforms and austerity lose support. Banks will continue their deleveraging cycle should new rules (Basel III) on risk capital be implemented. In Japan, where banks are in better health, high public debt, low growth, a weakening regional economic picture, and aging demographics will challenge the government in delivering their growth and inflation targets.

Emerging markets posted solid returns in 2017 as the impact of capital flows due to the U.S. interest rate increases were much lower than expected. All eyes will continue to be on China. So far, China's move towards an economy emphasizing services and innovation over manufacturing has taken place with minimal disruptions. We expect the country's careful restraint over its monetary and fiscal policies to offer a smooth path for China's massive economic evolution. That said, the world's second largest economy remains at risk to world markets due to its sizable contribution to global growth.

United States

Markets in the U.S. were strong for the year and were amongst the best performers in 2017. U.S. equities outperformed in 2017 achieving new highs, the S&P 500 Index spent its ninth straight year in the black. The flagship U.S. index has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory.

Large Cap stocks were strongly positive, with the S&P 500 and Russell 1000 indices posting returns of (+21.8%) and (+21.7%), respectively. Small Cap and Mid Cap indices underperformed large cap. Small Cap, as measured by the Russell 2000 Index, returned (+14.6%). The Russell Mid Cap Index lagged but still posted a (+18.5%) return. Of note, growth oriented investments outperformed the value counterpart with the Russell 1000 Growth (+30.2%) outpacing the Russell 1000 Value (+13.6%).

Fixed income markets took the three rate hikes by the Fed's in stride in 2017. Treasuries returned (+2.3%) for the year, with the assets strongest quarter coming in second quarter of 2017. Credit outperformed Treasuries for the year, with (+6.2%), posting positive returns for four straight quarters. Following strong results in 2016, high yield high yield continued its upward trend and performing well in 2017, returning (+7.5%).

International Developed

International equity markets posted strong results in 2017 and outpaced U.S. equity markets for the first time since 2012. In U.S. dollars, both Europe and Japan equities posted positive performance in 2017 with MSCI Europe returning (+25.5%) and MSCI Japan returning (+24.0%). Strong returns in Europe were driven by positive market performance and a weakening US dollar. The small cap portion of international developed markets posted even stronger returns in 2017, (+33.0%).

Fixed income markets in Europe and Japan are largely centered on government bonds, with corporate and asset-backed issuance making up a fraction of the overall markets. Global Treasuries were positive in 2017, following a slightly positive year in 2016.

Emerging Markets

Emerging markets posted strong performance in 2017 and outpaced both U.S. and international developed markets across equity and debt. The broad emerging markets index returned (+37.3%) for the year. China, a significant exposure within the emerging market index, was a strong performer, returning (+54.3%) for the year. Performance of the bond markets of emerging markets was encouraging. Both hard currency and local currency bond posted solid years in performance. Hard currency bonds, which are predominately issued in U.S. dollar, returned (+10.3%) in 2017. Local currency bonds, which are issued in the local currency, returned (+15.2%) for the year.

Commodities

Commodities posted positive performance in 2017, with the broad Bloomberg Commodity Index up (+1.7%). Industrial metals and precious metals posted strong performance for the year while agriculture was negative. Oil continued its positive rebound from 2016 with another positive year in 2017.

Contact Information

This financial report is designed to provide a general overview of the Metropolitan Transportation Authority Other Postemployment Benefits Plan's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Comptroller, Metropolitan Transportation Authority, 2 Broadway, 16th Floor, New York, NY 10004.

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METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

STATEMENTS OF PLAN NET POSITION AS OF DECEMBER 31, 2017 AND 2016 (In thousands)

	2017	2016
ASSETS:		
Investments measured at fair value - net asset value	\$ 370,595	\$ 323,199
Interest receivable	<u>8</u>	<u>3</u>
Total assets	<u>370,603</u>	<u>323,202</u>
LIABILITIES:		
Benefits payable and accrued expenses	<u>251</u>	<u>220</u>
Total liabilities	<u>251</u>	<u>220</u>
PLAN NET POSITION HELD IN TRUST FOR OTHER POSTEMPLOYMENT BENEFITS	<u>\$ 370,352</u>	<u>\$ 322,982</u>

See notes to financial statements.

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

STATEMENTS OF CHANGES IN PLAN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016 (In thousands)

	2017	2016
ADDITIONS:		
Net realized and unrealized gains or (losses)	\$ 42,470	\$ 22,802
Dividends	6,697	4,347
Interest	64	28
Total investment income/(loss)	49,231	27,177
Less:		
Investment expenses	1,861	1,743
Net investment income or (loss)	47,370	25,434
Add:		
Employer contributions	579,893	551,013
Implicit rate subsidy contribution	71,101	-
Total additions	698,364	576,447
DEDUCTIONS:		
Benefit Payments	579,893	551,013
Implicit rate subsidy payments	71,101	-
Total deductions	650,994	551,013
Net increase in Plan net position	47,370	25,434
PLAN NET POSITION HELD IN TRUST FOR OTHER POSTEMPLOYMENT BENEFITS:		
Beginning of year	322,982	297,548
End of year	\$ 370,352	\$ 322,982

See notes to financial statements.

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

1. BACKGROUND AND ORGANIZATION

The Metropolitan Transportation Authority (“MTA”) Retiree Welfare Benefits Plan (“Other Postemployment Benefits Plan” or “OPEB Plan” or the (“Plan”) and the related Trust Fund was established effective January 1, 2009 for the exclusive benefit of The MTA Group’s retired employees and their eligible spouses and dependents, to fund some of the OPEB benefits provided in accordance with the MTA’s Group’s various collective bargaining agreements and MTA policies. The MTA Group is comprised of the following current and former agencies:

- MTA New York City Transit
- MTA Long Island Rail Road
- MTA Metro-North Railroad
- MTA Bridges and Tunnels
- MTA Headquarters (“MTAHQ”)
- MTA Long Island Bus
- MTA Staten Island Railway
- MTA Bus Company
- MTA Capital Construction

The Trust is tax exempt in accordance with Section 115 of the Internal Revenue Code. The Plan is classified as a single employer plan for Governmental Accounting Standards Board (“GASB”) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (“GASB 74”) purposes.

The MTA is not required by law or contractual agreement to provide funding for the Plan, other than the “pay-as-you-go” amount necessary to provide the current benefits to current eligible retirees, spouses and dependents (Pay-Go).

GASB 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* prescribes uniform financial reporting standards for other postemployment benefits (“OPEB”) plans of all state and local governments. OPEB refers to postemployment benefits other than pension benefits and includes postemployment healthcare benefits which are covered under The MTA OPEB plan.

Plan Administration – The Other Postretirement Plan is administered by the Board of Managers, which is comprised of:

- (a) the persons holding the following positions:

- (i) the MTA Chief Financial Officer;
- (ii) the MTA Director of Labor Relations; and
- (iii) the Chairman of the MTA

- (b) Designation of Others – Any member of the Board of Managers, serving as such by virtue of holding a position described in (a) of this section, may, by written authorization filed with the Secretary,, designate another individual, not then a member, to serve in that member's stead, in accordance with procedures established with the approval of the Executive Director of the MTA. Any such authorization may be revoked by the designating member at any time in writing filed in the same manner.

Postemployment benefits are part of an exchange of salaries and benefits for employee services rendered. Most OPEB have been funded on a pay-as-you-go basis and have been reported in financial statements when the promised benefits are paid.

OPEB Funding - During 2012, MTA funded \$250 million into a Trust allocated between Headquarters and New York City Transit and funded an additional \$50 million during 2013 allocated between Long Island Railroad and Metro-North Railroad. There have been no further contributions made to the Trust. Since the amount of benefits paid during 2017 exceed the current market value of assets, a depletion date is assumed to occur immediately. Therefore, the discount rate is set equal to the municipal bond index. MTA elected the Bond Buyer 20-Bond GO Index. As a result, the discount rates as of December 31, 2016 and December 31, 2017 are 3.78% and 3.44%, respectively.

Significant Changes - This valuation reflects changes to the plan provisions that were adopted during the measurement period. Represented members of Metro-North who retire on or after ratification dates in 2017 and 2018 (varies by union) will be eligible for a \$100 per month supplemental benefit upon becoming eligible for Medicare.

2. PLAN DESCRIPTION, ELIGIBILITY AND MEMBERSHIP INFORMATION

The benefits provided by the MTA Group include medical, pharmacy, dental, vision, life insurance and a Medicare supplemental plan. The different types of benefits provided vary by MTA agency and relevant collective bargaining agreements. Certain benefits are provided upon retirement. "Retirement" is defined by the applicable pension plan. Certain agencies provide benefits to certain former employees if separated from service within 5 years of attaining retirement eligibility. Employees of the MTA Group are members of the following pension plans: the MTA Defined Benefit Pension Plan ("MTADBPP"), the MTA Long Island Rail Road Plan for Additional Pensions, the Metro-North Cash Balance Plan, , the Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA") Pension Plan, the New York City Employees' Retirement System ("NYCERS") and the New York State and Local Employees' Retirement System ("NYSLERS").). Certain represented employees of Metro-North Railroad participate in the Thrift Plan for Employees of MTA, its Subsidiaries and Affiliates ("401(k) Plan"). Eligible employees of the MTA Group may elect to join the New York State Voluntary Defined Contribution Plan ("VDC").

The MTA Group participates in the New York State Health Insurance Program ("NYSHIP"), and provides medical and prescription drug benefits, including Medicare Part B reimbursements, to many of its retirees. NYSHIP offers a Preferred Provider Organization ("PPO") plan and several Health Maintenance Organization ("HMO") plans. However, represented MTA New York City Transit employees, other MTA New York City Transit former employees who retired prior to January 1, 1996 or January 1, 2001, Staten Island Railway represented employees as of March 1, 2010, June 1, 2010 or January 1, 2013 depending on the union and MTA Bus Company represented

employees do not participate in NYSHIP. These benefits are provided through a self-insured health plan, a fully insured health plan or an HMO.

The MTA is a participating employer in NYSHIP. The NYSHIP financial report can be obtained by writing to NYS Department of Civil Service, Employee Benefits Division, Alfred E. Smith Office Building, 805 Swan Street, Albany, NY 12239.

GASB 74 requires employers to perform periodic actuarial valuations to determine annual accounting costs, and to keep a running tally of the extent to which these amounts are over or under funded. The valuation must be performed at least biennially. The most recent biennial valuation was performed with a valuation date of January 1, 2016. The total number of plan participants as of January 1, 2016 receiving retirement benefits was approximately 46 thousand.

Plan Eligibility — Generally, to qualify for benefits under the Plan, a former employee of The MTA must:

- have retired, be receiving a pension (except in the case of the 401(k) Plan), and have at least 10 years of credited service as a member of NYCERS, NYSLERS, the MTADBPP, the MaBSTOA Pension Plan, the 401(k) Plan or the VDC and have attained a minimum age requirement (unless within 5 years of commencing retirement for certain members); provided, however, a represented retired employee may be eligible only pursuant to the relevant collective bargaining agreement.
- Surviving Spouse and Other Dependents:
 - (i) Lifetime coverage is provided to the surviving spouse (not remarried) or domestic partner and surviving dependent children to age 26 of retired managers and certain non-represented retired employees.
 - (ii) Represented retired employees must follow the guidelines of their collective bargaining agreements regarding continued health coverage for a surviving spouse or domestic partner and surviving dependents. For represented employees of New York City Transit and Staten Island Railway retiring on or after May 21, 2014 for TWU Local 100, September 24, 2014 for ATU Local 726, October 29, 2014 for ATU Local 1056, March, 2015 for TCU and December 16, 2015 for UTU and ATDA, surviving spouse coverage continues until spouse is eligible for Medicare.
 - (iii) Lifetime coverage is provided to the surviving spouse (not remarried) or domestic partner and surviving dependents of retired uniform members of the MTA Police Department.
 - (iv) Lifetime coverage is provided to the surviving spouse (not remarried) or domestic partner and surviving dependent children to age 26 of uniformed members of the MTA Police Department whose death was sustained while in performance of duty.

Plan Membership — As permitted under GASB 74, the Plan has elected to use January 1, 2016, as the valuation date of the OPEB actuarial valuation. The Plan's combined membership consisted of the following at January 1, 2016, the date of the most recent OPEB actuarial valuation:

	January 1, 2016	January 1, 2014
Active Plan members	70,070	67,516
Inactive Plan members currently receiving Plan benefit payments	46,064	44,644
Inactive Plan members entitled to but not yet receiving benefit payments	<u>22,826</u>	<u>22,184</u>
Total number of participating employees	<u>138,960</u>	<u>134,344</u>

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting — The Plan's financial statements are prepared on the accrual basis of accounting under which deductions are recorded when the liability is incurred and revenues are recognized in the accounting period in which they are earned. Employer contributions are recognized when paid in accordance with the terms of the Plan. Additions to the Plan consist of employer contributions and net investment income. Investment purchases and sales are recorded as of trade date.

The financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America, as prescribed by Government Accounting Standards Board ("GASB").

Recent Accounting Pronouncements — The Plan adopted GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* ("GASB 74"). GASB 74 establishes financial reporting standards of State and Local governmental OPEB plans. This statement replaces GASB Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*.

The Plan adopted GASB Statement No. 74, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* ("GASB 75"). GASB 75 establishes accounting and financial reporting standards for OPEB that is provided to employees of state and local governmental employers. This statement replaces GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*.

The implementation of GASB Statements 74 did not have an impact the Plan Net Position held in Trust for Other Postemployment Benefits, however, certain changes were made to the note disclosures and required supplementary information to comply with the new standard.

Recent Accounting Pronouncements — Not yet adopted

GASB Statement No.	GASB Accounting Standard	MTA Welfare Benefits Plan Required Year of Adoption
84	<i>Fiduciary Activities</i>	2019
85	<i>Omnibus 2017</i>	2018

Investments — The Plan's investments are those which are held in the Trust. Investments are reported on the statements of plan net position at fair value based on quoted market prices or Net Asset Value, which is determined to be a practical expedient for measuring fair value. Investment income, including changes in the fair value of investments, is reported on the Statements of changes in Plan net position during the reporting period.

Benefit Payments — The Plan Sponsor makes direct payments of insurance premiums for healthcare benefits to OPEB Plan members or beneficiaries. Payments made directly to the insurers by the Plan Sponsor which bypass the trust are treated as additions and deductions from the Plan's net position. Additionally, premium payments on behalf of retirees have been adjusted to reflect age-based claims cost. The amount of the implicit rate subsidy adjustment should be subtracted from the healthcare costs attributable to active employees.

4. INVESTMENTS

Investment Policy – The Plan's policy statement is issued for the guidance of fiduciaries, including the members of the Board of Managers, in the course of investing the assets of the Trust. The investments of the Trust will be made for the exclusive benefit of the Plan participants and their beneficiaries. Policy guidelines may be amended by the Board of Managers upon consideration of the advice and recommendations of the investment professionals.

In order to have a reasonable probability of achieving the target return at an acceptable risk level, the Board has adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on, at least, annually. The following was the Board of Managers adopted asset allocation policy as at December 31, 2017.

Asset Class	Target Allocation (%)	Policy Benchark
Global Equity	35.0	MSCI AC WI NR
Fixed Income	18.0	Manager Specific
Global Asset Allocation*	30.0	50% World Equity/ 50% Citigroup WGBI unhedged
Absolute Return	12.0	Manager Specific
Real Assets	5.0	Manager Specific
Total	100.0	

* The Global Asset Allocation managers will invest across numerous liquid asset classes including: stocks, bonds, commodities, TIPS and REITs.

Investment Objective — The Plan’s investments are those which are held in the Trust. The investment objective of the funds is to achieve consistent positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation.

Investment Guidelines — The Committee of the MTA Retiree Welfare Benefits Plan is in the process of creating investment guidelines with the Plan’s investment advisor (“NEPC”) that will address and execute investment management agreements with professional investment management firms to manage the assets of the Plan. However, the Committee of the MTA Retiree Welfare Benefits Plan allows the Plan to follow the Investment Guidelines established by the Board of Managers of Pensions for the MTA Defined Benefit Pension Plan.

Credit Risk — At December 31, 2017 and 2016 the following credit quality rating has been assigned by a nationally recognized rating organization:

Quality Rating	2017		2016	
	Fair Value	Percentage of Fixed Income Portfolio	Fair Value	Percentage of Fixed Income Portfolio
AAA	\$ 12,784,627	7.08 %	\$ 23,164,269	13.27 %
AA	15,820,019	8.77	5,276,145	3.02
A	29,348,972	16.27	14,044,929	8.05
BBB	22,960,712	12.73	24,789,389	14.20
BB	12,735,163	7.06	11,522,793	6.60
B	4,775,609	2.65	6,186,168	3.55
CCC	107,298	0.06	1,861,824	1.07
Not Rated	<u>35,768,932</u>	<u>19.83</u>	<u>17,672,299</u>	<u>10.13</u>
Credit risk debt securities	134,301,334	74.45	104,517,815	59.89
U.S. Government bonds	<u>46,092,991</u>	<u>25.55</u>	<u>70,001,778</u>	<u>40.11</u>
Total fixed income securities	180,394,325	<u>100.00 %</u>	174,519,593	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>190,201,299</u>		<u>148,679,191</u>	
Total investments	<u>\$ 370,595,624</u>		<u>\$ 323,198,784</u>	

Interest Rate Risk — Interest rate risk is the risk that changes in interest rates that will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice versa. Duration is an indicator of bond price’s sensitivity to 100 basis point change in interest rates.

Investment Fund	2017		2016	
	Fair Value	Duration	Fair Value	Duration
Allianz Structured Alpha	\$ 20,434,253	0.13	\$ 18,611,047	0.13
Baird Aggregate Bond Fund	27,046,146	5.98	25,955,723	5.89
Bridgewater Alpha Pure Markets Fund	13,014,796	(5.78)	13,423,321	0.02
Bridgewater All Weather Fund	41,399,870	7.70	37,020,801	9.05
GAM Unconstrained Bond Fund	17,005,448	(0.17)	16,061,041	0.25
Pimco All Asset Fund	34,606,248	3.45	30,361,189	3.10
Wellington Diversified Inflation Hedge Fund	15,659,837	0.70	14,455,323	3.88
Wellington Blended Emerging Markets Debt Fund	16,663,943	5.70	14,576,069	11.80
Wellington Opportunistic Investment Fund	31,359,989	1.70	26,410,584	4.56
	217,190,532		196,875,098	
Portfolio modified duration		3.15		4.76
Investments with no duration reported	153,405,092		126,323,686	
Total investments	<u>\$ 370,595,624</u>		<u>\$ 323,198,784</u>	

Custodial Credit Risk — For investments, custodial credit risk is the risk that in the event of the failure of the Trustee Bank, the Plan will not be able to recover the value of its investments or collateral securities that are in the possession of the outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured and are not registered in the name of the Trust.

Concentration of Credit Risk — The Plan places no limit on the amount the Trust may invest in any one issuer of a single issue. Individual investments held by the Plan that represents 5.0% or more of the Plan's net assets available for benefits at December 31, 2017 and 2016 is as follows:

Issuer	% of Total Investments	of Total Investments	% of Total Investments	of Total Investments
Artisan Global Opportunities Fund	15 %	\$ 53,435,866	13 %	\$ 40,638,219
Dreyfus Global Stock Fund	13	46,709,730	12	37,555,562
Hexavest World Equity Fund	12	44,836,161	12	38,936,964
Bridgewater All Weather Fund	11	41,399,870	12	37,020,801
PIMCO All Asset Fund	10	34,606,248	10	30,361,189
Wellington Opportunities Investment Fund	9	31,359,989	8	26,410,584
Baird Aggregate Bond Fund	7	27,046,146	8	25,955,723
Allianz Structured Alpha	6	20,434,253	6	18,611,047
GAM Unconstrained Bond Fund	5	17,005,448	5	16,061,041
Wellington Divisified Inflation Hedge Fund	-		5	14,455,323
Wellington Blended Emerging Markets Debt Fund	5	16,663,943	5	14,576,069

Foreign Currency Risk — Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Each investment manager, through the purchase of units in a commingled investment trust fund or international equity mutual fund establishes investments in international equities. In addition, the Plan has investments in foreign stocks and/or bonds denominated in foreign currencies. The Plan's foreign currency exposures as of December 31, 2017 and 2016 is as follows :

Foreign Currency Holdings in US \$	December 31, 2017	December 31, 2016
Argentine Peso	\$ 498,826	\$ 71,309
Australian Dollar	5,571,875	4,410,531
Bermudian Dollar	122,304	-
Brazilian Cruzeiro Real	1,380,421	1,981,032
Canadian Dollar	1,905,487	3,347,574
Chilean Peso	837,601	385,209
Columbian Peso	823,287	901,326
Croatia Kuna	18,816	-
Chinese Yuan Renminbi	4,716,754	738,361
Czech Republic Koruna	302,465	494,705
Danish Krone	2,824,620	2,164,758
Egyptian Pound	542,807	27,547
Euro	26,033,881	19,083,383
Ghanaian Cedi	44,993	-
Great Britain Pound Sterling	17,228,009	13,023,840
Hong Kong Dollar	7,774,433	7,505,825
Hungarian Forint	315,702	319,816
Iceland Krona	746,368	79,232
Indian Rupee	4,660,494	3,152,040
Indonesia Rupiah	1,491,734	996,056
Israeli Shekel	234,820	191,321
Japanese Yen	17,870,874	13,256,388
Karakhstan Tenge	34,496	-
Malaysian Ringgit	1,524,929	767,425
Mauritian Rupee	87,808	66,026
Mexican New Peso	801,974	454,531
New Zealand Dollar	244,708	270,697
Norwegian Krone	542,156	168,072
Peruvian Nuevo Sol	523,413	475,744
Philippine Peso	71,797	84,279
Polish Zloty	1,336,209	1,141,372
Qatar Riyal	4,484	5,022
Romanian Leu	51,909	34,334
Russian Federation Rouble	1,099,840	788,754
Singapore Dollar	948,228	450,365
South African Rand	1,423,040	1,228,826
South Korean Won	3,004,232	1,740,291
Swedish Krona	4,378,202	1,195,094
Swiss Franc	7,424,175	5,645,730
Taiwanese New Dollar	1,987,086	3,054,654
Thai Baht	718,909	841,589
Turkish Lira	676,234	172,522
UAE Dirham	18,326	4,743
Uruguayan Peso	110,238	-
Other	(106,794)	(221,811)
Total	\$ 122,852,172	\$ 90,498,510

In year 2015, the MTA Retiree Welfare Benefits Plan adopted GASB Statement No. 72 ("GASB 72"), *Fair Value Measurement and Application*. GASB 72 was issued to address accounting and financial

reporting issues related to fair value measurements. For the years ended December 31, 2017 and 2016, the Plan reported all of its investments at Net Asset Value (“NAV”) and thus fair value leveling measurement was not required.

Investments measured at NAV

	December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Comingled international equity funds	\$ 44,836,161	\$ -	Daily	None
International equity mutual funds	100,145,597	-	Daily, monthly	None
Total equity investments measured at the NAV	144,981,758	-		
Debt Securities				
Comingled debt funds	60,715,538	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	60,715,538	-		
Absolute return:				
Directional	13,014,796	-	Monthly	3-60 days
Global macro	20,434,253	-	Monthly	3-30 days
Global tactical asset allocation	65,966,238	-	Daily, monthly	3-30 days
Risk parity	41,399,870	-	Monthly	3-30 days
Total absolute return measured at the NAV	140,815,157	-		
Real assets				N/A
Comingled commodities fund	15,659,837	-	Not eligible	N/A
Total real assets measured at the NAV	15,659,837	-		
Short term investments measured at the NAV	8,423,334	-		
Total investments measured at the NAV	\$ 370,595,624	\$ -		

Investments measured at NAV

	December 31, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Comingled international equity funds	\$ 38,936,964	\$ -	Daily	None
International equity mutual funds	78,193,781	-	Daily, monthly	None
Total equity investments measured at the NAV	117,130,745	-		
Debt Securities				
Comingled debt funds	56,592,832	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	56,592,832	-		
Absolute return:				
Directional	18,611,047	-	Monthly	3-60 days
Global macro	13,423,321	-	Monthly	3-30 days
Global tactical asset allocation	56,771,774	-	Daily, monthly	3-30 days
Risk parity	37,020,801	-	Monthly	3-30 days
Total absolute return measured at the NAV	125,826,943	-		
Real assets				N/A
Comingled commodities fund	14,455,323	-	Not eligible	N/A
Total real assets measured at the NAV	14,455,323	-		
Short term investments measured at the NAV	9,192,941	-		
Total investments measured at the NAV	\$ 323,198,784	\$ -		

5. NET OPEB LIABILITY

The components of the net OPEB liability of the Plan at December 31, 2017 was as follows (in thousands):

	<u>December 31, 2017</u>
Total OPEB liability	\$ 21,379,903
Fiduciary net position	<u>370,352</u>
Net OPEB liability	<u>21,009,551</u>
Fiduciary net position as a percentage of the total OPEB liability	1.73%

The total OPEB liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions below, and was then projected forward to the measurement date. Any significant changes during this period have been reflected as prescribed by GASB Statement No.74. Covered payroll is based on salary information provided as of the valuation date.

Additional Important Actuarial Valuation Information

Valuation date	January 1, 2016
Measurement date	December 31, 2017
Reporting date	December 31, 2017
Actuarial cost method	Entry Age Normal
Normal cost increase factor	4.50%

Discount Rate

Discount rate	3.44%
Long-term expected rate of return, net of investment expense	6.50%
Bond Buyer General Obligation 20-Bond Municipal Bond Index	3.44%

The Plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total OPEB liability is equal to the single equivalent rate that results in the same actuarial present value as the long-term expected rate of return applied to benefit payments, to the extent that the Plan's fiduciary net position is projected to be sufficient to make projected benefit payments, and the municipal bond rate applied to benefit payments, to the extent that the Plan's fiduciary net position is not projected to be sufficient.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of the Authority, calculated using the discount rate of 3.44 percent; as well as what the Authority's net OPEB would be if it were calculated using a discount rate that is 1-percentage point lower (2.44 percent) or 1-percentage point higher (4.44 percent) than the current rate:

	1% Decrease 2.44%	Current Discount Rate 3.44%	1% Increase 4.44%
Net OPEB liability	\$24,111,362	\$21,009,551	\$18,464,564

The following presents the net OPEB liability of the Authority, calculated using the current healthcare cost trend rates as well as what the Authority's net OPEB liability would be if it were calculated using trend rates that are 1 percentage point lower or 1 percentage point higher than the current trend rates.

2017
(in thousands)

	1% Decrease	Current Trend Rate	1% Increase
Net OPEB liability	\$17,896,890	\$21,009,551	\$24,938,260

Calculation on Money-Weighted Rate of Return

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the beginning of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

2017 Schedule of Calculations of Money-Weighted Rate of Return

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2017	\$322,981,973	12.00	1.00	\$370,352,332
Monthly net external cash flows:				
January	-	12.00	1.00	-
February	-	11.00	0.92	-
March	-	10.00	0.83	-
April	-	9.00	0.75	-
May	-	8.00	0.67	-
June	-	7.00	0.58	-
July	-	6.00	0.50	-
August	-	5.00	0.42	-
September	-	4.00	0.33	-
October	-	3.00	0.25	-
November	-	2.00	0.17	-
December	-	1.00	0.08	-
Ending Value - December 31, 2017				\$370,352,332
Money-Weighted Rate of Return			14.67%	

6. OPEB ACTUARIAL COSTS AND ASSUMPTIONS

Projections of benefits for financial reporting purposes are based on the substantive OPEB plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The MTA may not be obligated to provide the same types or levels of benefits to retirees in the future.

Valuation Date — The valuation date is the date that all participant and other pertinent information is collected and liabilities are measured. This date may not be more than 24 months prior to the measurement date. The valuation date for this valuation is January 1, 2016, which is 24 months prior to the measurement date of December 31, 2017.

Inflation Rate — 2.5% per annum compounded annually.

Healthcare Reform — The results of this valuation reflect our understanding of the impact in future health costs due to the Affordable Care Act (“ACA”) passed into law in March 2010. An excise tax for high cost health coverage or “Cadillac” health plans was included in ACA. The provision levies a 40% tax on the value of health plan costs that exceed certain thresholds for single coverage or family coverage. If, between 2010 and 2018, the cost of health care insurance rises more than 55%, the threshold for the excise tax will be adjusted. Legislative changes passed in December 2015 have delayed the effective date of the excise tax until 2020. However, the calculation of the threshold amounts remains unchanged. Also included in ACA are various fees (including, but not limited to, the Patient-Centered Outcomes Research Institute fee, Transitional Reinsurance Program fee, and the Health Insurer fee) associated with the initiation of health exchanges in 2014.

Actuarial valuation involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and that actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

Per Capita Claim Costs — Use of a blended premium rate for active employees and retirees under age 65 is a common practice. Health costs generally increase with age, so the blended premium rate is higher than the true underlying cost for actives and the blended premium is lower than the true underlying cost for retirees. For retirees, this difference is called the implicit rate subsidy. Since GASB 74 only requires an actuarial valuation for retirees, it requires the plan sponsor to determine the costs of these benefits by removing the subsidy.

Effective with the January 1, 2016 valuation, age adjustments are required for valuing NYSHIP benefits due to a change in actuarial standards. Age adjustments reflect that health costs are typically higher for retirees under age 65 than an average active population and, upon reaching Medicare, health costs are reduced as NYSHIP becomes the secondary payer.

The medical and pharmacy benefits are self-insured for TWU Local 100, ATU 1056 and ATU 726 represented Transit members, other Transit members, some transit pre-NYSHIP members, represented MTA Bus Company members and represented SIRTOA members. For these benefits we developed per capita claims cost assumptions that vary by age, gender and benefit type. The per capita costs assumptions reflect medical and pharmacy claims information, including the EGWP plan for providing pharmacy benefits to Medicare-eligible retirees, for 2017 and 2016.

Health Care Cost Trend — The healthcare trend assumption is based on the Society of Actuaries-Getzen Model version 2017 utilizing the baseline assumptions included in the model, except inflation of 2.5% for medical and pharmacy benefits. Additional adjustments apply based on

percentage of costs associated with administrative expenses, aging factors, potential excise taxes due to healthcare reform, and other healthcare reform provisions, separately for NYSHIP and self-insured benefits administered by MTA New York City Transit. The NYSHIP trends reflect actual increases in premiums to Participating Agencies through 2017. These assumptions are combined with long-term assumptions for dental and vision benefits (4%) plus Medicare Part B reimbursements (4.5%) but not more than projected medical trends excluding any excise tax adjustments. The self-insured trend is applied directly for represented employees of MTA New York City Transit, SIRTOA and MTA Bus Company. Note that for purposes of estimating the impact of the Excise Tax, the self-insured trends for MTA Bus and New York City Transit differ. The following lists illustrative rates for the NYSHIP and self-insured trend assumptions for MTA New York City Transit, SIRTOA and MTA Bus Company (amounts are in percentages).

Health Care Cost Trend Rates

Fiscal Year	NYSHIP		Transit and SIRTOA		MTA BUS COMPANY	
	< 65	>=65	< 65	>=65	< 65	>=65
2016	11.8	0.0	7.3	4.9	7.3	4.9
2017	6.7	6.4	7.1	4.9	7.1	4.9
2018	6.2	6.0	6.4	5.0	6.4	5.0
2019	6.3	5.5	9.5	5.0	9.2	5.0
2020	5.3	5.1	6.0	5.1	6.0	5.1
2025	6.0	5.1	5.9	5.1	5.9	5.1
2030	5.9	5.1	5.8	5.1	5.8	5.1
2035	5.9	5.2	5.8	5.2	5.8	5.2
2040	5.8	5.2	5.7	5.2	5.7	5.2
2050	5.4	5.8	5.3	5.0	5.3	5.0
2060	5.2	5.5	5.1	5.2	5.2	5.2
2070	4.6	4.7	4.6	4.6	4.6	4.9
Ultimate	* 4.2	4.3	4.2	4.5	4.2	4.4

* Ultimate rate used for years prior to 2016 for Entry Age purposes

Participation — The table below summarizes the census data provided by each Agency utilized in the preparation of the actuarial valuation. The table shows the number of active and retired employees by Agency and provides a breakdown of the coverage elected and benefits offered to current retirees.

OPEB Participation By Agency as at January 1, 2016

	MTA New York City Transit	MTA Long Island Rail Road	MTA Metro- North Rail Road	MTA Bridges & Tunnels	MTAHQ	MTA Long Island Bus *	MTA Staten Island Railway	MTA Bus Company	Total
<u>Active Members</u>									
Number	49,174	7,141	6,506	1,475	1,720	-	297	3,757	70,070
Average Age	49.3	44.5	45.1	47.2	46.3	-	44.4	47.4	48.2
Average Service	13.8	12.2	12.7	14.1	12.9	-	11.9	11.7	13.4
<u>Retirees</u>									
Single Medical Coverage	12,818	662	452	622	193	88	27	616	15,478
Employee/Spouse Coverage	17,427	2,065	1,050	716	371	198	60	939	22,826
Employee/Child Coverage	1,085	107	77	45	29	21	4	47	1,415
No Medical Coverage	817	2,387	2,486	7	11	317	24	296	6,345
Total Number	<u>32,147</u>	<u>5,221</u>	<u>4,065</u>	<u>1,390</u>	<u>604</u>	<u>624</u>	<u>115</u>	<u>1,898</u>	<u>46,064</u>
Average Age of Retiree	72.0	68.5	74.5	69.7	65.9	66.1	64.8	70.6	71.5
Total Number with Dental	7,018	846	534	435	529	58	47	110	9,577
Total Number with Vision	27,843	846	534	435	529	58	93	1,562	31,900
Total No. with Supplement	26,448	1,957	-	955	-	462	22	1,454	31,298
Average Monthly Supplement Amount (Excluding Part B Premium)	\$ 32	\$ 229	\$ -	\$ 211	\$ -	N/A	\$ 236	\$ 25	\$ 50
Total No. with Life Insurance	7,163	4,751	2,536	380	519	509	92	232	16,182
Average Life Insurance Amount	\$ 2,693	\$23,515	\$2,722	\$5,605	\$5,000	\$9,715	\$2,978	\$5,409	\$ 9,215

* No active members as of January 1, 2016. In addition, there are 155 vestees not included in these counts.

Coverage Election Rates — The majority of members participating in NYSHIP are assumed to elect coverage in the Empire PPO plan. For certain agencies (MTA New York City Transit, MTA Bridges and Tunnels and Staten Island Railway) a percentage of the membership is assumed to elect NYSHIP HIP plan and for the MTA Metro-North Railroad a percentage is assumed to elect ConnectiCare, an HMO plan.

Dependent Coverage - Spouses are assumed to be the same age as the employee/retiree. 80% of male and 45% of female eligible members are assumed to elect family coverage upon retirement and 65% of male and 35% of female eligible members participating in self-insured programs administered by New York City Transit are assumed to cover a dependent. No children are assumed. Actual coverage elections for current retirees are used. If a current retiree's only dependent is a child, eligibility is assumed for an additional 7 years from the valuation date.

Demographic Assumptions:

Mortality — Preretirement and postretirement health annuitant rates are projected on a generational basis using Scale AA.

Preretirement — RP-2000 Employee Mortality Table for Males and Females with blue-collar adjustments. No blue-collar adjustments were used for management members of MTAHQ.

Postretirement Healthy Lives — 95% of the rates from the RP-2000 Healthy Annuitant mortality table for males with Blue Collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females. No blue-collar or percentage adjustments were used for management members of MTAHQ.

Postretirement Disabled Lives — RP-2014 Disabled mortality table for males and females.

Vestee Coverage — For members that participate in NYSHIP, Vesteers (members who have terminated employment, but are not yet eligible to retire) are eligible for NYSHIP benefits provided by the Agency upon retirement, but must maintain NYSHIP coverage at their own expense from termination to retirement. Vesteers are assumed to retire at first eligibility and would continue to maintain NYSHIP coverage based on the following percentages. This assumption is based on the Development of Recommended Actuarial Assumptions for New York State/SUNY GASB 45 Valuation report provided to Participating Employers of NYSHIP. These percentages were also applied to current vesteers based on age at valuation date.

Age at Termination	Percent Electing
< 40	0 %
40–43	5
44	20
45–46	30
47–48	40
49	50
50–51	80
52+	100

7. TRUSTEE, CUSTODIAL, AND OTHER PROFESSIONAL SERVICES

The Plan and the Trust are administered by the MTA, including the day-to-day administration of the health insurance program. JP Morgan Chase, the trustee and custodian makes payments to health insurers and to welfare funds for retiree benefits, and reimbursements of retiree Medicare Part B premiums, as directed by the MTA. The MTA OPEB Committee is advised by NEPC with respect to the investment of Plan assets. Actuarial services were provided to the Plan by Milliman Inc.

8. SUBSEQUENT EVENTS

On August 2, 2018 GAM Investments announced suspension of all subscriptions and redemptions in its Unconstrained/Absolute Return Bond Funds (“ARBF”) as at July 31, 2018 by the relevant fund boards of directors following high level of redemptions. This was related to the suspension of Tim Haywood, the Investment Director, Business Unit Head and leader of the Unconstrained Bond Fund portfolio management team after internal and external reviews of his failure to follow due diligence and adhere to risk controls and practices. Although the funds have the necessary liquidity to meet these redemption requests, GAM Investments felt that such actions would lead to a disproportional shift in their portfolio composition, which could compromise the interests of remaining investors.

On August 9, 2018, the Board of managers approved the termination of the investment in the GAM Unconstrained Bond Fund. Since that time, GAM elected to formally close the fund and distribute the proceeds in an orderly manner. Sixty (60) percent of the Plan’s investment in the ARBF was returned on September 6, 2018 and an additional five (5) percent was received on October 4, 2018. GAM has indicated that twenty-five (25) percent will be returned during the last quarter of 2018 or the first quarter of 2019. Ten (10) percent held in derivatives will be held back for some period, as the funds unwind.

* * * * *

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE I

**METROPOLITAN TRANSPORTATION AUTHORITY
OTHER POSTEMPLOYMENT BENEFITS PLAN**

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

**SCHEDULE OF CHANGES IN THE EMPLOYERS' NET OPEB LIABILITY AND RELATED RATIOS
(in thousands)**

	<u>2017</u>
Total OPEB liability:	
Service cost	\$ 876,723
Interest	757,859
Changes of benefit terms	24,446
Differences between expected and actual experience	(44,082)
Changes of assumptions	921,007
Benefit payments and withdrawals	(650,993)
Net change in total OPEB liability	<u>1,884,960</u>
Total OPEB liability – beginning	<u>19,494,943</u>
Total OPEB liability – ending (a)	<u>21,379,903</u>
Plan fiduciary net position:	
Employer contributions	650,993
Member contributions	-
Net investment income	47,370
Benefit payments and withdrawals	(650,993)
Administrative expenses & Transfer to investments	-
Net change in plan fiduciary net position	<u>47,370</u>
Plan fiduciary net position – beginning	<u>322,982</u>
Plan fiduciary net position – ending (b)	<u>370,352</u>
Employer's net OPEB liability – ending (a)-(b)	<u>\$ 21,009,551</u>
Plan fiduciary net position as a percentage of the total OPEB liability	<u>1.73%</u>
Covered-employee payroll	<u>\$ 5,041,030</u>
Employer's net OPEB liability as a percentage of covered-employee payroll	<u>416.77%</u>

In accordance with GASB No. 74, paragraph 39, such information was not readily available for periods prior to 2017.

**METROPOLITAN TRANSPORTATION AUTHORITY
OTHER POSTEMPLOYMENT EMPLOYMENT**

SCHEDULE II

**Required Supplementary Information (Unaudited)
Schedule of Employer Contributions
(in thousands)**

Fiscal Year Ending December 31	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)
2008	\$ -	\$ -	\$ -
2009	-	-	-
2010	-	-	-
2011	-	-	-
2012	-	-	-
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	-	-	-
2017	579,893	579,893	- *

In accordance with GASB No. 74, paragraph 39, such information was not readily available for periods prior to 2017.

**METROPOLITAN TRANSPORTATION AUTHORITY
OTHER POSTEMPLOYMENT PLAN**

SCHEDULE III

**Required Supplementary Information (Unaudited)
Schedule of Investment Returns**

The following table displays annual money-weighted rate of return, net of investment expense.

Fiscal Year Ending December 31	Net Money-Weighted Rate of Return
2008	N/A
2009	N/A
2010	N/A
2011	N/A
2012	N/A
2013	N/A
2013	N/A
2013	N/A
2013	N/A
2017	14.67%

In accordance to GASB No. 74, paragraph 39, such information was not readily available for periods prior to 2017.

The Long Island Rail Road Company Plan for Additional Pensions

Financial Statements as of and for the Years Ended
December 31, 2017 and 2016, Supplemental Schedules and
Independent Auditors' Report

DRAFT

**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

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INDEPENDENT AUDITORS' REPORT

To the Participants and Administrator of
The Long Island Rail Road Company Plan
for Additional Pensions:

Report on the Financial Statements

We have audited the accompanying statements of plan net position of The Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan") as of December 31, 2017 and 2016, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Additional Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Additional Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Additional Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position as of December 31, 2017 and 2016, and the respective changes in plan net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 8 and the Schedule of Changes in the Employers' Net Pension Liability and Related Ratios—Schedule I on page 34; Schedule of Employer Contributions—Schedule II on page 35 - 36; and Schedule of Investment Returns—Schedule III on page 37 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

January 22, 2019

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) DECEMBER 31, 2017 AND 2016

OVERVIEW OF THE FINANCIAL STATEMENTS

Introduction—This management's discussion and analysis ("MD&A") of The Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan") financial performance for the years ended December 31, 2017 and 2016, provides an overview of the Additional Plan's financial activities. It is meant to assist the reader in understanding the Additional Plan's financial statements by providing an overview of the financial activities and the effects of significant changes, as well as a comparison with the prior year's activities and results. This discussion and analysis is intended to be read in conjunction with the Additional Plan document as well as the Additional Plan's financial statements. Additionally, an analysis of major economic factors and industry decisions that have contributed to significant changes is provided. It should be noted that for purposes of the MD&A, summaries of the financial statements and the various exhibits presented are extracted from the Additional Plan's financial statements, which are prepared in accordance with accounting principles generally accepted in the United States of America.

Overview of Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Additional Plan's financial statements. The basic financial statements are:

- **The Statements of Plan Net Position** — presents the financial position of the Additional Plan at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Additional Plan presently controls (assets), consumption of net assets by the Additional Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Additional Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Additional Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Plan Net Position** - present the results of activities during the year. All changes affecting the assets and liabilities of the Additional Plan are reflected on an accrual basis when the activity occurred regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- **The Notes to Financial Statements** - provides additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.
- **Required Supplementary Information** - as required by the Government Accounting Standards Board ("GASB") includes the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Investment returns.

The accompanying financial statements of the Additional Plan are presented in conformity with accounting principles generally accepted in the United States of America as prescribed by the GASB.

Financial Highlights

Financial Analysis Plan

Net Position

As of December 31, 2017, 2016 and 2015

(Amounts in thousands)

(Amounts in thousands)	Increase/(Decrease)						
	2017	2016	2015	Amount of Change 2017-2016	% Change 2017-2016	Amount of Change 2016-2015	% Change 2016-2015
Cash	\$ 1,575	\$ 1,076	\$ 9,466	\$ 499	46 %	\$ (8,390)	-89%
Investments, at fair value	949,800	770,199	720,150	179,601	23%	50,049	7 %
Receivables	703	6,519	259	(5,816)	(89)%	6,260	2,417 %
Total assets	952,078	777,794	729,875	174,284	22%	47,919	7 %
Due to broker fro securities purchased	900	577	3,677	323	56 %	(3,100)	84 %
Due to broker for investment fee	(149)	-	-	(149)	-	-	100%
Total liabilities	751	577	3,677	174	30 %	(3,100)	(84)%
Plan net position restricted for pensions	\$ 951,327	\$ 777,217	\$ 726,198	\$ 174,110	22 %	\$ 51,019	7 %

December 31, 2017 versus December 31, 2016

The assets of the Additional Plan exceeded its liabilities by \$951 million and \$777 million as of December 31, 2017 and 2016, respectively. Plan net position restricted for pensions are held for the payment of future benefits to members and pensioners.

The Additional Plan's net position restricted for pensions increased by \$174 million during 2017, representing an increase of 22% over 2016. The increase in 2017 was primarily due to \$145 million for additional non-employer contributions from the Metropolitan Transportation Authority ("MTA") as an infusion towards improving the funding for the Plan's unfunded pension liability.

Investments at December 31, 2017, were \$950 million representing an increase of \$180 million from 2016. The increase is a result of positive investment gains and reflective of the additional contributions invested in the portfolio during 2017. The composite 2017 investment returns for the fund was 14.94% as opposed to the 2016 return of 7.98%.

Payables for investments purchased at December 31, 2017, amounted to \$0.9 million. Investments are purchased on a trade-date settlement basis and that generate timing differences in settlement dates, like receivables for investments sold.

December 31, 2016 versus December 31, 2015

The assets of the Additional Plan exceeded its liabilities by \$777 million and \$726 million as of December 31, 2016 and 2015, respectively. Plan net position restricted for pensions are held for the payment of future benefits to members and pensioners.

The Additional Plan's net position restricted for pensions increased by \$51 million during 2016, representing an increase of 7% over 2015. The increase in 2016 was primarily due to \$70 million for

additional non-employer contributions from the Company's parent company, Metropolitan Transportation Authority ("MTA") as an infusion towards improving the funding for the Plan's unfunded pension liability.

Investments at December 31, 2016, were \$770 million representing an increase of \$50 million from 2015. The increase is reflective of the additional contributions invested in the portfolio during 2016.

Payables for investments purchased at December 31, 2016, amounted to \$1 million. Investments are purchased on a trade-date settlement basis and that generate timing differences in settlement dates, like receivables for investments sold discussed earlier.

CHANGES IN PLAN NET POSITION

For the Years Ended December 31, 2017, 2016 and 2015
(Amounts in thousands)

	2017	2016	2015	Amount of Change 2017-2016	Increase/(decrease) % Change 2017-2016	Amount of Change 2016-2015	% Change 2016-2015
Additions:							
Net investment income	\$ 112,614	\$ 58,239	\$ 527	\$ 54,375	93 %	\$ 57,712	10,951 %
Employer contributions	76,523	81,079	100,000	(4,556)	(6)%	(18,921)	(19)%
Non - Employer contributions	145,000	70,000	-	75,000	107%	70,000	0%
Employee contributions	760	905	1,108	(145)	(16)%	(203)	(18)%
Total additions	334,897	210,223	101,635	124,674	59 %	108,588	107 %
Deductions:							
Benefits paid directly to participants	159,717	158,593	157,071	1,124	1%	1,522	1%
Administrative expenses	1,070	717	678	353	49%	39	6 %
Other	-	(106)	540	106	100%	(646)	(120)%
Total deductions	160,787	159,204	158,289	1,583	1 %	915	1 %
Net increase	174,110	51,019	(56,654)	\$ 123,091	241%	\$ 107,673	190 %
Plan net position							
restricted for pensions	777,217	726,198	782,852				
End of year	\$ 951,327	\$ 777,217	\$ 726,198				

December 31, 2017 versus December 31, 2016

At the end of 2017, the net investment income amounted to \$113 million. This represents an increase of \$54 million over the prior year, due to strong stock market conditions resulting in an increase in the investment portfolio in 2017.

Employer, non-employer and employee contributions for the year ended December 31, 2017, totaled \$222 million, which represents a 47% increase from 2016. This increase was the result of the additional \$145 million in non-contributing employer contributions the MTA infused into the plan in 2017.

Benefit payments for the year ended December 31, 2017, totaled \$160 million, which was 1% higher than 2016.

December 31, 2016 versus December 31, 2015

At the end of 2016, the net investment income amounted to \$58 million. This represents an increase of \$58 million over the prior year, due to strong stock market conditions resulting in an increase in the investment portfolio in 2016.

Employer, non-employer and employee contributions for the year ended December 31, 2016, totaled \$152 million, which represents a 50% increase from 2015. This increase was the result of the additional \$70 million in non-contributing employer contributions the MTA infused into the plan in 2016.

Benefit payments for the year ended December 31, 2016, totaled \$159 million, which was 1% higher than 2015.

ECONOMIC FACTORS AND INDUSTRY DECISIONS

Market Overview and Outlook – 2017

The equity markets continued to outperform in 2017, with foreign equities finally joining the decade-long success enjoyed by United States (“U.S.”) markets. Arriving at new highs, the S&P 500 Index generated positive performance for the ninth straight year and has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory. Outside the U.S., developed market equities were up 25% in 2017, according to the Morgan Stanley Country Index Europe Australasia Far East. And after a somewhat disappointing stretch over the past 5 years, it was emerging market equities that really outperformed last year, with returns of 38%. Not to be left out, high-yield debt and dollar-denominated emerging market bonds outperformed within credit investment space. Thus, transcending that risk-taking remained a rewarding proposition for investors.

2017 was another banner year for global equities amid optimism that U.S. corporate tax cuts would spur further fundamental performance in corporate America and that the acceleration and synchronization of global economic growth would continue unabated. Investors would be well reminded that eventually the Bull markets end and that investors have not completely abandoned the caution and vigilance necessary to survive the next downturn, whenever it may occur.

Macro Themes

- Headwinds in Emerging Markets
- Rising interest rates
- Trade uncertainty
- High valuations and increasing leverage

The macro picture was framed by higher global growth in 2017. Developed and emerging markets all saw an uptick in growth for the year. Developed markets remained mired in relatively weak growth, with Gross Domestic Product (“GDP”) growth posting its highest level (+2.5%) since 2010. This may indicate a peak level of growth as the International Monetary Fund (“IMF”) forecasts lower economic performance over the coming five years. Emerging markets posted their best GDP performance since 2013, with +4.9% growth for the year. Unlike developed markets, the IMF expects growth in emerging markets to remain buoyant through the next five years. Inflation remains subdued across the developed markets while currency depreciation and devaluations in emerging markets have led to spikes in inflation.

In 2017, a continued rise in populism globally led to a continued backlash against globalization and the liberal economic tenets that underpinned the global economy since World War II. Discontent over economic policies that produced an uneven economic recovery led to a continued questioning of the

viability of the institutions of the European Union and the euro. The political stability that Europe has largely enjoyed since World War II has been eroded by elections in key countries where populist parties, on both the right and the left, have gained influence at the expense of the established broad, centrist political parties. The global trade and political regime seems to have shifted from one of cooperation and coordination to one of confrontation and competition. Large scale trade agreements, such as TPP and NAFTA, will be replaced by bi-lateral agreements, raising the risk of weak implementation, confusion, and non-compliance.

The U.S. is now entering its ninth year of economic expansion following the financial crisis. Measured gains in GDP and robust job growth provided strong underpinnings for domestic equities. The U.S. economy will likely continue to grow, supported by accommodative financial conditions, including tax cuts and regulatory changes. At the same time, the excess economic capacity will provide fuel to the ongoing expansion. There is no doubt that the U.S. Federal Bank Reserve ("Fed's") slow pace of raising interest rates has bolstered easy financial conditions. The Fed's will likely remain relatively accommodative, barring surprises in inflation or the labor market. The moderate unwinding of the Fed's balance sheet and the untested impact on capital markets will continue to influence investors' calculus of risk and reward.

Outside the United States, gradualism is the policy of choice for other major central banks: The European Central Bank's quantitative easing program continues to expand (now at a slower rate), while the Bank of Japan is carrying on its accommodative monetary policy. Europe continues to be impacted by high levels of public debt, fractious politics and low economic growth. Like emerging markets, a significant portion of Europe's export engine is tied to Chinese demand and growth. Lower growth in China will place pressures on Europe, in particular net exporters, such as Germany. Debt levels have not yet moderated post-financial crisis and flare-ups in periphery countries, such as in Greece, Portugal, Italy, and Spain, are likely to continue as growth remains challenged and reforms and austerity lose support. Banks will continue their deleveraging cycle should new rules (Basel III) on risk capital are implemented. In Japan, where banks are in better health, high public debt, low growth, a weakening regional economic picture, and aging demographics will challenge the government in delivering their growth and inflation targets.

Emerging markets posted solid returns in 2017 as the impact of capital flows due to the U.S. interest rate increases were much lower than expected. All eyes will continue to be on China. So far, China's move towards an economy emphasizing services and innovation over manufacturing has taken place with minimal disruptions. We expect the country's careful restraint over its monetary and fiscal policies to offer a smooth path for China's massive economic evolution. That said, the world's second largest economy remains at risk to world markets due to its sizable contribution to global growth.

United States

Markets in the U.S. were strong for the year and were amongst the best performers in 2017. U.S. equities outperformed in 2017 achieving new highs, the S&P 500 Index spent its ninth straight year in the black. The flagship U.S. index has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory.

Large Cap stocks were strongly positive, with the S&P 500 and Russell 1000 indices posting returns of (+21.8%) and (+21.7%), respectively. Small Cap and Mid Cap indices underperformed large cap. Small Cap, as measured by the Russell 2000 Index, returned (+14.6%). The Russell Mid Cap Index lagged but still posted a (+18.5%) return. Of note, growth oriented investments outperformed the value counterpart with the Russell 1000 Growth (+30.2%) outpacing the Russell 1000 Value (+13.6%).

Fixed income markets took the three rate hikes by the Fed's in stride in 2017. Treasuries returned (+2.3%) for the year, with the assets strongest quarter coming in second quarter of 2017. Credit outperformed

Treasuries for the year, with (+6.2%), posting positive returns for four straight quarters. Following strong results in 2016, high yield high yield continued its upward trend and performing well in 2017, returning (+7.5%).

International Developed

International equity markets posted strong results in 2017 and outpaced U.S. equity markets for the first time since 2012. In U.S. dollars, both Europe and Japan equities posted positive performance in 2017 with MSCI Europe returning (+25.5%) and MSCI Japan returning (+24.0%). Strong returns in Europe were driven by positive market performance and a weakening US dollar. The small cap portion of international developed markets posted even stronger returns in 2017, (+33.0%).

Fixed income markets in Europe and Japan are largely centered on government bonds, with corporate and asset-backed issuance making up a fraction of the overall markets. Global Treasuries were positive in 2017, following a slightly positive year in 2016.

Emerging Markets

Emerging markets posted strong performance in 2017 and outpaced both U.S. and international developed markets across equity and debt. The broad emerging markets index returned (+37.3%) for the year. China, a significant exposure within the emerging market index, was a strong performer, returning (+54.3%) for the year. Performance of the bond markets of emerging markets was encouraging. Both hard currency and local currency bond posted solid years in performance. Hard currency bonds, which are predominately issued in U.S. dollar, returned (+10.3%) in 2017. Local currency bonds, which are issued in the local currency, returned (+15.2%) for the year.

Commodities

Commodities posted **positive performance** in 2017, with the broad Bloomberg Commodity Index up (+1.7%). Industrial metals and precious metals posted strong performance for the year while agriculture was negative. Oil continued its positive rebound from 2016 with another positive year in 2017.

CONTACT INFORMATION

This financial report is designed to provide a general overview of the Long Island Rail Road Company for Additional Pensions' finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Controller, Long Island Rail Road, 146-01 Archer Avenue, Jamaica, New York 11435-4380.

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**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

**STATEMENTS OF PLAN NET POSITION
AS OF DECEMBER 31, 2017 AND 2016**

(Amounts in thousands)

	2017	2016
ASSETS:		
Cash	\$ <u>1,575</u>	\$ <u>1,076</u>
Investments measured at fair value (Notes 2 and 3):		
Investments measured at readily determined fair value	183,882	151,826
Investments measured at net asset value	<u>765,918</u>	<u>618,373</u>
Total investments	<u>949,800</u>	<u>770,199</u>
Receivables:		
Participant and union contributions	(6)	(14)
Accrued interest and dividends	399	348
Securities sold	363	-
Additional Plan receivable due from MTA Defined Benefit Plan	-	6,185
Other	<u>(53)</u>	<u>-</u>
Total receivables	703	6,519
Total assets	<u>952,078</u>	<u>777,794</u>
LIABILITIES:		
Due to broker for securities purchased	900	577
Due to broker for investment fee	<u>(149)</u>	<u>-</u>
Total liabilities	751	577
PLAN NET POSITION RESTRICTED FOR PENSIONS	<u>\$ 951,327</u>	<u>\$ 777,217</u>

See notes to financial statements.

**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

**STATEMENTS OF CHANGES IN PLAN NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016**

(Amounts in thousands)

	2017	2016
ADDITIONS:		
Investment income:		
Net realized and unrealized gains or (losses)	\$ 115,106	\$ 59,537
Interest income	1,036	1,121
Dividend income	7,599	6,065
Total investment income	123,741	66,723
Less investment expenses	(11,127)	(8,484)
Total Net investment income	112,614	58,239
Contributions (Note 5):		
Employer	76,523	81,079
Non-Employer	145,000	70,000
Participant and union	760	905
Total contributions	222,283	151,984
Total additions	334,897	210,223
DEDUCTIONS:		
Benefits paid to participants	159,717	158,593
Administrative expenses	1,070	717
Other	-	(106)
Total deductions	160,787	159,204
NET INCREASE IN PLAN NET POSITION	174,110	51,019
PLAN NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	777,217	726,198
End of year	\$ 951,327	\$ 777,217

See notes to financial statements.

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

NOTES TO FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(Dollars in thousands)

1. PLAN DESCRIPTION

The Long Island Rail Road Company Plan for Additional Pensions (the “Additional Plan”) is a defined benefit plan administered by the Board of Pension Managers. The following brief description of the Additional Plan is provided for general information purposes only. Participants should refer to the Additional Plan document for more complete information.

General—Effective July 1, 1971, The Long Island Rail Road Company (the “Company”) adopted two fully integrated defined benefit pension plans, The Long Island Rail Road Company Pension Plan (the “Plan”) and the Additional Plan. These plans cover employees hired before January 1, 1988. Effective January 1, 1989, the Plan was amended to limit the accrual of credited service time and determination of average earnings through December 31, 1988. All pension plan benefits were frozen as of that date by virtue of a Plan amendment. All benefit accruals subsequent to that date are provided under the Additional Plan, which was amended to provide for accruals on and after January 1, 1989. The Additional Plan benefits are now the total benefit that would have been paid previously from the sum of the two plans reduced by any portion of benefits that a participant received from the frozen pension plan benefits. The total benefits payable to participants have not been changed. These financial statements do not include any amounts related to the Plan, as all Plan assets were transferred into the MTA Defined Benefit Pension Plan, effective October 2, 2006.

Both Company’s pension plans are governmental plans and, accordingly, are not subject to funding and other requirements of the Employee Retirement Income Security Act of 1974 (“ERISA”).

The Metropolitan Transportation Authority Defined Benefit Pension Plan and The Long Island Rail Road Company Plan for Additional Pensions comprise the Metropolitan Transportation Authority’s Master Trust. The MTA Master Trust is governed by the Board of Pension Managers (the “Board”). The Board has contracted with JP Morgan Chase, as the Trustee for the Trust, and has provided the Master Trust Investment Guidelines to the respective Trustee. These guidelines provide the specific goals and objectives of the Trust as well as the allowable investments permitted under the Trust. Under the Investment Guidelines, the Trustee is permitted to invest in commingled funds on behalf of the Master Trust.

The total asset allocation of the 2017 Master Trust is 82.54% for the Metropolitan Transportation Authority Defined Benefit Pension Plan and 17.46% for the Long Island Rail Road Company Plan for Additional Pensions for the year ended December 31, 2017.

The total asset allocation of the 2016 Master Trust is 83.48% for the Metropolitan Transportation Authority Defined Benefit Pension Plan and 16.52% for the Long Island Rail Road Company Plan for Additional Pensions for the year ended December 31, 2016.

Pension Benefits—All full-time employees who were hired before January 1, 1988, are eligible for Additional Plan membership. At January 1, 2017 and 2016, the most recent valuation dates, the Additional Plan's membership consisted of the following:

	2017	2016
Active plan members	146	216
Terminated vested & other inactives	28	38
Retirees and beneficiaries receiving benefits	<u>5,833</u>	<u>5,900</u>
Total	<u>6,007</u>	<u>6,154</u>

An employee who retires under the Additional Plan, either: (a) after completing at least 20 years of credited service, or (b) after both attaining age 65 while in service and completing at least five years of credited service, or in the case of those who were active employees on January 1, 1988, after completing at least 10 years of credited service, is entitled to an annual retirement benefit, payable monthly for life. Payments commence to an employee referred to in: (a) only after attaining age 50, or (b) only after attaining age 65.

Benefit and contribution provisions, which are based on the point in time at which participants last entered qualifying service and their length of credited service, are established by, and may only be amended by the Company, subject to the obligations of the Company under its collective bargaining agreements. The Company's Board of Directors must approve all amendments. The Additional Plan has both contributory and non-contributory requirements, with retirement ages varying from 50 to 65 depending upon a participant's length of credited service. Pension benefits payable to age 65, where eligible, are calculated as 2% of the employee's applicable final average earnings for each year of qualifying service up to 25 years plus 1.5% of applicable final average earnings for each year of qualifying service in excess of 25 years. For pension benefits payable at and after age 65, regardless of whether benefits commenced before or after the employee attained age 65, benefits are calculated in the same manner as pension benefits payable prior to age 65 except that the amount so determined is reduced by a percentage of the employee's annuity (not including any supplemental annuity) value at age 65 under the Federal Railroad Retirement Act.

The reduction of pension benefits for amounts payable under the Federal Railroad Retirement Act is as follows:

- (i) 25% for an employee who had 20 years credited service prior to July 1, 1974,
- (ii) 50% for any other employee first employed before July 1, 1974, and
- (iii) 100% for any employee first employed on or after July 1, 1974

Beginning in 1999, for all represented employees who were hired between July 1, 1974, and December 31, 1987, who were employees after January 1, 1999, and were not retired when their collective bargaining agreement was ratified and approved by MTA Board after that date, the offset of Railroad Retirement Benefits is reduced to 50% (under the Additional Plan). For all management employees who were hired between July 1, 1974, and December 31, 1987, and who were employees on September 30, 1999, the offset of Railroad Retirement Benefits was reduced to 50% (under the Additional Plan).

For participants, the Additional Plan has both non-contributory and contributory requirements. Participants who entered qualifying service before July 1, 1978, are not required to contribute.

Participants who entered qualifying service on or after July 1, 1978, are required to contribute 3% of their wages to the Additional Plan. The Company contributes additional amounts based on actuarially determined amounts that are designed to accumulate sufficient assets to pay benefits when due.

Death and Disability Benefits—Participants who become disabled after accumulating 10 years of credited service and who meet the requirements as described in the Additional Plan receive a disability benefit. Disability pension benefits are calculated based on the participant's qualifying service and a percentage of final average compensation reduced by the full amount of benefit under the Federal Railroad Retirement Act.

Survivorship benefits are paid to the participant's spouse when a survivorship option is elected or when an active participant has not divested his or her spouse of benefits. The survivorship benefit is payable at the time of death or when the vested participant would have attained an eligible age. The amount payable is in the form of an annuity. A lump sum death benefit no greater than \$5,000 is payable upon death on behalf of a non-vested participant or vested participant whose pension rights were waived.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting—The Additional Plan's financial statements are prepared on the accrual basis of accounting under which deductions are recorded when the liability is incurred and revenues are recognized in the accounting period in which they are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Contributions from members are recorded when the employer makes payroll deductions from plan members. Employer contributions are recognized when due in accordance with the terms of the Plan. Additions to the Plan consist of contributions (member and employer) and net investment income. Investment purchases and sales are recorded as of trade date.

For financial reporting purposes, The Additional Plan adheres to accounting principles generally accepted in the United States of America. The Additional Plan applies all applicable pronouncements of the Governmental Accounting Standards Board ("GASB").

New Accounting Standards Adopted – The Plan adopted GASB Statement No. 73 Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68. The requirements of GASB Statement No. 73, extend the approach to accounting and financial reporting established in Statement No. 68 to all pensions, with modifications as necessary to reflect that for accounting and financial reporting purposes, any assets accumulated for pensions that are provided through pension plans that are not administered through trusts that meet the criteria specified in Statement No. 68 should not be considered pension plan assets. It also requires that information similar to that required by Statement No. 68 be included in notes to financial statements and required supplementary information by all similarly situated employers and nonemployer contributing entities. This Statement also clarifies the application of certain provisions of Statement Nos. 67 and 68 with regard to the following issues: 1) Information that is required to be presented as notes to the 10-year schedules of required supplementary information about investment-related factors that significantly affect trends in the amounts reported; 2) Accounting and financial reporting for separately financed specific liabilities of individual employers and nonemployer contributing entities for defined benefit pensions; 3) Timing of employer recognition of revenue for the support of nonemployer contributing entities not in a special funding situation. There was no material impact on the Plan's financial statements as a result of the implementation of GASB Statement No. 73.

Recent Accounting Pronouncements — Not yet adopted

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
84	<i>Fiduciary Activities</i>	2019
85	<i>Omnibus 2017</i>	2018

The Additional Plan has implemented GASB Statement No. 67, Financial Reporting for Pension Plans. The Statement addresses accounting and financial reporting requirements for pension plans. Significant requirements include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The total pension liability, determined in accordance with GASB Statement No. 67, is presented in Note 6 and in the Required Supplementary Information.

Use of Management's Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates include fair market value of investments, the annual required contribution and the Net Pension liability.

Payment of Benefits—Benefits are recorded when paid.

Investment and Administrative Expenses—Investment and administrative expenses are paid by the Additional Plan assets and accordingly are reflected in the accompanying financial statements.

Income Tax Status—The Additional Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) of the Internal Revenue Code. Accordingly, the Additional Plan is tax-exempt and is not subject to the provisions of ERISA.

3. CASH AND INVESTMENTS

Investment Policy – The Plan's policy statement is issued for the guidance of fiduciaries, including the members of the Board and investment managers, in the course of investing the assets of the Trust. The investments of the Trust will be made for the exclusive benefit of the Plan participants and their beneficiaries. Policy guidelines may be amended by the Board upon consideration of the advice and recommendations of the investment professionals.

In order to have a reasonable probability of achieving the target return at an acceptable risk level, the Board has adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on, at least, a quarterly basis and will be readjusted when an asset class weighting is outside its target range. The following was the MTA Defined Benefit Pension Plan Board adopted asset allocation policy, which includes assets of the Additional Plan, as at December 31, 2017.

Asset Class	Target Allocation (%)	Target Range (%)	Policy Benchmark
Equities	29.0	24-34	
Domestic Large Cap	10.0	5-15	S&P 500
Domestic Small Cap	5.5	2-10	Russell 2000
International Developed Markets Equities	10.0	5-15	MSCI EAFE
Emerging Markets Equities	3.5	2-6	MSCI Emerging Markets
Fixed Income	15.0	9-21	Manager Specific
Global Asset Allocation*	20.0	15-33	50% World Equity/ 50% Citigroup WGBI unhedged
Opportunistic Investments	6.0	0-15	Manager Specific
Absolute Return	15.0	10-22	Manager Specific
Real Assets	5.0	0-10	Manager Specific
Real Estate	3.0	0-10	Manager Specific
Private Equity	7.0	0-10	Manager Specific
Total	100.0		

* The Global Asset Allocation managers will invest across numerous liquid asset classes including: stocks, bonds, commodities, TIPS and REITs.

Investment Objective —The investment objective of the funds is to achieve consistent positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation.

Investment Guidelines — The Board of Pension Managers executes investment management agreements with professional investment management firms to manage the assets of the Plan. The fund managers must adhere to guidelines that have been established to limit exposure to risk.

All Securities managers shall be registered advisors under the Investment Advisors Act of 1940.

The overall capital structure targets and permissible ranges for eligible asset classes of the Trust are detailed within the Investment Policy Statement. Full discretion, within the parameters of the guidelines described herein and in any individual investment policy associated with that allocation, is granted to the investment managers regarding the asset allocation, the selection of securities, and the timing of transactions. It is anticipated that the majority of investment managers will be funded through commingled funds, however, in some cases (likely equity and fixed income mandates) separate account vehicles may be utilized. For separate accounts, individual manager guidelines and/or exemptions are specified in each approved investment management agreement (“IMA”). Should there be conflicts, the individual manager guidelines set forth in the IMA supersede the general guidelines in the Investment Policy Statement. For commingled funds, investment guidelines and/or exemptions are specified in such vehicle’s offering documents. Should there be conflicts, the individual vehicle’s investment guidelines supersede the general guidelines in the Investment Policy Statement.

Individual investment manager benchmarks and performance requirements are specified within the Investment Policy Statement. Performance of the Trust will be evaluated on a regular basis. Evaluation will include the degree to which performance results meet the goals and objectives as

herewith set forth. Toward that end, the following standards will be used in evaluating investment performance:

1. The compliance of each investment manager with the guidelines as expressed herein, and
2. The extent to which the total rate of return performance of the Trust achieves or exceeds the targeted goals.

Fixed Income Managers—Investment managers may not purchase inverse floating rate bonds, structured notes, commodities, securities on margin, sell short, lend securities, invest in private placements (other than 144A Privates), real estate investments, and oil, gas and mineral exploration investments without the written consent of the Board of Managers. The fixed-income portion of the Additional Plan's assets shall be invested in marketable, fixed income securities. The following are acceptable:

- Domestic fixed income investments are permitted, subject to the guidelines reflected in Investment Policy Statement. Yankee bonds, which are dollar denominated foreign securities, may be held by each domestic manager in proportions which each manager shall deem appropriate.
- International fixed income securities are permitted, subject to the guidelines reflected in Investment Policy Statement. Generally defined, the Citigroup World Government Bond Index represents the opportunity set for international developed markets. The J.P. Morgan Emerging Markets Bond Index-Global represents the opportunity set for international emerging markets denominated in USD. The J.P. Morgan GBI-EM Global Diversified Index represents the opportunity set for international emerging markets denominated in local currency. These index references are guidelines and do not prohibit investment in securities outside those indexes.
- Investment managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments regardless of the classifications provided by rating agencies.
- The average duration (interest rate sensitivity) of an actively managed fixed income portfolio shall range within two years of the benchmark's duration.
- For domestic fixed income portfolios, individual manager account for the securities of an individual issuer, excepting the U.S. government and U.S. government agencies, shall not constitute more than 5% at market at any time.
- For international bond portfolios, individual manager account for the securities of any non-governmental issuer shall not constitute more than 5% at market at any time.

Equity Investment Managers—The equities investment managers may not purchase commodities, securities on margin, sell short, lend securities, invest in private placements, real estate investments, oil, gas and mineral exploration investments, and nominally public issues without the written consent of the Board of Managers. The manager may purchase Rule 144A securities provided such securities are judged by the manager to be liquid and don't in the aggregate exceed 10% of the market value of the portfolio. The manager shall also be able to purchase securities if such securities are convertible into publicly traded equities.

- Domestic equity investments are permitted, subject to the guidelines. American Depositary Receipts (ADRs), which are dollar denominated foreign securities traded on the domestic U.S. stock exchanges (e.g., Reuters, Nestle, Sony) may be held by each domestic stock manager in proportions which each manager shall deem appropriate.
- International equities are permitted, subject to the guidelines. Generally defined, the Morgan Stanley EAFE (Europe, Australasia and the Far East) Index represents the opportunity set for international developed markets. The Morgan Stanley Emerging Markets Free Index represents the opportunity set for international emerging markets. These index references are guidelines and do not prohibit investment in securities outside those indexes.
- The equity specialists may vary equity commitment from 90% to 100% of assets under management.
- Individual manager account may hold no more than 8% at market or 1.5x the manager's benchmark weight (whichever is greater) of any single company's stock.

Overlay Managers

- For a variety of reasons, the investment program may carry large amounts of cash throughout the year. In order to achieve the actuarial assumed returns on the total investment program, the Board may retain a futures overlay manager. The overlay manager shall use exchange traded futures contracts to expose the cash to the long-term target asset allocation.
- In addition, the overlay manager may be utilized for the following:
 - a) Expose un-invested assets of domestic and international equity investment managers to their respective equity benchmarks through the use of futures contracts,
 - b) Assist the Board in rebalancing, transitions, and/or gaining exposure to approved asset classes,
 - c) Provide the market (or "beta") exposures in a portable alpha program.
 - d) The overlay manager shall ensure that all futures positions are fully collateralized and the manager is prohibited from leveraging any portion of the portfolio.

Alternative Investments Managers

Alternative investments are broadly categorized into the following categories:

- Opportunistic
- Real assets
- Real estate
- Absolute return
- Private equity

Common features of alternative investments are limited liquidity, the use of derivatives, leverage and shorting, lower regulatory oversight, limited transparency, and high fees. Compensating for these risks, these investments offer the potential of diversification and/or higher rates of return over time.

Derivatives Policy

Where appropriate, investment managers may use derivative securities for the following reasons:

- **Hedging.** To the extent that the portfolio is exposed to clearly defined risks and there are derivative contracts that can be used to reduce those risks, the investment managers are permitted to use such derivatives for hedging purposes, including cross-hedging of currency exposures.
- **Creation of Market Exposures.** Investment managers are permitted to use derivatives to replicate the risk/return profile of an asset or asset class provided that the guidelines for the investment manager allow for such exposures to be created with the underlying assets themselves.
- **Management of Country and Asset Allocation Exposure.** Investment managers charged with tactically changing the exposure of their portfolio to different countries and/or asset classes are permitted to use derivative contracts for these purposes.
- **Additional uses of derivatives** shall be approved by the Board or set forth in the individual investment guidelines or the offering documents prior to implementation and shall be restricted to those specific investment managers.

Ineligible Investments (Separately Managed Accounts) —Unless specifically approved by the Board or set forth in the individual investment guidelines, certain securities, strategies and investments are ineligible for inclusion within separately managed accounts. Among these are:

- Privately-placed or other non-marketable debt, except securities issued under Rule 144a,
- Lettered, legend or other so-called restricted stock,
- Commodities
- Short sales, and,
- Direct investments in private placements, real estate, oil and gas and venture capital, or funds comprised thereof.

Exceptions:

The Board of Managers, in recognition of the benefits of commingled funds as investment vehicles (i.e., the ability to diversify more extensively than in a small, direct investment account and the lower costs which can be associated with these funds) may, from time to time, allow investment in such funds. The Board recognizes that it cannot give specific policy directives to a fund whose policies are already established; therefore, the Board is relying on the investment consultant to assess and monitor the investment policies of any funds used by the Plan to ascertain whether they are appropriate.

Investment Valuation—Investments primarily include money market funds, equity securities, United States government securities, corporate bonds and debentures, asset backed securities, mortgage and commercial backed securities, mutual and commingled funds. All investments are registered with securities held by the trustee under a grantor trust, in the name of the Additional Plan. The values of Additional Plan investments are adjusted to fair value as of the last business day of each month based on quoted market prices or net asset value, which is determined to be a practical expedient for measuring fair value, except for certain cash equivalents, which are stated at cost and approximate market value. Purchases and sales of securities are recorded on a trade-date basis.

Income Recognition—Gains or losses from investment transactions are recognized on a trade date basis. Such investment gains or losses are determined using the average cost method. Dividend income is recorded on the ex-dividend date and interest income is recorded on the accrual basis.

Risks and Uncertainties— The Plan's investments are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities and level of uncertainty related to changes in the value of investment securities, it is possible that changes in risks in the near term would materially affect the amounts reported in the Plan's financial statements.

The financial markets, both domestically and internationally, have demonstrated significant volatility on a daily basis, which affects the valuation of investments. The Plan utilizes asset allocation strategies that are intended to optimize investment returns over time in accordance with investment objectives and with acceptable levels of risk.

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Investments measured at readily determined fair value (FV)

	December 31, 2017	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity Securities:				
Separate account large-cap equity funds	\$ 55,376,015	\$ 55,376,015	\$ -	\$ -
Separate account small-cap equity funds	79,011,370	79,011,370	-	-
Separate account real estate investment trust	8,717,470	8,717,470	-	-
Total equity investments	143,104,855	143,104,855	-	-
Debt Securities				
Separate account debt funds	40,777,093	-	40,777,093	-
Total debt investments	40,777,093	-	40,777,093	-
Total investments at readily determined FV	\$ 183,881,948	\$ 143,104,855	\$ 40,777,093	\$ -

Investments measured at the net asset value (NAV)

	December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 27,225,948	\$ -	Daily	None
Commingled international equity funds	114,123,832	-	Daily	None
Commingled emerging market equity funds	29,328,976	-	Daily, monthly	None
Total equity investments measured at the NAV	170,678,756	-		
Debt Securities				
Commingled debt funds	73,497,792	-	Daily, monthly, quarterly	None
Mutual funds	13,455,266	-	Daily	None
Total debt investments measured at the NAV	86,953,058	-		
Absolute return:				
Directional	23,613,108	-	Monthly	3-60 days
Direct lending	33,478,233	2,369,618	Bi-annually	60 plus days
Distressed securities	8,860,531	-	Not eligible	N/A
Credit long	13,446,929	-	Quarterly	3-30 days
Credit long/short	15,571,119	-	Quarterly	3-60 days
Equity long/short	12,633,764	-	Quarterly	3-60 days
Event driven	18,894,170	396,008	Quarterly, Bi-annually	60-120 days
Global macro	17,866,288	-	Monthly	3-30 days
Global tactical asset allocation	57,519,740	-	Daily, monthly	3-30 days
Market neutral	-	-	Quarterly	3-60 days
Multistrategy	24,765,480	-	Quarterly	3-60 days
Risk parity	77,368,296	-	Monthly	3-30 days
Structured credit	3,391,126	-	Not eligible	N/A
Total absolute return measured at the NAV	307,408,784	2,765,626		
Private equity - private equity partnerships	58,562,806	40,015,478	Not eligible	N/A
Real assets				
Commingled commodities fund	-	-	Not eligible	N/A
Commingled real estate funds	104,382,454	-	Not eligible	N/A
Energy	12,048,446	3,779,108	Not eligible	N/A
Infrastructure	5,076,347	1,666,799	Not eligible	N/A
Total real assets measured at the NAV	121,507,247	5,445,907		
Short term investments measured at the NAV	20,807,562	-		
Total investments measured at the NAV	765,918,213	\$ 48,227,011		

Total investments at fair value \$949,800,161

Investments measured at readily determined fair value (FV)

	December 31, 2016	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity Securities:				
Separate account large-cap equity funds	\$ 44,286,188	\$ 44,286,188	\$ -	\$ -
Separate account small-cap equity funds	67,442,576	67,442,576	-	-
Separate account real estate investment trust	6,816,345	6,816,345	-	-
Total equity investments	118,545,109	118,545,109	-	-
Debt Securities				
Separate account debt funds	33,280,888	-	33,280,888	-
Total debt investments	33,280,888	-	33,280,888	-
Total investments at readily determined FV	\$ 151,825,997	\$ 118,545,109	\$ 33,280,888	\$ -

Investments measured at the net asset value (NAV)

	December 31, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 19,600,494	\$ -	Daily	None
Commingled international equity funds	77,705,257	-	Daily	None
Commingled emerging market equity funds	20,362,075	-	Daily, monthly	None
Total equity investments measured at the NAV	117,667,826	-		
Debt Securities				
Commingled debt funds	64,951,970	-	Daily, monthly, quarterly	None
Mutual funds	9,093,971	-	Daily	None
Total debt investments measured at the NAV	74,045,941	-		
Absolute return:				
Directional	18,718,239		Monthly	3-60 days
Direct lending	29,826,310	2,051,667	Bi-annually	60 plus days
Distressed securities	6,791,914	-	Not eligible	N/A
Credit long	11,038,108	-	Quarterly	3-30 days
Credit long/short	13,394,058	-	Quarterly	3-60 days
Equity long/short	13,430,724	-	Quarterly	3-60 days
Event driven	16,908,024	374,553	Quarterly, Bi-annually	60-120 days
Global macro	16,776,423	-	Monthly	3-30 days
Global tactical asset allocation	40,642,912	-	Daily, monthly	3-30 days
Market neutral	30,449	-	Quarterly	3-60 days
Multistrategy	21,023,003	-	Quarterly	3-60 days
Risk parity	65,567,885	-	Monthly	3-30 days
Structured credit	3,535,366	8,825,615	Not eligible	N/A
Total absolute return measured at the NAV	257,683,415	11,251,835		
Private equity - private equity partnerships	42,739,171	36,311,877	Not eligible	N/A
Real assets				
Commingled commodities fund	19,404,300	-	Not eligible	N/A
Commingled real estate funds	75,080,555	-	Not eligible	N/A
Energy	8,855,215	5,544,109	Not eligible	N/A
Infrastructure	2,739,805	3,618,661	Not eligible	N/A
Total real assets measured at the NAV	106,079,875	9,162,770		
Short term investments measured at the NAV	20,157,242	-		
Total investments measured at the NAV	618,373,470	\$ 56,726,482		
Total investments at fair value	\$ 770,199,467			

Concentration of Credit Risk—Individual investments held by the Additional Plan that represent 5% or more of the Additional Plan’s net assets available for benefits at December 31, 2017 and 2016, are as follows:

(Amounts in thousands)

December 31,
2017 2016

Investments at fair value as determined by
quoted market prices:
JPMCB Strategic Property Fund

\$ 58,831 \$ 54,877

Credit Risk—The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2017 and 2016:

(Amount in thousands)

Quality Rating—S&P	2017 Fair Value	Percentage of Fixed Income Portfolio	2016 Fair Value	Percentage of Fixed Income Portfolio
AAA	\$ 33,492	19.05 %	\$ 11,391	7.07 %
AA	5,924	3.37	3,580	2.04
A	18,145	10.32	12,504	7.11
BBB	25,327	14.41	29,382	16.71
BB	19,705	11.21	17,627	10.03
B	12,820	7.29	11,464	6.52
CCC	1,575	0.90	1,941	1.10
CC	202	0.11	300	0.17
C	18	0.01	711	0.40
D	4	0.00	-	-
Not rated	<u>29,254</u>	<u>16.64</u>	<u>26,160</u>	<u>14.88</u>
Total credit risk debt securities	146,466	83.31	115,060	65.44
U.S. Government bonds*	<u>29,346</u>	<u>16.69</u>	<u>45,958</u>	<u>26.14</u>
Total Fixed Income Securities	<u>\$ 175,812</u>	<u>100.00 %</u>	<u>\$ 161,018</u>	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>773,988</u>		<u>609,181</u>	
Total investments	<u>\$ 949,800</u>		<u>\$ 770,199</u>	

* U.S. Treasury Bonds, Notes and Treasury-inflation protected securities are obligations of the U.S. government or explicitly guaranteed by the U.S. government and therefore not considered to have a credit risk.

Custodial Credit Risk—Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Custodial credit risk is the risk that, in the event of a failure of the counterparty, the Additional Plan will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Additional Plan and are held by either

the counterparty or the counterparty's trust department or agent but not in the Additional Plan's name.

Consistent with the Additional Plan's trust custodial administration agreement, the investments are held by the Additional Plan's custodian and registered in the Additional Plan's name.

Interest Rate Risk—Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice-versa. Duration is an indicator of bond price's sensitivity to 100-basis point change in interest rates.

The lengths of investment maturities (in years), as of December 31, 2017 and 2016 are as follows:

(Amounts in thousands) Investment Type	2017		2016	
	Fair Value	Duration	Fair Value	Duration
Chase	\$ 40,634	11.44	\$ 33,796	11.54
Wellington Blended Emerging Market Debt	16,661	5.70	9,440	5.55
Bridgewater All Weather Fund	18,393	7.70	19,127	9.00
Wellington Opportunistic Fund	7,302	1.70	4,590	1.91
Bridgewater Pure Alpha Fund	(25,807)	(7.90)	430	(3.54)
Bridgewater Markets Limited	(2,948)	(6.80)	1,808	1.40
Northern Trust William Capital	1,765	-	1,657	-
Park Square Capital Credit Opportunities	6,990	-	6,628	0.54
Libremax Partners Fund	3,317	3.87	1,088	5.02
Gramercy Distressed Opportunistic Fund	2,701	(0.05)	1,900	(0.48)
Makuria Credit Fund	6,653	5.50	2,793	1.05
Crescent Capital High Income Fund	6,390	2.43	5,677	2.61
Fit Tree Realization Value Fund	1	-	20	-
Wellington Global Managed Risk	21,921	10.60	10,420	6.70
Wellington Trust Collective Investment Fund and Diversified Investment Fund	-	-	4,626	0.88
Allianz Structured Alpha Fund	23,613	0.13	18,295	0.25
GAM Unconstrained Bond Fund	35,595	(0.17)	34,459	0.25
State Street Real Asset Fund	5,339	5.84	-	-
EIG Energy Fund XV	869	-	-	-
EIG Energy XVI	1,193	-	-	-
Canyon Value Realization Fund	5,228	2.50	-	1.90
Total fixed income	<u>\$ 175,810</u>		<u>\$ 156,752</u>	
Portfolio modified duration		<u>6.96</u>		<u>4.60</u>
Investments with no duration reported	<u>773,990</u>		<u>609,182</u>	
Total investments	<u>\$ 949,800</u>		<u>\$ 765,934</u>	

Foreign Currency Risk—Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Each investment manager, through the purchase of units in a commingled investment trust fund or international equity mutual fund establishes investments in international equities. The Additional Plan also holds investments in

American Depositary Receipts (“ADRs”), which are not included in the below schedule since they are denominated in US dollars and accounted for at fair market value.

The Additional Plan’s foreign currency exposures as December 31, 2017 and 2016 are follows (amounts in U.S. dollars):

Foreign Currency	December 31,	
	2017	2016
Euro	\$ 16,131	\$ 22,928
British Pound (Sterling)	15,494	19,371
Japanese Yen	2,006	8,032
Franc (Swiss)	2,211	2,278
Dollar (Hong Kong)	3,258	2,929
Australian Dollar	5,954	11,553
Sri Lankan Rupee	89	68
Krona (Swedish)	4,722	888
Brazil Cruzeiro Real	3,229	2,078
Chilean Peso	1,264	269
Dollar (Canadian)	4,024	5,190
Krone (Danish)	528	352
Mexican New Peso	1,435	1,072
China (Yuan Renminbi)	3,722	2,037
Czech Koruna	(215)	571
Egyptian Pound	593	83
Hungary (Forint)	284	71
South Korean Won	6,442	2,111
Indian Rupee	5,547	4,556
Indonesia Rupiah	3,339	2,994
Israel (Shekel)	275	185
Malaysian (Ringgit)	1,645	784
Philippines Peso	469	308
Dollar (New Zealand)	1,156	829
Krone (Norwegian)	1,153	(177)
Thai Bhat	1,044	1,025
Polish (New Zloty)	623	271
Russian Federation Ruble	1,141	525
Singapore Dollar	1,218	249
Argentina Peso	831	72
Colombian Peso	890	568
South Africa Rand	2,042	1,132
Dollar (Taiwan, New)	5,249	4,929
Turkish Lira	1,010	266
Kenyan Shilling	89	159
Uruguayan Pesos	109	-
Peru New Sol	562	406
Bangladesh (Taka)	90	77
Botswana Pula	34	19
Bulgarian Lev	4	1
Croatia Kuna	113	74
Ghanaian Cedi	64	7
UAE Dirham	460	295
Omanian Rial	92	74
Pakistani Rupee	453	564
Qatar Riyal	246	141
Mauritius (Rupee)	196	140
Morocco Dirham	91	76
Nigerian Naira	90	132
Jordanian Dinar	97	71
Romanian Leu	125	69
Kuwait Dinar	182	154
Tunisian Dinar	37	27
Georgian Lari	447	305
Saudi Riyal	91	83
Iceland Krona	900	-
Bermudian Dollar	177	-
Vietnamese Dong	146	-
Kazakhstan Tenge	135	-
Bahraini Dinar	91	-
Panamanian Dinar	35	-
Lebanese Pound	25	-
Other	(3,094)	1,002
Totals	\$ 100,890	\$ 104,273

Additional Information—The Additional Plan is part of the MTA Master Trust of which the Additional Plan participates on a percentage basis. JP Morgan Chase is the trustee of the MTA Master Trust. The percentage of the Additional Plan ownership for the years ended December 31, 2017 and 2016, were 17.46% and 16.52%, respectively.

	December 31, 2017		December 31, 2016	
	Master Trust Total	Additional Plan	Master Trust Total	Additional Plan
Total Investments:				
Investments measured at readily determined fair value	\$ 818,785	\$ 142,973	\$ 693,868	\$ 114,596
Investments measured at the net asset value	<u>4,074,432</u>	<u>711,462</u>	<u>3,411,910</u>	<u>563,496</u>
Total investments measured at fair value	<u>\$ 4,893,218</u>	<u>\$ 854,436</u>	<u>\$ 4,105,778</u>	<u>\$ 678,093</u>

There are additional investments which reside outside of the Master Trust and are presented within these financial statements.

4. NET PENSION LIABILITY

The components of the net pension liability of the Plan at December 31, 2017 and 2016 were as follows (in thousands):

	2017	2016
Total pension liability	\$ 1,471,828	\$ 1,526,304
Fiduciary net position	<u>951,327</u>	<u>777,217</u>
Net pension liability	<u>\$ 520,501</u>	<u>\$ 749,087</u>
Fiduciary net position as a percentage of the total pension liability	<u>64.64 %</u>	<u>50.92 %</u>
Covered payroll	<u>\$ 11,046</u>	<u>\$ 18,216</u>
Net pension liability as a percentage of covered payroll	<u>4,711.97 %</u>	<u>4,112.20 %</u>

Actuarial Methods and Assumptions—The total pension liability as of December 31, 2017 was determined by an actuarial valuation date of January 1, 2017, that was updated to roll forward the total pension liability to the respective year-end. Actuarial valuations are performed annually as of January 1.

Discount Rate—The discount rate used to measure the total liability as of December 31, 2017 and 2016 was 7%. The projection of cash flows used to determine the discount rate assumed that plan contributions will be made in accordance with the Employer funding policy as projected by the Plan's actuary. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current and inactive plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate—The following presents the net pension liability of the Plan, calculated using the discount rate of 7.00%; as well as what the Plan's net pension would be if it were calculated using a discount rate that is 1-percentage point lower (6.00%) or 1-percentage point higher (8.00%) than the current rate:

2017 (In thousands)	Decrease 6.00%	Discount Rate 7.00%	Increase 8.00%
Net pension liability	<u>\$ 636,713</u>	<u>\$ 520,501</u>	<u>\$ 419,474</u>
2016 (In thousands)	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Net pension liability	<u>\$ 871,350</u>	<u>\$ 749,087</u>	<u>\$ 642,973</u>

Additional information of the latest actuarial valuation follows:

Valuation date	January 1, 2017	January 1, 2016
Valuation timing	Actuarially determined contributions calculated as of December 31, for the fiscal year and discounted to July 1 to reflect monthly payments throughout the year.	Actuarially determined contributions calculated as of December 31, for the fiscal year and discounted to July 1 to reflect monthly payments throughout the year.
Actuarial cost method	Entry age normal.	Entry age normal.
Amortization method	Period specified in current valuation report (closed 16-year period beginning January 1, 2017) with level dollar payments.	Period specified in current valuation report (closed 17-year period beginning January 1, 2016) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA
Actuarial assumptions:		
Investment rate of return	7.0%, net of investment expenses	7.0%, net of investment expenses
Projected salary increases	3.0%	3.0%
Inflation/Railroad Retirement wage base	2.5%; 3.5%	2.5%; 3.5%

Calculation on Money-Weighted Rate of Return—The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the middle of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

2017 - Schedule of Calculations of Money-Weighted Rate of Return
(Amounts in thousands)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning value—January 1, 2017	\$ 777,217	12.00	1.00	\$ 881,191
Monthly net external cash flows:				
January	(13,336)	12.00	1.00	(15,120)
February	(6,527)	11.00	0.92	(7,326)
March	138,473	10.00	0.83	152,876
April	(6,527)	9.00	0.75	(7,172)
May	(6,527)	8.00	0.67	(7,100)
June	(6,527)	7.00	0.58	(7,020)
July	(6,527)	6.00	0.50	(6,950)
August	(6,527)	5.00	0.42	(6,881)
September	(6,527)	4.00	0.33	(6,803)
October	(6,527)	3.00	0.25	(6,735)
November	(6,527)	2.00	0.17	(6,668)
December	(4,896)	1.33	0.11	(4,964)
Ending Value—December 31, 2017	<u>\$ 951,327</u>			<u>\$ 951,327</u>
Money—Weighted Rate of Return		<u>13.38</u>		%

2016 - Schedule of Calculations of Money-Weighted Rate of Return
(Amounts in thousands)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning value—January 1, 2016	\$ 726,198	12.00	1.00	\$ 785,100
Monthly net external cash flows:				
January	(7,008)	12.00	1.00	(7,576)
February	(7,008)	11.00	0.92	(7,529)
March	(7,008)	10.00	0.83	(7,477)
April	(7,008)	9.00	0.75	(7,430)
May	(6,149)	8.00	0.67	(6,478)
June	(6,149)	7.00	0.58	(6,433)
July	63,851	6.00	0.50	66,390
August	(6,149)	5.00	0.42	(6,353)
September	(6,149)	4.00	0.33	(6,309)
October	(6,149)	3.00	0.25	(6,270)
November	(6,149)	2.00	0.17	(6,231)
December	(6,149)	1.00	0.08	(6,187)
Ending Value—December 31, 2016	<u>\$ 777,217</u>			<u>\$ 777,217</u>
Money—Weighted Rate of Return		<u>8.11</u>		%

Calculation on Long-Term Expected Rate of Return—The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2017 and 2016.

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2017

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income	Barclays Aggregate	10.00%	1.96%
US High Yield Bonds	BAML High Yield	8.00%	4.62%
Global Bonds	Citi WGBI	10.00%	0.34%
Emerging Markets Bonds	JPM EMBI Plus	3.00%	3.30%
US Large Caps	S&P 500	10.00%	4.31%
US Small Caps	Russell 2000	5.50%	5.57%
Global Equity	MSCI ACWI NR	10.00%	4.99%
Foreign Developed Equity	MSCI EAFE NR	10.00%	5.57%
Emerging Markets Equity	MSCI EM NR	3.50%	7.91%
Global REITS	FTSE EPRA/NAREIT Developed	5.00%	5.62%
Private Real Estate Property	NCREIF Property	3.00%	3.64%
Private Equity	Cambridge Private Equity	7.00%	8.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	15.00%	3.35%
Assumed Inflation - Mean			2.50%
Assumed Inflation - Standard Deviation			1.85%
Portfolio Normal Mean Return			6.80%
Portfolio Standard Deviation			11.54%
Long-Term Expected Rate of Return selected by MTA			7.00%

* Based on March 2014 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2016

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income	Barclays Aggregate	10.00%	1.67%
US High Yield Bonds	BAML High Yield	8.00%	5.04%
Global Bonds	Citi WGBI	10.00%	0.28%
Emerging Markets Bonds	JPM EMBI Plus	3.00%	3.78%
US Large Caps	S&P 500	10.00%	4.80%
US Small Caps	Russell 2000	5.50%	6.06%
Global Equity	MSCI ACWI NR	10.00%	5.49%
Foreign Developed Equity	MSCI EAFE NR	10.00%	6.06%
Emerging Markets Equity	MSCI EM NR	3.50%	8.39%
Global REITS	FTSE EPRA/NAREIT Developed	5.00%	5.77%
Private Real Estate Property	NCREIF Property	3.00%	3.64%
Private Equity	Cambridge Private Equity	7.00%	8.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	15.00%	3.45%
Assumed Inflation - Mean			2.50%
Assumed Inflation - Standard Deviation			1.85%
Portfolio Normal Mean Return			7.03%
Portfolio Standard Deviation			11.54%
Long-Term Expected Rate of Return selected by MTA			7.00%

* Based on March 2014 Investment Policy

5. CONTRIBUTIONS

Employer contributions are actuarially determined on an annual basis and are recognized when due. The Additional Plan is a governmental plan and accordingly, is not subject to the funding and other requirements of ERISA.

Upon termination of employment before retirement, vested participants who have been required to contribute must choose to: (1) receive a refund of their own contributions, including accumulated interest at rates established by the Company's Board of Managers of Pensions (1.5% in 2017 and 2016), or (2) leave their contributions in the Additional Plan until they retire and become entitled to the pension benefits. Non-vested participants who have been required to contribute will receive a refund of their own contributions, including accumulated interest at rates established by the Company's Board of Managers of Pensions (1.5% in 2017 and 2016).

The Company performs a public service of providing essential passenger transportation between New York City and Long Island. Substantial deficits result from providing these services and the Company expects that such deficits will continue in the foreseeable future. Funding for the Additional Plan by the Company is provided by MTA, which obtains the required funds from New York State, federal grants, the sale of bonds to the public and other sources. Certain funding by MTA is made to the Company on a discretionary basis. The continuance of the Company's funding for the Additional Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

6. ACTUARIAL METHODS AND ASSUMPTIONS

A. ACTUARIAL VALUATION METHOD

The Entry Age Normal method was used for determining normal costs and the unfunded actuarial accrued liability. The Normal Cost equals the present value of future employer normal contributions divided by the average future working lifetime factor. This factor equals the present value of future compensation or service divided by current compensation or the member count (less certain retirements), depending if benefits are pay-related, and weighted by the present value of benefits.

B. ASSET VALUATION METHOD

The Asset Valuation method smoothes gains and losses over a 5-year period. The formula for the asset valuation method is as follows:

$$\text{Actuarial Value of Assets} = MV_1 - 0.8*UR_1 - 0.6*UR_2 - 0.4*UR_3 - 0.2*UR_4$$

Where:

MV_1 = Market Value of assets as of the valuation date.

UR_n = Unexpected return during the nth year preceding the valuation date. The unexpected return for a year equals the total investment return minus the total expected return. The total expected return equals the market value of assets at the beginning of the year plus the weighted net cash flow during the year multiplied by the expected rate of return.

The resulting value cannot be less than 80% or greater than 120% of the market value of assets.

C. ACTUARIAL ASSUMPTIONS

Interest—7.00% per annum, compounded annually, net of investment expenses.

Salary Scale—Salaries are assumed to increase 3.00% per year.

Valuation Compensation—The valuation compensation (e.g. for 2017) is equal to the annualized base salary as of December 31, 2016 projected 6 months at the assumed rate of salary increase.

Overtime/Unused Vacation Pay—Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.

Railroad Retirement Wage Base—3.50% per year.

Consumer Price Index—2.50% per year.

Provision for Expenses—Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior three year's reported administrative expenses and are assumed payable in the middle of the plan year.

Termination—Withdrawal rates vary by age. Illustrative rates are shown below:

Age	Rate	Age	Rate
20	2.12 %	45	0.96 %
25	1.64	50	0.80
30	1.44	55	0.60
35	1.36	60	0.00
40	1.16	65	0.00

Retirement—Assumed retirement age varies by year of eligibility.

Eligibility Period	Rate of Retirement
First year	40 %
Years 2-4	33
Year 5	37
Years 6-7	35
Years 8-9	33
Years 10-15	55
Years 16 and above	100

Mortality—Pre-Termination—RP-2000 Employee Mortality Table for Males and Females with blue-collar adjustments, projected on generational basis using Scale AA.

Post-Termination—95% of the rates from the RP-2000 Healthy Annuitant Mortality Table for Males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant Mortality Table for Females, both projected on a generational basis using Scale AA.

Marriage—80% of employees are assumed to be married with wives 3 years younger than husbands.

Interest on Employee Contributions—Assumed to be 3.5% per year for future years.

Tier 1 Railroad Offset—The Tier 1 Railroad offset, which is designed similar to a Social Security Benefit, was estimated by assuming that an individual would continue to earn compensation at the level in effect at his date of termination until eligibility for Railroad Benefits and further increased by 2% per year from the date of termination to age 65.

Participant Data—Retirement benefits are based on information provided in the JP Morgan file as of the valuation date; however, retirement benefits for members subject to DROs a similar order were reported by the System as such amounts include amounts payable to the member and the alternate payees. For inactive participants, offsets for Railroad Retirement benefits are estimated and assumed to occur at the member's age 65.

Retroactive Wage Adjustments—Based on recalculations completed by the MTA, adjustments to benefits were determined based on year of retirement: 2% for retirements prior to 2013, 5% for 2013 retirements, 8% for 2014 retirements and 11% for 2015 retirements. These adjustments were applied to liabilities represented members provided by the MTA who received a retroactive wage adjustment. Additional liabilities equal to the accumulated amount of estimated retroactive payments as of the valuation date were also included.

Benefits Not Valued—Since the majority of active plan participants are at or close to retirement eligibility, the disability benefit has not been explicitly valued.

D. CHANGES IN ACTUARIAL ASSUMPTIONS

None.

7. PLAN TERMINATION

While the Company expects to continue the Additional Plan indefinitely, it may, subject to its collective bargaining agreements, amend, restrict, or terminate the Additional Plan at any time. In the event of termination, all participants will become fully vested to the extent of their then accrued benefits based on their compensation and service up to the date of termination. The net assets of the Additional Plan will be allocated to provide benefits in accordance with the disposition of the Additional Plan assets in a prescribed manner as defined in the Additional Plan document.

8. COMMINGLING OF PENSION ASSETS FOR INVESTMENT PURPOSES

On July 26, 2006, the MTA Board passed a resolution to transfer the responsibilities for the administration of the Additional Plan to the MTA Defined Benefit Pension Plan ("MTA DB") with no changes in the pension and death benefits and appeal rights provided by the Additional Plan. The trust agreement under the Additional Plan was replaced by the MTA Master Trust Agreement, which allows for the commingling of pension assets for investment purposes under the management of the MTA DB's Board of Managers of Pensions. The Additional Plan and Trust Agreements were

amended in September 2006 and all Plan assets were commingled into the MTA Master Trust for investment purposes, effective October 2, 2006.

9. CUSTODIAL AND OTHER PROFESSIONAL SERVICES

JP Morgan Chase Bank is the custodian of plan assets and also provides cash receipt and disbursement services to the Additional Plan. New England Pension Consultants reviews the Additional Plan's portfolio, the investment policies as stipulated by the Investment Committee and the performance of the Investment Managers. Actuarial services were provided to the Additional Plan by Milliman Inc.

10. SUBSEQUENT EVENTS

On August 2, 2018 GAM Investments announced suspension of all subscriptions and redemptions in its Unconstrained/Absolute Return Bond Funds ("ARBF") as at July 31, 2018 by the relevant fund boards of directors following high level of redemptions. The ARBF experienced a high level of redemption requests following the suspension of the Investment Director, Business Unit Head and leader of the Unconstrained Bond Fund portfolio management team after an internal review of the team's risk controls and practices. Although the funds have the necessary liquidity to meet these requests, GAM Investments felt that such actions would lead to a disproportional shift in their portfolio composition, which could compromise the interests of remaining investors.

On August 9, 2018, MTA Defined Benefit Pension Board of Managers approved the termination of the GAM Unconstrained Bond Fund. Since that time, GAM elected to formally close the fund and distribute the proceeds in an orderly manner. Sixty (60) percent of the Plan's investment in the ARBF was returned on September 6, 2018 and an additional five (five) percent was received on October 4, 2018. Gam has indicated that the remaining thirty-five (35) percent will be returned during the last quarter of 2018 and the first quarter of 2019.

* * * * *

REQUIRED SUPPLEMENTAL SCHEDULES

THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS

SCHEDULE I

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND
RELATED RATIOS

(In thousands)

	2017	2016	2015	2014
Total pension liability:				
Service cost	\$ 1,874	\$ 2,752	\$ 3,441	\$ 3,813
Interest	101,477	104,093	106,987	110,036
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	1,890	15,801	6,735	-
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	(159,717)	(158,593)	(157,071)	(156,974)
Net change in total pension liability	(54,476)	(35,947)	(39,908)	(43,125)
Total pension liability—beginning	1,526,304	1,562,251	1,602,159	1,645,284
Total pension liability—ending (a)	1,471,828	1,526,304	1,562,251	1,602,159
Plan fiduciary net position:				
Employer contributions	76,523	81,100	100,000	407,513
Non-Employer contributions	145,000	70,000	-	-
Member contributions	760	884	1,108	1,304
Net investment income	112,614	58,239	527	21,231
Benefit payments and withdrawals	(159,717)	(158,593)	(157,071)	(156,974)
Administrative expenses	(1,070)	(611)	(1,218)	(975)
Net change in plan fiduciary net position	174,110	51,019	(56,654)	272,099
Plan fiduciary net position—beginning	777,217	726,198	782,852	510,753
Plan fiduciary net position—ending (b)	951,327	777,217	726,198	782,852
Employer's net pension liability—ending (a)-(b)	\$ 520,501	\$ 749,087	\$ 836,053	\$ 819,307
Plan fiduciary net position as a percentage of the total pension liability	64.64 %	50.92 %	46.48 %	48.86 %
Covered-employee payroll	\$ 11,046	\$ 18,216	\$ 25,712	\$ 29,334
Employer's net pension liability as a percentage of covered-employee payroll	4,711.97 %	4,112.20 %	3,251.65 %	2,793.05 %

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

SCHEDULE II

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS

FOR THE YEARS ENDED DECEMBER 31

(In thousands)

Year Ending December 31	Actuarially Determined Contribution	Actual Employer Contribution *	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2008	\$ 100,337	\$ 100,337	\$ 0	\$ 80,927	123.98 %
2009	\$ 108,677	\$ 108,677	\$ 0	\$ 72,718	149.45 %
2010	\$ 107,249	\$ 107,249	\$ 0	\$ 65,198	164.50 %
2011	\$ 108,980	\$ 108,285	\$ 695	\$ 51,159	211.66 %
2012	\$ 116,011	\$ 116,011	\$ 0	\$ 40,033	289.79 %
2013	\$ 119,325	\$ 199,336	\$ (80,011)	\$ 33,043	603.26 %
2014	\$ 112,513	\$ 407,513	\$ (295,000)	\$ 29,334	1,389.22 %
2015	\$ 82,382	\$ 100,000	\$ (17,618)	\$ 25,712	388.93 %
2016	\$ 83,183	\$ 151,100	\$ (67,917)	\$ 18,216	829.48 %
2017	\$ 76,523	\$ 221,523	\$ (145,000)	\$ 11,046	2,005.39 %

* Employer contributions include amounts from both employer and non-employer contributing entities.

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

SCHEDULE II

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS

Note to Schedule II:

The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan for the years ended December 31, 2017, 2016 and 2015, are as follows:

Valuation Dates	January 1, 2017	January 1, 2016	January 1, 2015
Actuarial cost method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method
Amortization method	Period specified in current valuation report (closed 16-year period from January 1, 2017) with level dollar payments.	Period specified in current valuation report (closed 17-year period from January 1, 2016) with level dollar payments.	Period specified in current valuation report (closed 18-year period from January 1, 2015) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Interest rate	Net rate of 7.0% for 2017, per annum, net of investment expenses	Net rate of 7.0% for 2016, per annum, net of investment expenses	Net rate of 7.0% for 2015, per annum, net of investment expenses
Inflation	2.5% per annum	2.5% per annum	2.5% per annum
Railroad retirement wage base	3.5% per year	3.5% per year	3.5% per year
Mortality	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA
Separations other than for normal retirement	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Rates of normal retirement	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.
Salary increases	3.0% per year	3.0% per year	3.0% per year
Overtime	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.
Provision for expenses	The provision for administrative expenses was modified to equal an average of the prior three years.	The provision for administrative expenses was modified to equal an average of the prior three years.	\$650,000 is added to the normal cost to account for administrative expenses paid by plan assets throughout the year.

**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

SCHEDULE III

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF INVESTMENT RETURNS
FOR THE YEARS ENDED DECEMBER 31**

The following table displays annual money-weighted rate of return, net of investment expense.

Year Ended December 31	Net Money-Weighted Rate of Return
2008	N/A
2009	N/A
2010	N/A
2011	N/A
2012	N/A
2013	N/A
2014	3.73 %
2015	0.07 %
2016	8.11 %
2017	13.38 %

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016,
Supplemental Schedules, and
Independent Auditors' Report

DRAFT

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

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INDEPENDENT AUDITORS' REPORT

To the Board of Administration of
The Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Report on the Financial Statements

We have audited the accompanying statements of plan net position of The Manhattan and Bronx Surface Transit Operating Authority Pension Plan (the "Plan") as of December 31, 2017 and 2016, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position as of December 31, 2017 and 2016, and the respective changes in plan net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 8 and the Changes in the Employers' Net Pension Liability and Related Ratios-Schedule I on page 51; Employer Contributions and Notes to Schedule-Schedule II on pages 52-53; and the Investment Returns-Schedule III on page 54 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

January 22, 2019

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis As of and For the Years Ended December 31, 2017 and 2016 (Unaudited)

This management's discussion and analysis of The Manhattan and Bronx Surface Transit Operating Authority Pension Plan (the "Plan") financial performance provides an overview of the Plan's financial activities for the years ended December 31, 2017 and 2016. It is meant to assist the reader in understanding the Plan's financial statements by providing an overall review of the financial activities during the two years and the effects of significant changes, as well as a comparison with the prior years' activity and results. This discussion and analysis may contain opinions, assumptions, or conclusions by MTA management that should not be considered a replacement for and is intended to be read in conjunction with the plan's financial statements which begin on page 9.

Overview of Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Plan's financial statements. The basic financial statements are:

- **The Statements of Plan Net Position** — presents the financial position of the Plan at fiscal year end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Plan Net Position** — presents the results of activities during the year. All changes affecting the assets and liabilities of the Plan are reflected on an accrual basis when the activity occurred regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- **The Notes to Financial Statements** — provides additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.
- **Required Supplementary Information** — as required by the Government Accounting Standards Board ("GASB") includes the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Investment returns.

The accompanying financial statements of the Plan are presented in conformity with accounting principles generally accepted in the United States of America as prescribed by the GASB.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2017 and 2016 (Unaudited)

CONDENSED FINANCIAL INFORMATION AND ANALYSIS

FINANCIAL ANALYSIS

Plan Net Position

As of December 31, 2017, 2016, and 2015

(Dollars in thousands)

				Increase / Decrease			
	2017	2016	2015	2017-2016		2016-2015	
				\$	%	\$	%
Cash and investments	\$ 2,894,950	\$ 2,526,557	\$ 2,263,535	\$ 368,393	14.6%	\$ 263,022	11.6 %
Receivables and other assets	39,628	39,441	40,789	187	0.5 %	(1,348)	(3.3)%
Total assets	\$ 2,934,578	\$ 2,565,998	\$ 2,304,324	\$ 368,580	14.4 %	\$ 261,674	11.4 %
Payable for investment securities purchased	2,250	2,348	1,762	(98)	(4.2)%	586	33.3 %
Other liabilities	13,339	7,915	10,247	5,424	68.5 %	(2,332)	(22.8)%
Total liabilities	15,589	10,263	12,009	5,326	51.9 %	(1,746)	(14.5)%
Plan net position restricted for pensions	\$ 2,918,989	\$ 2,555,735	\$ 2,292,315	\$ 363,254	14.2%	\$ 263,420	11.5%

December 31, 2017 versus December 31, 2016

Cash and investments at December 31, 2017, were \$2,894.9 million, an increase of \$368.4 million or 14.6% from 2016. This increase is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and other assets less plan liabilities at December 31, 2017 decreased by \$5.1 million or 17.6%. The increase is a result the revaluation of post retirement death benefits and additional members contribution liabilities for Tiers 3 and 4 – 25 year and age 55 retirement programs.

The plan net position restricted for pensions increased \$363.3 million or 14.2% in 2017 as a result of the changes noted above.

December 31, 2016 versus December 31, 2015

Cash and investments at December 31, 2016, were \$2,526.6 million, an increase of \$263.0 million or 11.6% from 2015. This increase is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and other assets less plan liabilities at December 31, 2016 increased by \$0.4 million or 1.4%. The flat variance represents a minimal decrease in interest and dividends and employee loans offset by a minimal increase in investment securities payable and post retirement death benefits.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2017 and 2016 (Unaudited)

The plan net position restricted for pensions increased \$263.4 million or 11.5% in 2016 as a result of the changes noted above.

Changes in Plan Net Position

For the Years Ended December 31, 2017, 2016 and 2015

(Dollars in thousands)

				Increase / Decrease			
	2017	2016	2015	2017-2016		2016-2015	
				\$	%	\$	%
Additions:							
Net investment income	\$ 350,186	\$ 212,260	\$ (24,163)	\$ 137,926	65.0 %	\$ 236,423	(978.5)%
Transfers and contributions	222,397	239,169	231,202	(16,772)	(7.0)%	7,967	3.4 %
Total net additions	572,583	451,429	207,039	121,154	26.8 %	244,390	118.0 %
Deductions:							
Benefit payments	209,121	187,823	179,928	\$ 21,298	11.3%	\$ 7,895	4.4 %
Administrative expenses	208	186	89	22	11.8%	97	109.0 %
Total deductions	209,329	188,009	180,017	21,320	11.3%	7,992	4.4 %
Net increase	363,254	263,420	27,022	99,834	37.9 %	236,398	874.8 %
Plan net position							
restricted for pensions:							
Beginning of year	2,555,735	2,292,315	2,265,293	263,420	11.5%	27,022	1.2 %
End of year	\$ 2,918,989	\$ 2,555,735	\$ 2,292,315	\$ 363,254	14.2%	\$ 263,420	11.5 %

December 31, 2017 versus December 31, 2016

Net investment income increased by \$137.9 million in 2017 due to net investment gains of \$350.2 million in 2017 versus net gains of \$236.4 million in 2016.

Contributions decreased by \$16.8 million or 7.0% in 2017 compared to 2016, as a result of the Actuarial Determined Contributions ("ADC") and member contributions from 2016 to 2017.

Benefit payments increased by \$21.3 million or 11.3% over the prior year due to a continuing trend of increase in the number of retirees and cost-of-living adjustments provided to retirees and beneficiaries.

Administrative expenses increased by \$0.022 million or 11.8% over 2016. This increase was due to an increase of fees for services provided to the Plan.

December 31, 2016 versus December 31, 2015

Net investment income increased by \$236.4 million in 2016 due to net investment gains of \$212.3 million in 2016 versus net losses of \$24.2 million in 2015.

Contributions increased by \$8.0 million or 3.4% in 2016 compared to 2015, as a result of the Actuarial Determined Contributions ("ADC") and member contributions from 2015 to 2016.

Benefit payments increased by \$7.9 million or 4.4% over the prior year due to a continuing trend of increase in the number of retirees and cost-of-living adjustments provided to retirees and beneficiaries.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2017 and 2016 (Unaudited)

Administrative expenses increased by \$0.097 million or 109.0% over 2015. This increase was due to recognition of Plan Trustee fees as part of administration expenses offset by a reduction of audit expenses reimbursed to the Plan for years 2014 and 2015 respectively. Starting in 2014, Plan annual audit expenses are paid by the MTA Headquarters and no longer by the Plan.

Economic Factors

Market Overview and Outlook – 2017

The equity markets continued to outperform in 2017, with foreign equities finally joining the decade-long success enjoyed by United States (“U.S.”) markets. Arriving at new highs, the S&P 500 Index generated positive performance for the ninth straight year and has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory. Outside the U.S., developed market equities were up 25% in 2017, according to the Morgan Stanley Country Index Europe Australasia Far East. And after a somewhat disappointing stretch over the past 5 years, it was emerging market equities that really outperformed last year, with returns of 38%. Not to be left out, high-yield debt and dollar-denominated emerging market bonds outperformed within credit investment space. Thus, transcending that risk-taking remained a rewarding proposition for investors.

2017 was another banner year for global equities amid optimism that U.S. corporate tax cuts would spur further fundamental performance in corporate America and that the acceleration and synchronization of global economic growth would continue unabated. Investors would be well reminded that eventually the Bull markets end and that investors have not completely abandoned the caution and vigilance necessary to survive the next downturn, whenever it may occur.

Macro Themes

- Headwinds in Emerging Markets
- Rising interest rates
- Trade uncertainty
- High valuations and increasing leverage

The macro picture was framed by higher global growth in 2017. Developed and emerging markets all saw an uptick in growth for the year. Developed markets remained mired in relatively weak growth, with Gross Domestic Product (“GDP”) growth posting its highest level (+2.5%) since 2010. This may indicate a peak level of growth as the International Monetary Fund (“IMF”) forecasts lower economic performance over the coming five years. Emerging markets posted their best GDP performance since 2013, with +4.9% growth for the year. Unlike developed markets, the IMF expects growth in emerging markets to remain buoyant through the next five years. Inflation remains subdued across the developed markets while currency depreciation and devaluations in emerging markets have led to spikes in inflation.

In 2017, a continued rise in populism globally led to a continued backlash against globalization and the liberal economic tenets that underpinned the global economy since World War II. Discontent over economic policies that produced an uneven economic recovery led to a continued questioning of the viability of the institutions of the European Union and the euro. The political stability that Europe has largely enjoyed since World War II has been eroded by elections in key countries where populist parties, on both the right and the left, have gained influence at the expense of the established broad, centrist

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2017 and 2016 (Unaudited)

political parties. The global trade and political regime seems to have shifted from one of cooperation and coordination to one of confrontation and competition. Large scale trade agreements, such as Trans-Pacific Partnership and North American Free Trade Agreement, will be replaced by bi-lateral agreements, raising the risk of weak implementation, confusion, and non-compliance.

The U.S. is now entering its ninth year of economic expansion following the financial crisis. Measured gains in GDP and robust job growth provided strong underpinnings for domestic equities. The U.S. economy will likely continue to grow, supported by accommodative financial conditions, including tax cuts and regulatory changes. At the same time, the excess economic capacity will provide fuel to the ongoing expansion. There is no doubt that the U.S. Federal Bank Reserve ("Fed's") slow pace of raising interest rates has bolstered easy financial conditions. The Fed's will likely remain relatively accommodative, barring surprises in inflation or the labor market. The moderate unwinding of the Fed's balance sheet and the untested impact on capital markets will continue to influence investors' calculus of risk and reward.

Outside the United States, gradualism is the policy of choice for other major central banks: The European Central Bank's quantitative easing program continues to expand (now at a slower rate), while the Bank of Japan is carrying on its accommodative monetary policy. Europe continues to be impacted by high levels of public debt, fractious politics and low economic growth. Like emerging markets, a significant portion of Europe's export engine is tied to Chinese demand and growth. Lower growth in China will place pressures on Europe, in particular net exporters, such as Germany. Debt levels have not yet moderated post-financial crisis and flare-ups in periphery countries, such as in Greece, Portugal, Italy, and Spain, are likely to continue as growth remains challenged and reforms and austerity lose support. Banks will continue their deleveraging cycle should new rules (Basel III) on risk capital are implemented. In Japan, where banks are in better health, high public debt, low growth, a weakening regional economic picture, and aging demographics will challenge the government in delivering their growth and inflation targets.

Emerging markets posted solid returns in 2017 as the impact of capital flows due to the U.S. interest rate increases were much lower than expected. All eyes will continue to be on China. So far, China's move towards an economy emphasizing services and innovation over manufacturing has taken place with minimal disruptions. We expect the country's careful restraint over its monetary and fiscal policies to offer a smooth path for China's massive economic evolution. That said, the world's second largest economy remains at risk to world markets due to its sizable contribution to global growth.

United States

Markets in the U.S. were strong for the year and were amongst the best performers in 2017. U.S. equities outperformed in 2017 achieving new highs, the S&P 500 Index spent its ninth straight year in the black. The flagship U.S. index has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory.

Large Cap stocks were strongly positive, with the S&P 500 and Russell 1000 indices posting returns of (+21.8%) and (+21.7%), respectively. Small Cap and Mid Cap indices underperformed large cap. Small Cap, as measured by the Russell 2000 Index, returned (+14.6%). The Russell Mid Cap Index lagged but still posted a (+18.5%) return. Of note, growth oriented investments outperformed the value counterpart with the Russell 1000 Growth (+30.2%) outpacing the Russell 1000 Value (+13.6%).

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2017 and 2016 (Unaudited)

Fixed income markets took the three rate hikes by the Fed's in stride in 2017. Treasuries returned (+2.3%) for the year, with the assets strongest quarter coming in second quarter of 2017. Credit outperformed Treasuries for the year, with (+6.2%), posting positive returns for four straight quarters. Following strong results in 2016, high yield high yield continued its upward trend and performing well in 2017, returning (+7.5%).

International Developed

International equity markets posted strong results in 2017 and outpaced U.S. equity markets for the first time since 2012. In U.S. dollars, both Europe and Japan equities posted positive performance in 2017 with MSCI Europe returning (+25.5%) and MSCI Japan returning (+24.0%). Strong returns in Europe were driven by positive market performance and a weakening US dollar. The small cap portion of international developed markets posted even stronger returns in 2017, (+33.0%).

Fixed income markets in Europe and Japan are largely centered on government bonds, with corporate and asset-backed issuance making up a fraction of the overall markets. Global Treasuries were positive in 2017, following a slightly positive year in 2016.

Emerging Markets

Emerging markets posted strong performance in 2017 and outpaced both U.S. and international developed markets across equity and debt. The broad emerging markets index returned (+37.3%) for the year. China, a significant exposure within the emerging market index, was a strong performer, returning (+54.3%) for the year. Performance of the bond markets of emerging markets was encouraging. Both hard currency and local currency bond posted solid years in performance. Hard currency bonds, which are predominately issued in U.S. dollar, returned (+10.3%) in 2017. Local currency bonds, which are issued in the local currency, returned (+15.2%) for the year.

Commodities

Commodities posted positive performance in 2017, with the broad Bloomberg Commodity Index up (+1.7%). Industrial metals and precious metals posted strong performance for the year while agriculture was negative. Oil continued its positive rebound from 2016 with another positive year in 2017.

Contact Information

This financial report is designed to provide a general overview of the Manhattan and Bronx Surface Transit Operating Authority Pension Plan's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Comptroller, Metropolitan Transportation Authority, 2 Broadway, 16th Floor, New York, NY 10004.

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MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

STATEMENTS OF PLAN NET POSITION AS OF DECEMBER 31, 2017 AND 2016 (In thousands)

	2017	2016
ASSETS:		
Cash	\$ 5,418	\$ 10,431
Receivables:		
Investment securities sold	760	995
Interest and dividends	1,263	949
Employee loans	37,605	37,497
Total receivables	39,628	39,441
Investments at fair market value (Notes 2 and 3):		
Investments measured at readily determinable fair value	387,520	343,501
Investments measured at net asset value	2,502,012	2,172,625
Total investments	2,889,532	2,516,126
Total assets	2,934,578	2,565,998
LIABILITIES:		
Accounts payable	1,567	1,469
Payable for investment securities purchased	2,250	2,348
Accrued benefits payable	2,247	1,342
Accrued post retirement death benefits (PRDB) payable	3,344	1,492
Accrued 55/25 Additional Members Contribution (AMC) payable	6,181	3,612
Total liabilities	15,589	10,263
PLAN NET POSITION RESTRICTED FOR PENSIONS	\$2,918,989	\$2,555,735

See notes to financial statements.

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

STATEMENTS OF CHANGES IN PLAN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016 (In thousands)

	2017	2016
ADDITIONS:		
Contributions (Note 4):		
Employee contributions	\$ 19,713	\$ 18,472
Employer contributions	<u>202,684</u>	<u>220,697</u>
Total contributions	<u>222,397</u>	<u>239,169</u>
Investment income:		
Interest income	6,092	5,957
Dividend income	24,125	19,288
Net appreciation/(depreciation) in fair value of investments	<u>363,877</u>	<u>224,671</u>
Total investment income	394,094	249,916
Less investment expenses	<u>43,908</u>	<u>37,656</u>
Net investment income/(loss)	<u>350,186</u>	<u>212,260</u>
Total additions	<u>572,583</u>	<u>451,429</u>
DEDUCTIONS:		
Benefit payments and withdrawals	209,121	187,823
Administrative expenses	<u>208</u>	<u>186</u>
Total deductions	<u>209,329</u>	<u>188,009</u>
NET INCREASE IN PLAN NET POSITION	<u>363,254</u>	<u>263,420</u>
PLAN NET POSITION RESTRICTED FOR PENSIONS:		
Beginning of year	<u>2,555,735</u>	<u>2,292,315</u>
End of year	<u>\$2,918,989</u>	<u>\$2,555,735</u>

See notes to financial statements.

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

1. PLAN DESCRIPTION

Effective January 1, 1989, the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA) adopted a defined benefit qualified pension plan known as the MaBSTOA Pension Plan (the "Plan"). Prior to the adoption of the Plan, MaBSTOA pension benefits were funded on a pay-as-you-go basis.

The Plan is a single-employer public employee retirement system. MaBSTOA employees are specifically excluded from participating in the New York City Employees' Retirement System (NYCERS). Effective January 1, 1999, in order to afford managerial and non-represented MaBSTOA employees the same pension rights as like title employees in the Transit Authority, membership in the MaBSTOA Plan is optional.

The Board of Administration, established in 1963, determines eligibility of employees and beneficiaries for retirement and death benefits. The Board is composed of five members: two representatives from the Transport Workers Union, Local 100 (TWU) and three employer representatives.

Membership of the Plan consisted of the following as of January 1, 2017 and 2016, respectively, the date of the latest actuarial valuation:

	2017	2016
Active and inactive members	8,739	8,617
Retirees and beneficiaries currently receiving benefits	5,523	5,468
Vested formerly active members not yet receiving benefits	<u>1,006</u>	<u>998</u>
Total members	<u>15,268</u>	<u>15,083</u>

The Plan provides retirement, death, accident and disability benefits. The benefits provided by the Plan are generally similar to the benefits provided to participants in NYCERS. A participant may receive a vested benefit in accordance with the requirements of his or her Tier.

NYCERS has determined that Tier 4 employees are and have been eligible for a post retirement death benefit retroactive to members who retired no earlier than 1986. In June 2012, the Metropolitan Transportation Authority ("MTA") Board approved an amendment to the MaBSTOA Plan to provide for incorporation of this benefit. As of December 31, 2012, the Plan had estimated that \$6 million is owed to beneficiaries of retirees who were deceased prior to January 1, 2013. As of December 31, 2017, the Plan has paid \$10.4 million in post-retirement benefits and accrued an additional \$3.3 million based on the updated valuation.

Funding Policy—Contribution requirements of Plan members are established and may be amended only by the MaBSTOA Board in accordance with Article 10.01 of the MaBSTOA Plan. MaBSTOA's funding policy for periodic employer contributions provides for actuarially determined amounts that are designed to accumulate sufficient assets to pay benefits when due. It is MaBSTOA's policy to fund to the pension trust, at a minimum, the current year's normal cost plus amortization of the unfunded actuarial accrued liability.

The MaBSTOA Pension Plan includes the following retirement programs: (i) Tier 1 Age 50 and 20 Year, Age 55 and 1/100; (ii) Tier 2 Age 55 and 25 Year, Tier 2 Age 55 and 1/100; (iii) Tier 3 and Tier 4 Age 62 and 5 Year; (iv) Tier 6 Age 63 and 10 Year; (v.) Tier 4 and Tier 6 25 Year and Age 55; (vi)

Tier 4 25 Year Early Retirement; (vii) Tier 4 Age 57 and 5 Year, and (viii) the Year 2000 amendments, which are all under the same terms and conditions as NYCERS.

The Plan may require mandatory employee contributions, depending on the date of entry into service. Employees entering qualifying service on or before July 26, 1976, are non-contributing (Tiers 1 and 2). Prior to adoption of Tier 6, operating employees entering qualifying service on or after July 27, 1976, are required to contribute 2% of their salary and non-operating employees pay 3% of their salary for a 10-year period plus an additional member contribution of 1.85% of their salary. See Note 4 for 2000 Plan amendments.

Individuals joining the MaBSTOA Pension Plan on or after April 1, 2012 are members of Tier 6. Highlights of Tier 6 include:

- Increases in employee contribution rates. The rate varies depending on salary, ranging from 3% to 6% of gross wages. Contributions are made until retirement or separation from service.
- The retirement age is 63 and includes early retirement penalties, which reduce pension allowances by 6.5 percent for each year of retirement prior to age 63 (excluding Transit Operating Employees).
- Vesting after 10 years of credited service; increased from 5 years of credited service under Tier 3 and Tier 4.
- Changes to the pension multiplier for calculating pension benefits (excluding Transit Operating Employees) for participants who retire with greater than 20 years of credited service is 35% of FAS for the first 20 years of credited service plus 2% times FAS for each year of credited service in excess of 20.
- Adjustments to the Final Average Salary (FAS) calculation changed from an average of the final 3 years to an average of the final 5 years. Pensionable overtime capped at \$15,000 per year plus an inflation factor (\$16,048 for 2017).
- Pension buyback in Tier 6 at a rate of 6% of the wages earned during the period of buyback, plus 5% compounded annually from the date of service until date of payment.

SUMMARY OF PRINCIPAL PLAN PROVISIONS ELIGIBILITY AND BENEFITS

All Tiers

- | | |
|---|--|
| 1. Type of Plan | The Plan is a contributory, defined benefit plan. Contributions are not required for Tier 1 and Tier 2 members and vary for other members. Details can be found in the following sections. |
| 2. Effective Date of Plan Qualification | January 1, 1989. |
| 3. Compensation | The wages earned by the employee. Compensation is limited by Section 401(a)(17) of the Code. This limit is \$265,000 for 2015. |
| 4. Credited Service | Credited Service is credited full-time employment from date of hire. |
| 5. Pensioner Supplementations | |

(a) 1998 Supplement

Eligibility: Date of retirement is prior to 1993 for all disability pensioners and other pensioners who have attained (or will attain) age 62 or who have attained (or will attain) age 55 and have been retired for at least 10 years.

Benefit: Commencing with the payment for the month of September 1998, the cost-of-living adjustment is applied to the first \$13,500 of the maximum retirement allowance, computed without option modification. If not eligible by September 1998, payment will commence first of the month following eligibility.

(b) 1999 Supplement

Eligibility: Date of retirement is prior to 1994 for all disability pensioners and other pensioners who have attained (or will attain) age 62 or who have attained (or will attain) age 55 and have been retired for at least 10 years.

Benefit: Commencing with the payment for the month of September 1999, the cost-of-living adjustment is applied to the first \$14,000 of the maximum retirement allowance, computed without option modification. If not eligible by September 1999, payment will commence first of the month following eligibility.

(c) 2000 Supplement

Eligibility: Date of retirement is prior to 1997 and one of the following conditions is met:

- (i) All disability pensioners who have been retired for at least 5 years,
- (ii) Other pensioners who have attained (or will attain) age 62 and have been retired for at least 5 years,
- (iii) Other pensioners who have attained (or will attain) age 55 and have been retired for at least 10 years and
- (iv) All recipients of an accidental death benefit who have been in receipt of payments for at least 5 years.

Benefit: Commencing with the payment for the month of September 2000, the cost-of-living adjustment is applied to the first \$18,000 of the maximum retirement allowance, computed without option modification. The cost-of-living adjustment is equal to the change in the CPI-U measured from year of retirement through 1997 multiplied by 50% (greater percentages exist if date of retirement is prior to 1968). If not eligible by September 2000, payment will commence first of the month following eligibility.

Surviving Spouse Eligibility: The surviving spouse of a deceased retired member who chose any joint and survivor option.

Surviving Spouse Benefit: Commencing with the payment for the month of September 2000, the benefit is equal to 50% of the 2000 supplementation which the pensioner would be receiving if living.

(d) Automatic Cost-of-Living Adjustment (COLA)

Eligibility: One of the following conditions is met:

- (i) All disability pensioners who have been retired for at least 5 years,
- (ii) Other pensioners who have attained (or will attain) age 62 and have been retired for at least 5 years,
- (iii) Other pensioners who have attained (or will attain) age 55 and have been retired for at least 10 years and
- (iv) All recipients of an accidental death benefit who have been in receipt of payments for at least 5 years.

Benefit: Commencing with the payment for the month of September 2001 and continuing each September thereafter, the COLA is applied to the first \$18,000 of the maximum retirement allowance, computed without option modification plus any prior COLAs or supplementations. The cost-of-living adjustment is equal to the change in the CPI-U for the year ending March 31 multiplied by 50%. The resulting percentage is then rounded up to the next higher 0.1% and shall not exceed 3.0% nor be less than 1.0%. If not eligible by September 2001 or each September thereafter, payment will commence first of the month following eligibility.

Surviving Spouse Eligibility: The surviving spouse of a deceased retired member who chose any joint and survivor option.

Surviving Spouse Benefit: The benefit is equal to 50% of the automatic COLA benefit which the pensioner would be receiving if living and commence in the month following the death of the deceased member.

6. Normal and Optional Forms of Payment

The basic benefits described in the following sections are payable in the form of a life annuity. Other options are 100% and 50% contingent annuities with and without a popup feature, 5-year and 10-year certain and life annuities, and single life annuities with an insurance feature.

Benefits payable under the optional forms are actuarially adjusted to reflect the anticipated longer payment stream.

7. Maximum Benefit

Maximum benefits payable conform to those legislated by the Tax Reform Act of 1986. For 2015, the maximum benefit is \$210,000.

8. Changes in Plan Provisions Since Prior Valuation

The military service location was removed as a requirement for applying to purchase military service credit.

The deadline for filing a Notice of Participation in the World Trade Center Rescue, Recovery or Clean-Up Operations was further extended until September 11, 2022.

Participants on a preferred eligible list on or after May 11, 2010 through July 25, 2012, by reason of the abolition of their position, are permitted to purchase service credit for the period of time on the list, effective November 29, 2017.

I. Tier 1 Employees

1. Eligibility Members hired before July 1, 1973.
2. Pensionable Compensation
 - (a) Compensation Greater of earned or earnable salary during the year prior to retirement.
 - (b) Final Compensation Highest average earnings over five consecutive years.
 - (c) Compensation Limit If hired after June 17, 1971, earnings in a year are limited to 120% of the preceding year.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 50 and completion of 20 years of credited service.

Benefit:

1.5% for service before March 1, 1962, plus
2.0% for service from March 1, 1962 to June 30, 1970, plus
2.5% for service after June 30, 1970

The accumulated percentage above, up to a maximum of 50%, is multiplied by the member's Compensation. Once the accumulated percentage reaches 50%, the percentage for each further year of service reverts back to 1.5%. The percentage in excess of 50% is multiplied by the Final Compensation.
 - (b) Termination Benefits

Eligibility: Completion of 20 years of credited service.

Benefit: The Service Retirement Benefit with compensation and service calculated as of the date of termination. The benefit is deferred until age 50.
 - (c) Ordinary Death Benefits

Active Members

Eligibility: Completion of 6 months of credited service, but the benefit described below requires completion of 20 years of credited service.

Benefit: A lump sum equal to the present value of the retirement benefit under the Return of Reserve option.

Terminated Vested Members

If a member dies before age 50, a lump sum equal to the present value of the retirement benefit under the Return of Reserve option is payable (Death Gamble).
 - (d) Accidental Death Benefits

Eligibility: Death caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met. .

Benefit: The benefit equals 50% of Final Compensation.

- (e) Ordinary Disability Benefits Eligibility: Completion of 10 years of credited service.
Benefit: The benefit equals the greater of the Service Retirement percentages described (a) above or 25% multiplied by Final Compensation. If eligible for a service retirement benefit, the greater of this benefit and the Service Retirement benefit is payable.
- (f) Accidental Disability Benefits Eligibility: Disability caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.
Benefit: The benefit equals 75% of the Final Compensation reduced by 100% of any worker's compensation payments. If eligible for a service retirement benefit, the greater of this benefit and the Service Retirement benefit is payable.
4. Member Contributions None
5. Changes in Plan Provisions Since Prior Valuation None

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II. Tier 2 Employees

1. Eligibility Members hired on or after July 1, 1973, and before July 27, 1976.
2. Final Average Compensation
 - (a) Final 3-Year Average Compensation: Highest average earnings over three consecutive years.
 - (b) Final 5-Year Average Compensation: Highest average earnings over five consecutive years.
 - (c) Compensation Limit: Earnings in a year cannot exceed 120% of the average of the two preceding years.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 55 and completion of 25 years of credited service.

Benefit: The benefit equals 50% of Final 3-Year Average Compensation for the first 20 years of credited service, plus 1.5% of Final 5-Year Average Compensation per year of credited service in excess of 20 years.
 - (b) Early Retirement

Eligibility: Attainment of age 50 and completion of 20 years of credited service.

Benefit: Determined in the same manner as the Service Retirement benefit but no greater than 2.0% of the Final 3-Year Average Compensation per year of credited service.
 - (c) Termination Benefits

Eligibility: Completion of 20 years of credited service.

Benefit: The benefit equals the Early Retirement benefit, with compensation and service calculated as of the date of termination. The benefit is deferred until age 50. If a member dies before age 50, 50% of the ordinary death benefit (below) is payable.
 - (d) Ordinary Death Benefit

Eligibility: Completion of 90 days of credited service.

Benefit: The benefit equals a lump sum equal to 3 times salary, raised to the next multiple of \$1,000.
 - (e) Accidental Death Benefit

Eligibility: Death caused by on-the-job accident. World Trade Center Presumption benefits may apply if certain criteria are met.

Benefit: The benefit equals 50% of the Final 5-Year Average Compensation.
 - (f) Ordinary Disability Benefits

Eligibility: Completion of 10 years of credited service

Benefit: The benefit equals the greater of the Service Retirement percentage calculated in (a) above and 25% multiplied by Final 5-Year Average Compensation. If eligible for an Early or Service Retirement benefit, the greater of this benefit and the Early or Service Retirement benefit is payable.

(g) Accidental Disability Benefits Eligibility: Disability caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.

Benefit: The benefit equals 75% of the Final 5-Year Average Compensation reduced by any worker's compensation payments. If eligible for an Early or Service Retirement benefit, the greater of this benefit and the Early or Service Retirement benefit is payable.

4. Member Contributions None
5. Changes in Plan Provisions Since Prior Valuation None

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**III. Tier 3 and Tier 4—Basic Age
62 & 5 Year Retirement Program**

1. Eligibility

Non-operating Members hired prior to June 28, 1995, who have not elected the 55 & 25 Plan. Members hired on or after July 27, 1976, and before September 1, 1983, are in Tier 3. Members hired on or after September 1, 1983, are in Tier 4.
2. Final Average Compensation

Highest average earnings during any three consecutive calendar-years periods, or the final 36 months immediately preceding the member's retirement date. Earnings used in the calculation cannot exceed 110% of the average of the two preceding years.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 62 and completion of at least 5 years of credited service.

Benefit: If at least 20 years of credited service is completed, the benefit equals 2.0% of Final Average Compensation for first 30 years of credited service plus 1.5% of Final Average Compensation for years of credited service in excess of 30. If completed less than 20 years of credited service, the benefit equals 1-2/3% of Final Average Compensation multiplied by years of credited service.
 - (b) Early Retirement

Eligibility: Attainment of age 55 and completion of at least 5 years of credited service.

Benefit: The benefit equals the Service Retirement benefit reduced by 6% for each of the first two years prior to age 62, and by 3% for years prior to age 60.
 - (c) Termination Benefits
 - (i) Refund of Contributions

Eligibility: Completion of less than 10 years of Credited Service.

Benefit: The benefit equals a refund of the member's contributions accumulated with interest at a rate of 5.0%.
 - (ii) Vested Benefit

Eligibility: Completion of at least 5 years of credited service.

Benefit: The benefit equals the Service Retirement benefit with compensation and service calculated as of the date of termination. The benefit is deferred until age 62. A vested participant with less than 10 years of credited service may elect to receive the benefit in (i) above in lieu of this benefit. If a member with at least 10 years of credited service dies before commencing benefits, 50% of the ordinary death benefit (below) is payable. All accumulated regular contributions with interest are payable.

(d) Ordinary Death Benefits

Eligibility: all members.

Pre-retirement Death Benefit: The benefit equals a lump sum of annual salary times completed years of credited service up to 3 years of service. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest. Post-retirement Death Benefit: Upon retirement, the pre-retirement benefit shall be reduced by 50% and reduced an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.

Spouse Benefit (Tier 3 only)

Eligibility: Vested and spouse is beneficiary.

Benefit: In lieu of the ordinary death benefit above, the spouse may elect 1/3 of the ordinary death benefit plus an annuity of 1.0% of Final Average Compensation per year of credited service, payable for life, or until remarriage. If the surviving spouse is more than 10 years younger, the annuity is actuarially reduced. The total of all payments will at least equal the amount of the full lump sum benefit.

(e) Accidental Death Benefits

Eligibility: Death caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.

Benefit: The benefit equals 50% of compensation paid to eligible beneficiary as defined by priority:

- (i) Spouse, until remarriage
- (ii) Children, to age 25
- (iii) Dependent parents
- (iv) Any other dependent survivors, to age 21.

Total of all payments will at least equal the amount of the full ordinary death lump sum benefit.

- | | |
|---|---|
| (f) Ordinary and Accidental Disability Benefits | Eligibility: Completion of 10 years of credited service for ordinary. No minimum years of credited service required for accidental.

Benefit: The benefit equals the greater of 1-2/3% of Final Average Compensation per year of credited service and 1/3 of Final Average Compensation. If eligible for a Service Retirement benefit, the greater of this benefit and the Service Retirement benefit is payable. |
| 4. Member Contributions | Regular contribution rate of 3.0%. Regular contributions cease at the later of October 1, 2000, or the later of 10 years of membership or 10 years of credited service. |
| 5. Changes in Plan Provisions Since Prior Valuation | None |

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IV. Tier 3 and Tier 4—25 Year and Age 55 Retirement Programs

1. Eligibility

All operating members hired prior to April 1, 2012 and non-operating members hired prior to July 26, 1994, who elected this program. Members hired on or after July 27, 1976, and before September 1, 1983, are in Tier 3. Members hired on or after September 1, 1983 and before April 1, 2012 are in Tier 4.
2. Final Average Compensation

Highest average earnings during any three consecutive calendar-years periods, or the final 36 months immediately preceding the member's retirement date. Earnings used in the calculation cannot exceed 110% of the average of the two preceding years.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 55 and completion of at least 25 years of credited service, or attainment of age 62 and completion of at least 5 years of credited service.

Benefit: If completed less than 20 years of credited service, the benefit upon attainment of age 62 equals 1-2/3% of Final Average Compensation multiplied by years of credited service. If completed between 20 and 25 years of service, the benefit upon attainment of age 62 equals 2% of Final Average Compensation multiplied by years of credited service. If at least 25 years of credited service is completed, the benefit equals 2.0% of Final Average Compensation for the first 30 years of credited service plus 1.5% of Final Average Compensation for years of credited service in excess of 30. If age 62 with at least 20 years of credited service is completed, the benefit equals 2.0% of Final Average Compensation for the first 30 years of credited service plus 1.5% of Final Average Compensation for years of credited service in excess of 30. For non-operating employees who have attained age 62, a refund of one-half of the member's additional contributions accumulated at a rate of 5.0% is also payable.
 - (b) Termination Benefits
 - (i) Refund of Contributions

Eligibility: Less than 10 years of credited service.

Benefit: The benefit equals a refund of the basic member's accumulated contributions. All contributions are refunded with interest at a rate of 5.0% also payable.

(ii) Vested Benefit

Eligibility: Completion of at least 5 years of credited service.

Benefit: The benefit equals the Service Retirement benefit with compensation and service calculated as of the date of termination. The benefit is deferred until age 62 if credited service is less than 25 years, else the benefit is deferred until age 55 for operating employees only. For non-operating employees the benefit is payable at age 62 with less than 25 years or if both age and service has not been fulfilled. A vested participant with less than 10 years of credited service may elect to receive the benefit in (i) above in lieu of this benefit. If a member with at least 10 years of credited service dies before commencing benefits, 50% of the salary-related ordinary death benefit (below) plus accumulated regular contributions with interest and one-half of accumulated additional member contributions with interest are payable.

(c) Ordinary Death Benefits

Eligibility: All members.

Pre-retirement Death Benefit: The benefit equals a lump sum of annual salary times the completed years of credited service up to 3 years of service. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest and one-half of accumulated additional member contributions with interest are also payable.

Post-retirement Death Benefit: Upon retirement, the pre-retirement benefit shall be reduced by 50% and reduced, an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.

Spouse Benefit (Tier 3 only)

Eligibility: Vested and spouse is beneficiary.

Benefit: In lieu of the ordinary death benefit above, the spouse may elect 1/3 of the ordinary death benefit plus an annuity of 1.0% of Final Average Compensation per year of credited service, payable for life, or until remarriage. If the surviving spouse is more than 10 years younger, the annuity is actuarially reduced. The total of all payments will at least equal the amount of the full lump sum benefit.

(d) Accidental Death Benefits

Eligibility: Death caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.

Benefit: The benefit equals 50% of compensation paid to eligible beneficiary as defined by priority:

(i) Spouse, until remarriage

(ii) Children, to age 25

(iii) Dependent parents

(iv) Any other dependent survivors, to age 21.

Total of all payments will at least equal the amount of the full ordinary death lump sum benefit.

(e) Ordinary and Accidental Disability Benefits

Eligibility: Completion of 10 years of credited service for ordinary. No minimum years of credited service requirement for accidental.

Benefit: The benefit equals the greater of 1-2/3% of Final Average Compensation per year of credited service and 1/3 of Final Average Compensation. If eligible for a Service Retirement benefit, the greater of this benefit and the Service Retirement benefit is payable. For non-operating employees, a refund of one-half of the member's additional contributions accumulated plus interest at a rate of 5.0% is also payable.

4. Member Contributions

Operating Employees: Regular contribution rate of 2.0%. Additional 55/25 contributions were made through 2000. These contributions may be refunded effective November 2007 for TWU Local 100 and April 2008 for TSO Local 106.

Non-operating Employees: Regular contribution rate of 3.0%. Regular contributions cease at the later of October 1, 2000 or after the later of 10 years of membership or 10 years of credited service. Additional contribution rates were 4.35%, 2.85% and 1.85%, of which 1.85% ceases after 30 years of credited service.

5. Changes in Plan Provisions Since Prior Valuation

None

**V. Tier 4—Age 57 & 5 Year
Retirement Program**

1. Eligibility

Non-operating members hired on or after June 28, 1995 and prior to April 1, 2012. Members hired on or after September 1, 1983 and before April 1, 2012 are in Tier 4.
2. Final Average Compensation

Highest average earnings during any three consecutive calendar-years periods, or the final 36 months immediately preceding the member's retirement date. Earnings used in the calculation cannot exceed 110% of the average of the two preceding years.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 57 and completion of at least 5 years of credited service.

Benefit: If less than 20 years of credited service are completed, the benefit equals 1.67% of Final Average Compensation multiplied by years of credited service. If between 20 and 30 years of credited service are completed, the benefit equals 2% of Final Average Compensation multiplied by years credited service. If more than 30 years are completed, 2% of Final Average Compensation multiplied by years of credited service plus 1.5% of Final Average Compensation multiplied by years of credited service in excess of 30. For non-operating employees who have attained age 62, a refund of one-half of the member's additional contributions accumulated plus interest at a rate of 5.0% is also payable.
 - (b) Termination Benefits
 - (i) Refund of Contributions

Eligibility: Completion of less than 10 years of credited service.

Benefit: The benefit equals a refund of the member's basic accumulated contributions and 50% of additional member contributions plus interest at a rate of 5.0%.
 - (ii) Vested Benefit

Eligibility: Completion of at least 5 years of credited service.

Benefit: The benefit equals the Service Retirement benefit with compensation and service calculated as of the date of termination. The benefit is deferred until age 57. A vested participant with less than 10 years of credited service may elect to receive the benefit in (i) above in lieu of this benefit. If a member with at least 10 years of credited service dies before commencing benefits, 50% of the salary-related ordinary death benefit (below) is payable. All accumulated regular contributions with interest and one-half of accumulated additional member contributions with interest are payable.

(c) Ordinary Death Benefits	<p>Eligibility: All members</p> <p>Pre-retirement Death Benefit: The benefit equals a lump sum of annual salary times completed years of credited service up to 3 years of service. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest and one-half of accumulated additional member contributions with interest are also payable.</p> <p>Post-retirement Death Benefit: Upon retirement, the pre-retirement benefit shall be reduced by 50% and reduced an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.</p>
(d) Accidental Death Benefits	<p>Eligibility: Death caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.</p> <p>Benefit: The benefit equals 50% of final 1-year compensation paid to eligible beneficiary as defined by priority:</p> <ul style="list-style-type: none"> (i) Spouse, until remarriage (ii) Children, to age 25 (iii) Dependent parents (iv) Any other dependent survivors, to age 21. <p>Total of all payments will at least equal the amount of the full ordinary death lump sum benefit.</p>
(e) Ordinary and Accidental Disability Benefits	<p>Eligibility: Completion of 10 years of credited service for ordinary. No minimum years of credited service requirement for accidental.</p> <p>Benefit: The benefit equals the greater of 1-2/3% of Final Average Compensation per year of credited service and 1/3 of Final Average Compensation. If eligible for Service Retirement benefit, the greater of this benefit and the Service Retirement benefit is payable. For non-operating employees, a refund of one-half of the member's additional contributions accumulated at a rate of 5.0% is also payable.</p>
4. Member Contributions	<p>Regular contribution rate of 3.0%. Regular contributions cease at the later of October 1, 2000, or after the later of 10 years of membership or 10 years of credited service. Additional contribution rates were 4.35%, 2.85% and 1.85% of which 1.85%, ceases after 30 years of credited service.</p>
5. Changes in Plan Provisions Since Prior Valuation	None

**VI. Tier 6—25 and
Age 55 Retirement Program**

1. Eligibility

All operating members hired on or after April 1, 2012.
2. Final Average

Highest average pensionable earnings over five consecutive years. Pensionable earnings exclude any overtime earnings, defined as compensation paid at a rate greater than the standard rate, in excess of the overtime cap. The overtime cap is indexed annually and is \$16,048 for 2017. Pensionable earnings also exclude wages in excess of the annual salary paid to the Governor of New York, lump sum payments for sick leave, accumulated vacation and other credits for time not worked, termination pay and any additional compensation paid in anticipation of retirement. Pensionable earnings in a year cannot exceed 110% of the average of the four preceding years.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 55 and completion of at least 25 years of credited service, or attainment of age 63 and completion of at least 10 years of credited service.

Benefit: If completed at least 25 years of credited service, the benefit equals 2.0% of Final Average Salary for the first 30 years of credited service plus 1.5% of Final Average Salary for years of credited service in excess of 30. If completed less than 20 years of credited service, 1.67% of Final Average Salary multiplied by years of credited service. If completed between 20 to 25 of credited service, 35% of Final Average Salary for first 20 years of credited service, plus 2% of Final Average Salary for years of credited service in excess of 20.
 - (b) Termination Benefits
 - (i) Refund of Contributions

Eligibility: Completion of less than 10 years of credited service.

Benefit: The benefit equals a refund of the member's contributions accumulated plus interest at a rate of 5.0%.
 - (ii) Vested Benefit

Eligibility: Completion of at least 10 years of credited service.

Benefit: The benefit equals the Service Retirement benefit with compensation and service calculated as of the date of termination. The benefit equals the Service Retirement benefit with compensation and service calculated as of the date of termination. The vested benefit is deferred until age 63 if credited service is less than 25 years, else the benefit is deferred until age 55. If a member with at least 10 years of credited service dies before commencing benefits, 50% of the salary-related ordinary death benefit (below) plus accumulated regular contributions with interest are payable.

(c) Ordinary Death Benefits

Eligibility: All members

Pre-retirement Death Benefit: The benefit equals a lump sum of annual salary times completed years of credited service up to 3 years of service. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest and one-half of accumulated additional member contributions with interest are also payable.

Post-retirement Death Benefit: Upon retirement, the pre-retirement benefit shall be reduced by 50% and reduced an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.

(d) Accidental Death Benefits

Eligibility: Death caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.

Benefit: The benefit equals 50% of wages earned during last year of service or annual wage rate if less than one year of service, paid to eligible beneficiary as defined by priority:

- (i) Spouse, until remarriage
- (ii) Children, to age 25
- (iii) Dependent parents
- (iv) Any other dependent survivors, to age 21.

Total of all payments will at least equal the amount of the full ordinary death lump sum benefit.

(e) Ordinary and Accidental Disability Benefits

Eligibility: Completion of 10 years of credited service for ordinary. No minimum years of credited service requirement for accidental.

Benefit: The benefit equals the greater of 1-2/3% of Final Average Salary per year of credited service and 1/3 of Final Average Salary. If eligible for a Service Retirement benefit, the greater of this benefit and the Service Retirement benefit is payable.

4. Member Contributions

Regular contribution rate varies based on gross wages earned during two plan years (January 1 to December 31) prior to applicable plan year based on following table. For first three years, a projection of annual wages will be used. The rate for the plan year ending March 31, 2013 for all Tier 6 employees is 2%.

Annual Wages Earned During Plan Year	Contribution Rate
Up to \$45,000	3.00%
\$45,001–\$55,000	3.50%
\$55,001–\$75,000	4.50%
\$75,001–\$100,000	5.75%
Greater than \$100,000	6.00%

5. Changes in Plan Provisions Since Prior Valuation

None

VII. Tier 6—Age 63 and 10 Year Retirement Program

1. Eligibility

All non-operating members hired on or after April 1, 2012.
2. Final Average Compensation

Highest average pensionable earnings over five consecutive years. Pensionable earnings exclude any overtime earnings, defined as compensation paid at a rate greater than the standard rate, in excess of the overtime cap. The overtime cap is indexed annually and is \$16,048 for 2017. Pensionable earnings also exclude wages in excess of the annual salary paid to the Governor of New York, lump sum payments for sick leave, accumulated vacation and other credits for time not worked, termination pay and any additional compensation paid in anticipation of retirement. Pensionable earnings in a year cannot exceed 110% of the average of the four preceding years.
3. Benefits
 - (a) Service Retirement

Eligibility: Attainment of age 63 and completion of at least 10 years of credited service.

Benefit: If completed less than 20 years of credited service, the benefit equals 1.67%% of Final Average Salary multiplied by years of credited service. If completed at least 20 years of credited service, 35% of Final Average Salary for the first 20 years of credited service, plus 2% of Final Average Salary times each year of credited service in excess of 20.
 - (b) Early Retirement

Eligibility: Attainment of age 55 and completion of at least 10 years of credited service.

Benefit: The benefit equals the Service Retirement benefit reduced by 6.5% for each year prior to age 63.
 - (c) Termination Benefits
 - (i) Refund of Contributions

Eligibility: Completion of less than 10 years of credited service.

Benefit: The benefit equals a refund of the member's contributions accumulated plus interest at a rate of 5.0%.
 - (ii) Vested Benefit

Eligibility: Completion of at least 10 years of credited service.

Benefit: The benefit equals the Service Retirement benefit with compensation and service calculated as of the date of termination. The benefit is deferred until age 63. If a member with at least 10 years of credited service dies before commencing benefits, 50% of the salary-related ordinary death benefit (below) plus accumulated regular contributions with interest are payable.

(d) Ordinary Death Benefits

Eligibility: All members

Pre-retirement Death Benefit: The benefit equals a lump sum of annual salary times the completed years of credited service up to 3 years of service. After age 60, the benefit is reduced 5% per year, to a maximum reduction of 50%. Accumulated regular member contributions with interest and one-half of accumulated additional member contributions with interest are also payable.

Post-retirement Death Benefit: Upon retirement, the pre-retirement benefit shall be reduced by 50% and reduced an additional 25% after completion of one year of retirement. After completion of two years of retirement, the benefit equals 10% of the pre-retirement benefit in force at age 60.

(e) Accidental Death Benefits

Eligibility: Death caused by on-the-job accident. World Trade Center Presumption may apply if certain criteria are met.

Benefit: The benefit equals 50% of wages participant earned during last year of service or annual wage rate if less than one year of service, paid to eligible beneficiary as defined by priority:

- (i) Spouse, until remarriage
- (ii) Children, to age 25
- (iii) Dependent parents
- (iv) Any other dependent survivors, to age 21.

Total of all payments will at least equal the amount of the full ordinary death lump sum benefit.

(f) Ordinary and Accidental Disability Benefits

Eligibility: Completion of 10 years of credited service for ordinary. No minimum years of credited service requirement for accidental.

Benefit: The benefit equals the greater of 1-2/3% of Final Average Salary per year of credited service and 1/3 of Final Average Salary. If eligible for Service Retirement benefit, the greater of this benefit and the Service Retirement benefit is payable.

4. Member Contributions

Regular contribution rate varies based on gross wages earned during two plan years (January 1 to December 31) prior to applicable plan year based on following table. For first three years, a projection of annual wages will be used. The rate for the plan year ending March 31, 2013 for all Tier 6 employees is 3%.

Annual Wages Earned During Plan Year	Contribution Rate
Up to \$45,000	3.00%
\$45,001–\$55,000	3.50%
\$55,001–\$75,000	4.50%
\$75,001–\$100,000	5.75%
Greater than \$100,000	6.00%

5. Changes in Plan Provisions Since Prior Valuation

The MaBSTOA Board adopted amendments on June 21, 2017 which provided eligible members a refund of the employee Additional Member Contributions made in the Tier 4 Age 57 and 5 Year Program and the Tier 4 Age 25 and Year 55 Early Retirement Program.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS

Basis of Accounting—The Plan is accounted for on the accrual basis of accounting under which deductions are recorded when the liability is incurred and additions are recognized in the accounting period in which they are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Contributions from members are recorded when the employer makes payroll deductions from plan members. Employer contributions are recognized when due in accordance with the terms of the Plan. Additions to the Plan consist of contributions (member and employer) and net investment income.

The accounting and reporting policies of the Plan conform to accounting principles generally accepted in the United States of America (GAAP).

New Accounting Standards Adopted – The Plan adopted GASB Statement No. 73 *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. The requirements of GASB Statement No. 73, extend the approach to accounting and financial reporting established in Statement No. 68 to all pensions, with modifications as necessary to reflect that for accounting and financial reporting purposes, any assets accumulated for pensions that are provided through pension plans that are not administered through trusts that meet the criteria specified in Statement No. 68 should not be considered pension plan assets. It also requires that information similar to that required by Statement No. 68 be included in notes to financial statements and required supplementary information by all similarly situated employers and nonemployer contributing entities. This Statement also clarifies the application of certain provisions of Statement Nos. 67 and 68 with regard to the following issues: 1) Information that is required to be presented as notes to the 10-year schedules of required supplementary information about investment-related factors that significantly affect trends in the amounts reported; 2) Accounting and financial reporting for separately financed specific liabilities of individual employers

and nonemployer contributing entities for defined benefit pensions; 3) Timing of employer recognition of revenue for the support of nonemployer contributing entities not in a special funding situation. There was no material impact on the Plan's financial statements as a result of the implementation of GASB Statement No. 73.

Recent Accounting Pronouncements — Not yet adopted

GASB Statement No.	GASB Accounting Standard	MaBSTOA Pension Plan Required Year of Adoption
84	<i>Fiduciary Activities</i>	2019
85	<i>Omnibus 2017</i>	2018

Methods Used to Value Investments—Investments are stated at fair value or NAV which approximates fair value. Fair value is the amount that the Plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than a forced or liquidation sale. All investments, with the exception of alternative investments are valued based on closing market prices or broker quotes.

Traded securities are stated at the last reported sales price on a national securities exchange on the last business day of the fiscal year. Securities purchased pursuant to agreements to resell are carried at the contract price, exclusive of interest, at which the securities will be resold. Alternative investments are valued based on the most current net asset values.

Purchases and sales of securities are reflected on the trade date.

Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

Use of Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Authority to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Accordingly, actual results could differ from these estimates.

Risks and Uncertainties—The Plan's investments are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities and level of uncertainty related to changes in the value of investment securities, it is possible that changes in risks in the near term would materially affect the amounts reported in the Plan's financial statements.

Income Taxes—The Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) of the Internal Revenue Code. Accordingly, the Plan is tax-exempt and is not subject to the provisions of ERISA. Therefore, income retained by the Plan is not subject to Federal income tax.

3. CASH AND INVESTMENTS

Investment Committee—The Plan's policy statement is issued for the guidance of fiduciaries, including the members of the Board and investment managers, in the course of investing the assets of the Trust. The investments of the Trust will be made for the exclusive benefit of the Plan participants and their beneficiaries. Policy guidelines may be amended by the Board upon consideration of the advice and recommendations of the investment professionals.

In order to have a reasonable probability of achieving the target return at an acceptable risk level, the Board has adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on, at least, a quarterly basis and will be readjusted when an asset class weighting is outside its target range. The following was the MaBSTOA Pension Plan Board adopted asset allocation policy as at December 31, 2017.

Asset Class	Target Allocation (%)	Target Range (%)	Policy Benchmark
Equities	29.0	24-34	
Domestic Large Cap	10.0	5-15	S&P 500
Domestic Small Cap	5.5	2-10	Russell 2000
International Developed Markets Equities	10.0	5-15	MSCI EAFE
Emerging Markets Equities	3.5	2-6	MSCI Emerging Markets
Fixed Income	15.0	9-21	Manager Specific
Global Asset Allocation*	20.0	15-33	50% World Equity/ 50% Citigroup WGBI unhedged
Opportunistic Investments	6.0	0-15	Manager Specific
Absolute Return	15.0	10-22	Manager Specific
Real Assets	5.0	0-10	Manager Specific
Real Estate	3.0	0-10	Manager Specific
Private Equity	7.0	0-10	Venture Economics
Total	100.0		

* The Global Asset Allocation managers will invest across numerous liquid asset classes including: stocks, bonds, commodities, TIPS and REITs.

Investment Objective — The investment objective of the funds is to achieve consistent positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation.

Investment Guidelines — The Board of Pension Managers executes investment management agreements with professional investment management firms to manage the assets of the Plan. The fund managers must adhere to guidelines that have been established to limit exposure to risk.

All Securities managers shall be registered advisors under the Investment Advisors Act of 1940. The overall capital structure targets and permissible ranges for eligible asset classes of the Trust are detailed within the Investment Policy Statement. Full discretion, within the parameters of the guidelines described herein and in any individual investment policy associated with that allocation, is granted to the investment managers regarding the asset allocation, the selection of securities, and the timing of transactions. It is anticipated that the majority of investment managers will be funded through commingled funds, however, in some cases (likely equity and fixed income mandates) separate account vehicles may be utilized. For separate accounts, individual manager guidelines and/or exemptions are specified in each approved investment management agreement (IMA). Should there be conflicts, the individual manager guidelines set forth in the IMA supersede the general guidelines in the Investment Policy Statement. For commingled funds, investment guidelines and/or exemptions are specified in such vehicle's offering documents. Should there be conflicts, the individual vehicle's investment guidelines supersede the general guidelines in the Investment Policy Statement.

Individual investment manager benchmarks and performance requirements are specified within the Investment Policy Statement. Performance of the Trust will be evaluated on a regular basis. Evaluation will include the degree to which performance results meet the goals and objectives as herewith set forth. Toward that end, the following standards will be used in evaluating investment performance:

1. The compliance of each investment manager with the guidelines as expressed herein, and
2. The extent to which the total rate of return performance of the Trust achieves or exceeds the targeted goals.

Fixed Income Investment Managers

- Domestic fixed income investments are permitted, subject to the guidelines reflected in Investment Policy Statement. Yankee bonds, which are dollar denominated foreign securities, may be held by each domestic manager in proportions which each manager shall deem appropriate.
- International fixed income securities are permitted, subject to the guidelines reflected in Investment Policy Statement. Generally defined, the Citigroup World Government Bond Index represents the opportunity set for international developed markets. The J.P. Morgan Emerging Markets Bond Index-Global represents the opportunity set for international emerging markets denominated in USD. The J.P. Morgan GBI-EM Global Diversified Index represents the opportunity set for international emerging markets denominated in local currency. These index references are guidelines and do not prohibit investment in securities outside those indexes.
- Investment managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments regardless of the classifications provided by rating agencies.
- The average duration (interest rate sensitivity) of an actively managed fixed income portfolio shall range within two years of the benchmark's duration.
- For domestic fixed income portfolios, individual manager account for the securities of an individual issuer, excepting the U.S. government and U.S. government agencies, shall not constitute more than 5% at market at any time.
- For international bond portfolios, individual manager account for the securities of any non-governmental issuer shall not constitute more than 5% at market at any time.

Equity Investment Managers

- Domestic equity investments are permitted, subject to the guidelines. American Depositary Receipts (ADRs), which are dollar denominated foreign securities traded on the domestic U.S. stock exchanges (e.g., Reuters, Nestle, Sony) may be held by each domestic stock manager in proportions which each manager shall deem appropriate.
- International equities are permitted, subject to the guidelines. Generally defined, the Morgan Stanley EAFE (Europe, Australasia and the Far East) Index represents the opportunity set for international developed markets. The Morgan Stanley Emerging Markets Free Index represents the opportunity set for international emerging markets. These index references are guidelines and do not prohibit investment in securities outside those indexes.
- The equity specialists may vary equity commitment from 90% to 100% of assets under management.

- Individual manager account may hold no more than 8% at market or 1.5x the manager's benchmark weight (whichever is greater) of any single company's stock.

Overlay Manager(s)

- For a variety of reasons, the investment program may carry large amounts of cash throughout the year. In order to achieve the actuarial assumed returns on the total investment program, the Board may retain a futures overlay manager. The overlay manager shall use exchange traded futures contracts to expose the cash to the long-term target asset allocation.
- In addition, the overlay manager may be utilized for the following:
 - a) Expose un-invested assets of domestic and international equity investment managers to their respective equity benchmarks through the use of futures contracts,
 - b) Assist the Board in rebalancing, transitions, and/or gaining exposure to approved asset classes,
 - c) Provide the market (or "beta") exposures in a portable alpha program.
 - d) The overlay manager shall ensure that all futures positions are fully collateralized and the manager is prohibited from leveraging any portion of the portfolio.

Alternative Investments Managers

Alternative investments are broadly categorized into the following categories:

- Opportunistic
- Real assets
- Real estate
- Absolute return
- Private equity

Common features of alternative investments are limited liquidity, the use of derivatives, leverage and shorting, lower regulatory oversight, limited transparency, and high fees. Compensating for these risks, these investments offer the potential of diversification and/or higher rates of return over time.

Derivatives Policy

Where appropriate, investment managers may use derivative securities for the following reasons:

- **Hedging.** To the extent that the portfolio is exposed to clearly defined risks and there are derivative contracts that can be used to reduce those risks, the investment managers are permitted to use such derivatives for hedging purposes, including cross-hedging of currency exposures.
- **Creation of Market Exposures.** Investment managers are permitted to use derivatives to replicate the risk/return profile of an asset or asset class provided that the guidelines for the investment manager allow for such exposures to be created with the underlying assets themselves.
- **Management of Country and Asset Allocation Exposure.** Investment managers charged with tactically changing the exposure of their portfolio to different countries and/or asset classes are permitted to use derivative contracts for these purposes.
- Additional uses of derivatives shall be approved by the Board or set forth in the individual investment guidelines or the offering documents prior to implementation and shall be restricted to those specific investment managers.

Ineligible Investments (Separately Managed Accounts)

Unless specifically approved by the Board or set forth in the individual investment guidelines, certain securities, strategies and investments are ineligible for inclusion within separately managed accounts. Among these are:

- Privately-placed or other non-marketable debt, except securities issued under Rule 144a,
- Lettered, legend or other so-called restricted stock,
- Commodities
- Short sales, and,
- Direct investments in private placements, real estate, oil and gas and venture capital, or funds comprised thereof.

Exceptions:

The Board of Managers, in recognition of the benefits of commingled funds as investment vehicles (i.e., the ability to diversify more extensively than in a small, direct investment account and the lower costs which can be associated with these funds) may, from time to time, allow investment in such funds. The Board recognizes that it cannot give specific policy directives to a fund whose policies are already established; therefore, the Board is relying on the investment consultant to assess and monitor the investment policies of any funds used by the Plan to ascertain whether they are appropriate.

Investment Valuation and Income Recognition — Investments are presented at fair value based on information provided by JP Morgan Chase (the “trustee”), New England Pension Consultant (“NEPC”), and the investment managers. The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available, or net asset value, which is determined to be a practical expedient for measuring fair value. Many factors are considered in arriving at that value. Corporate debt securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings. All investments are registered, with securities held by the Plan’s trustee, in the name of the Plan. Gains and losses on investments that were sold during the year are included in the statement of plan net position.

Risks and Uncertainties — The Plan’s investments are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities and level of uncertainty related to changes in the value of investment securities, it is possible that changes in risks in the near term would materially affect the amounts reported in the Plan’s financial statements.

The financial markets, both domestically and internationally, have demonstrated significant volatility on a daily basis, which affects the valuation of investments. The Plan utilizes asset allocation strategies that are intended to optimize investment returns over time in accordance with investment objectives and with acceptable levels of risk.

Investments measured at readily determined fair value (FV)

	Quoted Price in			
	December 31,	Active Markets for	Significant Other	Significant
	2017	Identical Assets	Observable Inputs	Unobservable Inputs
		Level 1	Level 2	Level 3
Equity Securities:				
Separate account large-cap equity funds	\$ 85,488,024	\$ 85,488,024	\$ -	\$ -
Separate account small-cap equity funds	146,050,490	146,050,490	-	-
Separate account real estate investment trust funds	25,437,015	25,437,015	-	-
Total equity investments	256,975,529	256,975,529	-	-
Debt Securities				
Separate account debt funds	130,544,649	-	130,544,649	-
Total debt investments	130,544,649	-	130,544,649	-
Total investments at readily determined FV	\$ 387,520,178	\$ 256,975,529	\$ 130,544,649	\$ -

Investments measured at the net asset value (NAV)

	December 31,	Unfunded	Redemption	Redemption
	2017	Commitments	Frequency	Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 184,948,493	\$ -	Daily	None
Commingled international equity funds	380,934,661	-	Daily	None
Commingled emerging market equity funds	100,359,501	-	Daily, monthly	None
Total equity investments measured at the NAV	666,242,655	-		
Debt Securities				
Commingled debt funds	226,761,339	-	Daily, monthly, quarterly	None
Mutual fund	38,073,675	-	Daily	None
Total debt investments measured at the NAV	264,835,014	-		
Absolute return:				
Directional	91,662,096	-	Monthly	3-60 days
Direct lending	121,893,539	9,046,957	Bi-annually	60 plus days
Distressed securities	30,445,720	-	Not eligible	N/A
Credit long	41,164,642	-	Quarterly	3-30 days
Credit long/short	55,742,054	-	Quarterly	3-60 days
Equity long/short	41,257,033	-	Quarterly	3-60 days
Event driven	56,884,913	2,093,427	Quarterly, Bi-annually	60-120 days
Global macro	87,963,056	-	Monthly	3-30 days
Global tactical asset allocation	194,494,544	-	Daily, monthly	3-30 days
Multistrategy	83,029,805	-	Quarterly	3-60 days
Risk parity	258,962,104	-	Monthly	3-30 days
Structured credit	11,652,266	-	Not eligible	N/A
Total absolute return measured at the NAV	1,075,151,772	11,140,384		
Private equity - private equity partnerships	212,723,871	148,578,605	Not eligible	N/A
Real assets				N/A
Commingled commodities fund	55,646,462	-	Not eligible	N/A
Commingled real estate funds	107,001,741	-	Not eligible	N/A
Energy	45,027,093	14,156,595	Not eligible	N/A
Infrastructure	16,830,837	5,526,340	Not eligible	N/A
Total real assets measured at the NAV	224,506,133	19,682,935		
Short term investments measured at the NAV	58,552,141	-		
Total investments measured at the NAV	2,502,011,586	\$ 179,401,924		
Total investments at fair value	\$ 2,889,531,764			

Investments measured at readily determined fair value (FV)

	December 31, 2016	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity Securities:				
Separate account large-cap equity funds	\$ 72,251,016	\$ 72,251,016	\$ -	\$ -
Separate account small-cap equity funds	128,138,196	128,138,196	-	-
Separate account real estate investment trust funds	23,322,458	23,322,458	-	-
Total equity investments	223,711,670	223,711,670	-	-
Debt Securities				
Separate account debt funds	119,789,292	-	119,789,292	-
Total debt investments	119,789,292	-	119,789,292	-
Total investments at readily determined FV	\$ 343,500,962	\$ 223,711,670	\$ 119,789,292	\$ -

Investments measured at the net asset value (NAV)

	December 31, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 153,081,608	\$ -	Daily	None
Commingled international equity funds	279,977,601	-	Daily	None
Commingled emerging market equity funds	77,484,913	-	Daily, monthly	None
Total equity investments measured at the NAV	510,544,122	-		
Debt Securities				
Commingled debt funds	208,539,805	-	Daily, monthly, quarterly	None
Mutual fund	32,031,598	-	Daily	None
Total debt investments measured at the NAV	240,571,403	-		
Absolute return:				
Directional	83,483,726	-	Monthly	3-60 days
Direct lending	115,235,870	8,281,753	Bi-annually	60 plus days
Distressed securities	24,674,583	-	Not eligible	N/A
Credit long	35,726,215	-	Quarterly	3-30 days
Credit long/short	50,695,157	-	Quarterly	3-60 days
Equity long/short	36,673,598	-	Quarterly	3-60 days
Event driven	48,446,341	2,093,427	Quarterly, Bi-annually	60-120 days
Global macro	86,868,753	-	Monthly	3-30 days
Global tactical asset allocation	167,208,452	-	Daily, monthly	3-30 days
Market neutral	184,367	-	Quarterly	3-60 days
Multistrategy	74,514,322	-	Quarterly	3-60 days
Risk parity	232,165,400	-	Monthly	3-30 days
Structured credit	12,843,757	32,062,887	Not eligible	N/A
Total absolute return measured at the NAV	968,720,541	42,438,067		
Private equity - private equity partnerships	163,295,227	141,080,843	Not eligible	N/A
Real assets				
Commingled commodities fund	53,584,239	-	Not eligible	N/A
Commingled real estate funds	101,208,383	-	Not eligible	N/A
Energy	37,318,500	21,838,034	Not eligible	N/A
Infrastructure	9,604,288	12,685,084	Not eligible	N/A
Total real assets measured at the NAV	201,715,410	34,523,118		
Short term investments measured at the NAV	87,778,068	-		
Total investments measured at the NAV	2,172,624,771	\$ 218,042,028		
Total investments at fair value	\$ 2,516,125,733			

Concentration of Credit Risk – Individual investments held by the Plan that represents 5.0% or more of the Plan's net assets available for benefits at December 31, 2017 and 2016 are as follows:

	2017	2016
Investments at fair value as determined by quoted market prices:		
Sanderson International Equity Fund	\$ 156,605,947	\$ -

Credit Risk — At December 31, 2017 and 2016, the following credit quality rating has been assigned by a nationally recognized rating organization:

Quality Rating	2017 Fair Value	Percentage of Fixed Income Portfolio	2016 Fair Value	Percentage of Fixed Income Portfolio
AAA	\$ 112,325,115	21.16 %	\$ 29,130,599	5.39 %
AA	(3,161,041)	(0.60)	(7,537,593)	(1.39)
A	45,134,306	8.50	36,408,312	6.73
BBB	69,916,231	13.17	77,354,781	14.30
BB	62,391,251	11.75	63,644,818	11.77
B	41,445,339	7.81	41,858,028	7.74
CCC	4,492,561	0.85	6,609,734	1.22
CC	823,079	0.16	1,089,363	0.20
C	-	-	2,581,483	0.48
D	10,206	-	-	-
Not Rated	<u>78,989,475</u>	<u>14.88</u>	<u>88,743,868</u>	<u>16.41</u>
Credit risk debt securities	412,366,522	77.68	339,883,393	62.85
U.S. Government bonds	<u>118,466,010</u>	<u>22.32</u>	<u>200,917,215</u>	<u>37.15</u>
Total fixed income securities	530,832,532	<u>100.00 %</u>	540,800,608	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>2,358,699,232</u>		<u>1,975,325,125</u>	
Total investments	<u>\$ 2,889,531,764</u>		<u>\$ 2,516,125,733</u>	

Interest Rate Risk Exceptions — Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice versa. Duration is an indicator of bond price's sensitivity to 100 basis point change in interest rates.

Investment Fund	2017		2016	
	Fair Value	Duration	Fair Value	Duration
Chase	\$ 130,544,649	11.81	\$ 98,666,882	11.38
Wellington Blended Emerging Market Debt	49,815,124	5.70	33,839,192	5.55
Allianz Structured Alpha Fund	91,662,096	0.13	81,596,994	0.25
GAM Unconstrained Bond Fund	102,061,274	(0.17)	96,393,243	0.25
Bridgewater All Weather Fund	61,674,475	7.70	67,809,509	9.00
Wellington Opportunistic	25,844,850	1.70	17,303,562	1.91
Bridgewater Pure Alpha	(144,265,847)	(7.90)	2,541,467	(3.54)
Northern Trust William Capital	10,102,649	-	10,029,926	-
Park Square Capital Credit Opportunities	26,687,608	-	26,754,777	0.54
Crescent Capital High Income Fund	22,661,480	2.43	21,285,910	2.61
EIG Energy Fund XV	3,318,615	-	-	-
EIG Energy Fund XV	4,554,169	-	-	-
Fir Tree Value Realization Fund	3,174	-	53,997	-
Libremax Partners Fund	14,381,450	2.50	4,116,447	5.02
Gramercy Distressed Opportunistic Fund	1,768,973	(0.05)	6,902,793	(0.48)
Makuria Credit Fund	22,226,440	5.50	9,865,029	1.05
Wellington Global Managed Fund	79,238,392	10.60	40,351,500	6.70
State Street Real Asset Fund	13,850,883	5.84	-	-
Wellington Trust Collective Investment Fund and Diversified Inflation Fund	-	-	12,774,483	0.88
Canyon Value	14,702,078	2.50	10,514,897	1.90
Total fixed income securities	530,832,532		540,800,608	
Portfolio modified duration		8.76		4.37
Investments with no duration reported	\$ 2,358,699,232		\$ 1,975,325,125	
Total investments	\$ 2,889,531,764		\$ 2,516,125,733	

Foreign Currency Risk — Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Each investment manager, through the purchase of units in a commingled investment trust fund or international equity mutual fund establishes investments in international equities. The Plan also holds investments in American Depositary Receipts (“ADRs”) which are not included in the below schedule since they are denominated in U.S. dollars and accounted for at fair market value.

In addition, the Plan has investments in foreign stocks and/or bonds denominated in foreign currencies. The Plan's foreign currency exposures as of December 31, 2017 and 2016 are as follows (amounts in U.S. dollars, in thousands):

Foreign Currency Holdings in US \$	December 31, 2017	December 31, 2016
Argentina Peso	\$ 3,147,819	\$ 297,239
Dollar (Australian)	25,071,711	44,173,581
Bahraini Dinar	358,441	293,236
Bangladesh (Taka)	352,312	319,744
Bermudian Dollar	606,997	
Botswana Pula	132,377	77,108
Brazil Cruzeiro Real	12,167,575	5,303,903
Bulgarian Lev	13,771	5,948
Dollar (Canadian)	14,492,699	21,994,856
Chilean Peso	4,148,169	624,031
China (Yuan Renminbi)	13,680,011	7,786,652
Colombian Peso	3,175,930	2,057,190
Croatia Kuna	435,991	306,814
Czech Koruna	(1,158,491)	586,800
Krone (Danish)	1,835,587	1,303,137
Egyptian Pound	2,190,860	345,211
Euro	68,053,671	99,630,684
Georgian Lari	1,359,338	1,072,262
Ghanaian Cedi	209,003	29,813
Dollar (Hong Kong)	13,310,527	10,531,260
Hungary (Forint)	550,568	(374,759)
Icelandic Krona	3,185,666	310,355
Indian Rupee	20,102,075	16,821,854
Indonesia Rupiah	12,037,853	11,243,312
Israeli (Shekel)	1,014,021	634,785
Yen (Japan)	7,031,144	30,640,715
Jordanian Dinar	379,834	295,078
Kazakhstani Tenge	514,158	282,504
Kenyan Shilling	347,688	603,770
Kuwait Dinar	714,511	636,886
Lebanese Pound	99,082	90,816
Malaysian (Ringgit)	6,467,381	2,983,677
Mauritius (Rupee)	731,558	552,962
Mexican New Peso	3,885,634	2,046,380
Morocco Dirham	357,221	313,101
Dollar (New Zealand)	5,305,860	3,543,970
Nigerian Naira	350,884	492,602
Krone (Norwegian)	5,834,756	(1,972,015)
Omani Rial	359,487	307,841
Pakistani Rupee	1,522,003	2,082,977
Panamanian Balboa	135,437	133,397
Peru Sol	1,936,257	1,415,694
Philippines Peso	1,858,695	1,270,926
Polish (New Zloty)	1,232,550	(198,443)
Pound (Sterling)	79,022,240	89,307,070
Qatar Riyal	952,007	586,038
Romanian Leu	553,599	286,159
Russian Federation Rouble	4,296,438	1,435,821
Saudi Riyal	356,524	344,613
Singapore Dollar	4,255,338	881,381
South Africa Rand	5,871,146	3,667,204
South Korean Won	24,351,257	7,866,343
Sri Lankan Rupee	348,770	283,694
Krona (Swedish)	19,136,961	3,797,748
Swiss Franc	10,473,957	10,292,983
Thai (Bhat)	4,507,543	3,825,862
Dollar (Taiwan, New)	18,457,663	18,015,165
Tunisian Dinar	144,963	111,355
Turkish Lira	3,148,681	582,729
UAE Dirham	1,656,231	1,125,511
Uruguayan Pesos	337,719	-
Vietnamese Dong	571,020	296,607
Other	(17,198,902)	4,054,160
Total	\$ 400,781,776	\$ 417,658,297

4. CONTRIBUTIONS

The financial objective of the Plan is to fund, on an actuarial basis, the retirement and death benefits for eligible MaBSTOA employees and beneficiaries. MaBSTOA contributions to the fund are made annually. Contributions to MaBSTOA require the approval of the MaBSTOA Board.

Employer contributions amounted to \$202.7 million and \$220.7 million for the years ended December 31, 2017 and 2016, respectively. Employee contributions amounted to \$19.7 million and \$18.5 million for the years ended December 31, 2017 and 2016, respectively. Contributions made by employees are accounted for in separate accounts maintained for each employee. Annually, these accounts are credited with interest at 5%. Effective April 1, 1990, MaBSTOA began to deduct employee contributions as pretax contributions under Section 414(h) of the Internal Revenue Code.

Pursuant to Section 7.03 of the MaBSTOA Plan, active plan members are permitted to borrow up to 75% of their contributions with interest. Their total contributions and interest remain intact and interest continues to accrue on the full balance. The participant's accumulated contribution account is used as collateral against the loan. The Plan granted \$18.2 million and \$17.0 million in loans to members during 2017 and 2016, respectively. Loan repayments by members amounted to \$14.9 million and \$15.6 million in 2017 and 2016, respectively.

Upon termination of employment before retirement, certain participants are entitled to refunds of their own contributions including accumulated interest less any loans outstanding.

5. NET PENSION LIABILITY

The components of the net pension liability of the Plan at December 31, 2017 and 2016 were as follows (in thousands):

	December 31, 2017	December 31, 2016
Total pension liability	\$ 3,676,476	\$ 3,536,747
Fiduciary net position	<u>2,922,588</u>	<u>2,555,735</u>
Net pension liability	<u>\$ 753,888</u>	<u>\$ 981,012</u>
Fiduciary net position as a percentage of the total pension liability	79.49 %	72.26 %
Covered payroll	\$ 747,651	\$ 713,280
Net pension liability as a percentage of covered payroll	100.83 %	137.54 %

Actuarial Methods and Assumptions—The total pension liability as of December 31, 2017 was determined by an actuarial valuation date of January 1, 2017, that was updated to roll forward the total pension liability to the respective year-end. Actuarial valuations are performed annually as of January 1.

Additional information of the latest actuarial valuation follows:

Valuation date	January 1, 2017	January 1, 2016
Actuarial cost method	Frozen initial liability (FIL) ⁽¹⁾	Frozen initial liability (FIL) ⁽¹⁾
Amortization method	For FIL bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population	For FIL bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA
Actuarial Assumptions: Investment rate of return	7.00%, net of investment related expenses	7.00%, net of investment related expenses
Projected salary increases	Reflecting general wage, merit and promotion increases of 3.5% to 4.0% per year for operating and nonoperating employees, respectively. Larger increases are assumed in the first 5 years of a member's career.	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 15% for operating employees and 4.0% to 7.0% for nonoperating employees per year, depending on years of service
Overtime	Except for managerial employees, 8.5% of base salary for operating employees and 2.0% of base salary for nonoperating employees, with different assumptions used in the year before retirement	Except for managerial employees, 8.5% of base salary for operating employees and 2.0% of base salary for nonoperating employees, with different assumptions used in the year before retirement
Cost-of-living adjustments	55% of inflation assumption or 1.375% per annum, if applicable	55% of inflation assumption or 1.375% per annum, if applicable
Inflation	2.50% per annum	2.50% per annum

⁽¹⁾ Under this actuarial method, the initial liability has been established by the Entry Age Actuarial Cost Method for determining changes in the Unfunded Actuarial Accrued Liability (UAAL) due to plan provision and assumption changes.

Until the inception of the Tier 6 provisions in 2012, amendments enacted by State legislation in 2000 reflected the most significant changes to the plan and are summarized as follows:

For operating employees (Chapter 10 of the Laws of 2000):

- All operating employees are automatically included in the 2000 55/25 plan.
- Elimination of the 2.3% additional employees' contributions applicable to members of the 55/25 plan.
- Reduction in the Tier 3 and 4 employee contribution rate from 3.0% to 2.0%.

For managerial and non-operating employees (Chapter 126 of the Laws of 2000):

- Vesting under the Age 57 plan required only five years of service versus ten.
- As of October 1, 2000, regular Tier 3 and 4 employee contributions ceased after the completion of ten years of service.

For retired members (Chapter 125 of the Laws of 2000):

- Automatic cost-of-living adjustments (COLAs). The COLAs apply to retired members as follows:

Retirees at Least age	Retired or Receiving Benefits for at Least
62	5 years
55	10
Disabled retirees	5
Accidental death beneficiaries	5

- Initial COLA payable September 30, 2000, based on the first \$18,000 of the maximum retirement allowance.
- Thereafter, annual COLAs of 50% of the increase in the consumer price index (CPI), but not less than 1% or more than 3%, of the first \$18,000 of maximum retirement allowance will be payable.

The benefit enhancements, as well as the automatic COLA for retirees, were reflected in the actuarial valuation beginning with the January 1, 2000, valuation.

The Plan adopted several amendments during 2002 as a result of state legislation. Amendments included changes to the definition of active service for Tier 1 and Tier 2 members, extension of the phase-in period from five years to ten years for funding liabilities created by Chapter 125 of the Laws of 2000 and increased accidental disability benefits for Tier 3 and Tier 4 members.

The Plan also adopted the legislative provisions of Chapter 379, which allow current and former members of the Transport Workers Union, Local 100 and Transit Supervisors Organization, Local 106, with an accumulated balance of additional member contributions (AMC) made in accordance with the MaBSTOA 55/25 Plan enacted in 1994, to apply for a refund of such contributions. AMC refunds amounted to approximately \$603 thousand and \$443 thousand as of December 31, 2017 and 2016, respectively.

At December 31, 2017 and 2016, assets were available to fund 79.5% and 72.3%, respectively, of the unfunded actuarial accrued liability (UAAL) when measured using the Entry Age Normal Cost Method per GASB 67 and the market value of assets.

Calculation on Money-Weighted Rate of Return

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the middle of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month.

Schedule of Calculations of Money-Weighted Rate of Return

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2017	\$2,555,735,192	12.00	1.00	\$2,904,777,167
Monthly net external cash flows:				
January	2,970,674	11.50	0.96	3,359,139
February	1,109,374	10.50	0.88	1,241,661
March	1,109,374	9.50	0.79	1,227,438
April	1,109,374	8.50	0.71	1,214,931
May	1,109,374	7.50	0.63	1,202,552
June	1,109,374	6.50	0.54	1,188,776
July	1,109,374	5.50	0.46	1,176,664
August	1,109,374	4.50	0.38	1,164,675
September	1,109,374	3.50	0.29	1,151,333
October	1,109,374	2.50	0.21	1,139,602
November	1,109,374	1.50	0.13	1,127,990
December	2,603,128	0.50	0.04	2,616,492
Ending Value - December 31, 2017				\$2,918,988,651
Money-Weighted Rate of Return	13.66%			
	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2016	\$2,292,315,704	12.00	1.00	\$2,502,222,161
Monthly net external cash flows:				
January	4,341,704	11.50	0.96	4,722,691
February	4,343,937	10.50	0.88	4,692,116
March	4,343,937	9.50	0.79	4,655,262
April	4,343,937	8.50	0.71	4,622,746
May	4,343,937	7.50	0.63	4,590,457
June	4,343,937	6.50	0.54	4,554,401
July	4,343,937	5.50	0.46	4,522,589
August	4,343,937	4.50	0.38	4,491,000
September	4,343,937	3.50	0.29	4,455,725
October	4,343,937	2.50	0.21	4,424,603
November	4,343,937	1.50	0.13	4,393,698
December	3,378,850	0.38	0.03	2,287,743
Ending Value - December 31, 2016				\$2,555,735,192
Money-Weighted Rate of Return	9.16%			

Expected Rate of Return on Investments—The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of the December 31, 2017 and 2016 actuarial valuations are summarized in the following table:

Asset Class	Index	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Core Fixed Income	Barclays Aggregate	10.00 %	1.96 %
U.S. High Yield Bonds	BAML High Yield	8.00 %	4.62 %
Global Bonds	Citi WGBI	10.00 %	0.34 %
Emerging Market Bonds	JPM EMBI Plus	3.00 %	3.30 %
U.S. Large Cap	S&P 500	10.00 %	4.31 %
U.S. Small Cap	Russell 2000	5.50 %	5.57 %
Global Equities	MSCI ACWI NR	10.00 %	4.99 %
Foreign Developed Equities	MSCI EAFE NR	10.00 %	5.57 %
Emerging Market Equities	MSCI EM NR	3.50 %	7.91 %
GLOBAL REITs	FTSE EPRA/NAREIT Developed	5.00 %	5.62 %
Private Real Estate Property	NCREIF Property	3.00 %	3.64 %
Private Equity	Cambridge Private Equity	7.00 %	8.99 %
Hedge Funds - MultiStrategy	HFRI Fund Wtd Composite	15.00 %	3.35 %
Total			
Assumed Inflation—Mean			2.50 %
Assumed Inflation—Standard Deviation			1.85 %
Portfolio Arithmetic Mean Return			6.80 %
Portfolio Standard Deviation			11.54 %
Long-Term Expected Rate of Return			7.00 %

Asset Class	Index	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Core Fixed Income	Barclays Aggregate	10.00 %	1.67 %
U.S. High Yield Bonds	BAML High Yield	8.00 %	5.04 %
Global Bonds	Citi WGBI	10.00 %	0.28 %
Emerging Market Bonds	JPM EMBI Plus	3.00 %	3.78 %
U.S. Large Cap	S&P 500	10.00 %	4.80 %
U.S. Small Cap	Russell 2000	5.50 %	6.06 %
Global Equities	MSCI ACWI NR	10.00 %	5.49 %
Foreign Developed Equities	MSCI EAFE NR	10.00 %	6.06 %
Emerging Market Equities	MSCI EM NR	3.50 %	8.39 %
GLOBAL REITS	FTSE EPRA/NAREIT Developed	5.00 %	5.77 %
Private Real Estate Property	NCREIF Property	3.00 %	3.64 %
Private Equity	Cambridge Private Equity	7.00 %	8.99 %
Hedge Funds - MultiStrategy	HFRI Fund Wtd Composite	15.00 %	3.45 %
Total			
Assumed Inflation—Mean			2.50 %
Assumed Inflation—Standard Deviation			1.85 %
Portfolio Arithmetic Mean Return			7.03 %
Portfolio Standard Deviation			11.54 %
Long-Term Expected Rate of Return			7.00 %

Discount Rate—The discount rate used to measure the total liability as of December 31, 2017 and 2016 was 7.0%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the Plans' contributions will be made in accordance with the statutory contributions determined by the Actuary. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current and inactive plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate—The following presents the net pension liability of the Plan, calculated using the discount rate of 7.00 percent; as well as what the Plan's net pension would be if it were calculated using a discount rate that is 1-percentage point lower (6.00 percent) or 1-percentage point higher (8.00 percent) than the current rate for years 2017 and 2016 respectively:

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
2017 (in thousands)			
Net pension liability	<u>\$ 1,162,878</u>	<u>\$ 753,888</u>	<u>\$ 405,522</u>
2016 (in thousands)			
Net pension liability	<u>\$ 1,376,916</u>	<u>\$ 981,012</u>	<u>\$ 643,826</u>

6. CUSTODIAL AND OTHER PROFESSIONAL SERVICES

JP Morgan Chase Bank is custodian and trustee of plan assets with the exception of Mellon asset management investments in which Mellon Bank N.A. is the custodian. JP Morgan Chase also provides cash receipt and cash disbursement services to the Plan. NEPC reviews the Plan's portfolio, the investment policies as adopted by the Investment Committee and the performance of the Investment Managers. NEPC also provides audit services for the Plan's equity portfolios. Actuarial services were provided to the Plan by Milliman Inc.

7. SUBSEQUENT EVENTS

On August 2, 2018 GAM Investments announced the suspension of all subscriptions and redemptions in its Unconstrained/Absolute Return Bond Funds ("ARBF") as at July 31, 2018, by the relevant fund boards of directors following high level of redemptions. The ARBF experienced a high level of redemption requests following the suspension of the Investment Director, Business Unit Head and leader of the Unconstrained Bond Fund portfolio management team after an internal review of the team's risk controls and practices. GAM announced that although the funds have the necessary liquidity to meet these redemption requests, it believed that such actions would lead to a disproportional shift in their portfolio composition, which could compromise the interests of remaining investors.

On August 9, 2018, MaBSTOA Pension Plan Board approved the termination of the GAM Unconstrained Bond Fund. Since that time, GAM elected to formally close the fund and distribute the proceeds in an orderly manner. Sixty (60) percent of the Plan's investment in the ARBF was returned on September 6, 2018 and an additional five (5) percent was received on October 4, 2018. GAM has indicated that it expects that twenty-five (25) percent will be returned during 2019. Ten (10) percent will be held back for some period, as the funds unwind.

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**REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)**

**MANHATTAN AND BRONX SURFACE TRANSIT
OPERATING AUTHORITY PENSION PLAN**
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS
(in millions)**

	2017	2016	2015
Total pension liability:			
Service cost	\$ 85	\$ 82	\$ 77
Interest	247	237	232
Changes of benefit terms	6	-	-
Differences between expected and actual experience	8	14	(69)
Benefit payments and withdrawals	(205)	(188)	(180)
Net change in total pension liability	141	145	60
Total pension liability—beginning	3,536	3,391	3,331
Total pension liability—ending (a)	3,677	3,536	3,391
Plan fiduciary net position:			
Employer contributions	203	221	215
Employee contributions	20	18	16
Net investment income	350	212	(24)
Benefit payments and withdrawals	(205)	(188)	(180)
Administrative expenses	-	-	-
Other	-	-	-
Net change in plan fiduciary net position	368	263	27
Plan fiduciary net position—beginning	2,555	2,292	2,265
Plan fiduciary net position—ending (b)	2,923	2,555	2,292
Employer's net pension liability—ending (a)-(b)	\$ 754	\$ 981	\$ 1,099
Plan fiduciary net position as a percentage of the total pension liability	79.49 %	72.26 %	67.58 %
Covered-employee payroll	748	713	686
Employer's net pension liability as a percentage of covered-employee payroll	100.83 %	137.54 %	160.30 %

Note: Information for periods prior to 2014 was not readily available.

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS (in thousands)

Fiscal Year Ending December 31,	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency/ (Excess)	Covered- Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2017	\$202,897	\$202,684	\$ 213	\$747,651	27.11 %
2016	220,486	220,697	(211)	713,280	30.94
2015	214,881	214,881	-	685,998	31.32
2014	226,374	226,374	-	671,633	33.70
2013	234,474	234,474	-	582,081	40.28
2012	228,918	228,918	-	575,989	39.74
2011	186,454	186,454	-	579,696	32.16
2010	200,633	200,633	-	591,073	33.94
2009	204,274	204,274	-	569,383	35.88
2008	201,919	201,919	-	562,241	35.91

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS

Note to Schedule II:

The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan are as follows:

Valuation Dates	January 1, 2017	January 1, 2016	January 1, 2015
Actuarial cost method	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)
Amortization method	For FIL bases, period specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population	For FIL bases, period specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population	For FIL bases, period specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets
Interest rate	Net rate of 7.0% for 2017, per annum, net of investment expenses	Net rate of 7.0% for 2016, per annum, net of investment expenses	Net rate of 7.0% for 2015, per annum, net of investment expenses
Inflation	2.5% per annum	2.5% per annum	2.5% per annum
Deaths after retirement	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Separations other than for normal retirement	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Rates of normal retirement	Tables based on recent experience. Rates vary by age, years of service at retirement and Tier/Plan. All members are assumed to retire by age 80	Tables based on recent experience. Rates vary by age, years of service at retirement and Tier/Plan. All members are assumed to retire by age 80	Tables based on recent experience. Rates vary by age, years of service at retirement and Tier/Plan. All members are assumed to retire by age 80
Salary increases	Reflecting general, merit and promotion increases of 3.5% to 4.0% per year for operating and non-operating employees, respectively. Larger increases are assumed in the first 5 years of a member's career.	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 15.0% for operating employees and 4.0% to 7.0% for nonoperating employees per year, depending on years of service	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 15.0% for operating employees and 4.0% to 7.0% for nonoperating employees per year, depending on years of service
Overtime	Except for managerial employees, 8.5% of base salary for operating employees and 2.0% of base salary for nonoperating employees, with different assumptions used in the year before retirement. For Tier 6 members, all overtime was assumed to be less than overtime cap	Except for managerial employees, 8.5% of base salary for operating employees and 2.0% of base salary for nonoperating employees, with different assumptions used in the year before retirement. For Tier 6 members, all overtime was assumed to be less than overtime cap	Except for managerial employees, 8.5% of base salary for operating employees and 2.0% of base salary for nonoperating employees, with different assumptions used in the year before retirement. For Tier 6 members, all overtime was assumed to be less than overtime cap
Cost-of-living adjustments	55% of inflation assumption or 1.375% per annum if applicable (2)	55% of inflation assumption or 1.375% per annum if applicable (2)	55% of inflation assumption or 1.375% per annum if applicable (2)
Provision for expenses	An average of the prior two years' administrative charges added to the normal cost	An average of the prior two years' administrative charges added to the normal cost	An average of the prior two years' administrative charges added to the normal cost

(1) Under this actuarial method, the initial liability has been established by the Entry Age Actuarial Cost Method for determining changes in the Unfunded Actuarial Accrued Liability (UAAL) due to plan provision and assumption changes.

(2) Assumes a long-term consumer price inflation assumption of 2.5% per annum, compounded annually.

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF INVESTMENT RETURNS

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. The following table displays the annual money-weighted rate of return calculated net of investment expense for the Plan for:

Fiscal Year Ended December 31	Annual Money-Weighted Rate of Return
2017	13.66 %
2016	9.16
2015	(1.05)
2014	4.95

Note: Information for periods prior to 2014 was not readily available.

Metropolitan Transportation Authority Defined Benefit Pension Plan

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016,
Supplemental Schedules, and
Independent Auditors' Report

DRAFT

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

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INDEPENDENT AUDITORS' REPORT

To the Board of Managers of Pensions
Metropolitan Transportation Authority Defined Benefit Pension Plan

Report on the Financial Statements

We have audited the accompanying statements of plan net position of the Metropolitan Transportation Authority Defined Benefit Pension Plan (the "Plan") as of December 31, 2017 and 2016, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position as of December 31, 2017 and 2016, and the respective changes in plan net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 8 and the Schedule of Changes in the Employers' Net Pension Liability and Related Ratios-Schedule I on page 49; Schedule of Employer Contributions-Schedule II on page 50-51; and Schedule of Investment Returns-Schedule III on page 52 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

January 22, 2019

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS DECEMBER 31, 2017 AND 2016 (UNAUDITED)

This management's discussion and analysis of the Metropolitan Transportation Authority Defined Benefit Pension Plan (the "Plan") financial performance provides an overview of the Plan's financial activities for the years ended December 31, 2017 and 2016. It is meant to assist the reader in understanding the Plan's financial statements by providing an overall review of the financial activities during the two years and the effects of significant changes, as well as a comparison with the prior year's activity and results. This discussion and analysis may contain opinions, assumptions, or conclusions by the MTA's management that should not be considered a replacement for, and is intended to be read in conjunction with the Plan's financial statements which begin on page 9.

Overview of Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Plan's financial statements. The basic financial statements are:

- **The Statements of Plan Net Position** — presents the financial position of the Plan at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Plan Net Position** - present the results of activities during the year. All changes affecting the assets and liabilities of the Plan are reflected on an accrual basis when the activity occurred regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- **The Notes to Financial Statements** - provides additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.
- **Required Supplementary Information** - as required by the Government Accounting Standards Board ("GASB") includes the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Investment returns.

The accompanying financial statements of the Plan are presented in conformity with accounting principles generally accepted in the United States of America as prescribed by the GASB.

CONDENSED FINANCIAL INFORMATION AND ANALYSIS

Plan Net Position

December 31, 2017, 2016 and 2015

(Dollars in thousands)

	2017	2016	2015	Increase / Decrease			
				2017-2016		2016-2015	
				\$	%	\$	%
Cash and investments	\$ 4,056,779	\$ 3,433,122	\$ 3,096,159	\$ 623,657	18.2	\$ 336,963	10.9
Receivables and other assets	3,778	1,753	2,243	2,025	115.5	(490)	(21.8)
Total assets	\$ 4,060,557	\$ 3,434,875	\$ 3,098,402	\$ 625,682	18.2	\$ 336,473	10.9
Due to broker for securities purchased	3,575	2,391	18,771	1,184	49.5	(16,380)	(87.3)
Other liabilities	5,448	12,513	4,854	(7,065)	(56.5)	7,659	157.8
Total liabilities	9,023	14,904	23,625	(5,881)	(39.5)	(8,721)	(36.9)
Plan net position restricted for pensions	\$ 4,051,534	\$ 3,419,971	\$ 3,074,777	\$ 631,563	18.5	\$ 345,194	11.2

December 31, 2017 versus December 31, 2016

Cash and investments at December 31, 2017 were \$4,056.8 million representing an increase of \$623.6 million or 18.2% from 2016. This increase is a result of investment activity and plan contributions net of benefit payments and expenses during 2017.

Receivables and other assets net of liabilities at December 31, 2017 decreased by \$7.9 million or 39.9% from 2016. The is due primarily to an increase in interest and dividend receivables in the amount of \$2.0 million, , offset by a decrease in liabilities of \$6.2 related to the reversal of employer contributions due to the Long Island Railroad Additional Pension Plan, and other net liabilities of \$0.4 million.

The plan net position held in trust for pension benefits increased by \$631.6 million or 18.5% in 2017 as a result of the changes noted above.

December 31, 2016 versus December 31, 2015

Cash and investments at December 31, 2016 were \$3,433.1 million representing an increase of \$337.0 million or 10.9% from 2015. This increase is a result of investment activity and plan contributions net of benefit payments and expenses during 2016.

Receivables and other assets net of liabilities at December 31, 2016 decreased by \$8.2 million or 215.9% from 2015. The is due primarily to a decrease in interest and dividend receivables in the amount of \$0.5 million, and a decrease in net securities sold at the end of 2015 in the amount of \$16.4 million, offset by an increase in liabilities related to investment management fees of \$2.0 million, administrative expenses of \$0.5 million and amounts due for employer contribution to the Long Island Railroad Additional Plan in the amount of \$6.2 million.

The plan net position held in trust for pension benefits increased by \$345.2 million or 11.2% in 2016 as a result of the changes noted above.

Changes in Plan Net Position

For the Years Ended December 31, 2017, 2016 and 2015

(Dollars in thousands)

	2017	2016	2015	Increase / Decrease			
				2017-2016		2016-2015	
				\$	%	\$	%
Additions:							
Net investment income	\$ 516,153	\$ 247,708	\$ (45,122)	\$ 268,445	108.4	\$ 292,830	649.0
Transfers and contributions	352,855	310,160	256,213	42,695	13.8	53,947	21.1
Total net additions	869,008	557,868	211,091	311,140	55.8	346,777	164.3
Deductions:							
Benefit payments	231,321	209,623	199,572	\$ 21,698	10.3	\$ 10,051	5.0
Transfer to NYSLERs	1,622	-	-	1,622	100.0	-	-
Administrative expenses	4,502	3,051	1,962	1,451	47.5	1,089	55.5
Total deductions	237,445	212,674	201,534	24,771	11.7	11,140	5.5
Net increase in Plan net position	631,563	345,194	9,557	286,369	82.9	335,637	3511.9
Plan net position							
restricted for pensions:							
Beginning of year	3,419,971	3,074,777	3,065,220	345,194	11.2	9,557	0.3
End of year	\$ 4,051,534	\$ 3,419,971	\$ 3,074,777	\$ 631,563	18.5	\$ 345,194	11.2

December 31, 2017 versus December 31, 2016

Net investment income increased by \$268.4 million in 2017 due to net investment gains of \$216.1 million in 2017 versus net gains of \$247.7 million experienced in 2016.

Contributions increased by \$42.7 million or 13.8% in 2017 compared to 2016 as required by the Actuarial Determined Contributions ("ADC") and member contributions from 2016 to 2017.

Benefit payments increased by \$21.7 million or 10.3% over the prior year due to a continuing trend of increases in the number of retirees and cost-of-living adjustments provided to retirees and beneficiaries.

Administrative expenses increased by \$1.4 million, or 47.5% over 2016. This increase is due primarily to expenses charged in 2017 for various services provided to the Plan.

In 2017 the Plan transferred \$1.6 million to New York State and Local Police and Fire Retirement System as required by New York State law due to transfers of membership.

December 31, 2016 versus December 31, 2015

Net investment income increased by \$292.8 million in 2016 due to net investment gains of \$247.7 million in 2016 versus net losses of \$45.1 million experienced in 2015.

Contributions increased by \$53.9 million or 21.1% in 2016 compared to 2015 as required by the Actuarial Determined Contributions ("ADC") and member contributions from 2015 to 2016.

Benefit payments increased by \$10.1 million or 5.0% over the prior year due to a continuing trend of increases in the number of retirees and cost-of-living adjustments provided to retirees and beneficiaries.

Administrative expenses increased by \$1.1 million, or 55.5% over 2015. This increase is due primarily to expenses charged in 2016 for various services provided to the Plan.

Economic Factors

Market Overview and Outlook – 2017

The equity markets continued to outperform in 2017, with foreign equities finally joining the decade-long success enjoyed by United States (“U.S.”) markets. Arriving at new highs, the S&P 500 Index generated positive performance for the ninth straight year and has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory. Outside the U.S., developed market equities were up 25% in 2017, according to the Morgan Stanley Country Index Europe Australasia Far East. And after a somewhat disappointing stretch over the past 5 years, it was emerging market equities that really outperformed last year, with returns of 38%. Not to be left out, high-yield debt and dollar-denominated emerging market bonds outperformed within credit investment space. Thus, transcending that risk-taking remained a rewarding proposition for investors.

2017 was another banner year for global equities amid optimism that U.S. corporate tax cuts would spur further fundamental performance in corporate America and that the acceleration and synchronization of global economic growth would continue unabated. Investors would be well reminded that eventually the Bull markets end and that investors have not completely abandoned the caution and vigilance necessary to survive the next downturn, whenever it may occur.

Macro Themes

- Headwinds in Emerging Markets
- Rising interest rates
- Trade uncertainty
- High valuations and increasing leverage

The macro picture was framed by higher global growth in 2017. Developed and emerging markets all saw an uptick in growth for the year. Developed markets remained mired in relatively weak growth, with Gross Domestic Product (“GDP”) growth posting its highest level (+2.5%) since 2010. This may indicate a peak level of growth as the International Monetary Fund (“IMF”) forecasts lower economic performance over the coming five years. Emerging markets posted their best GDP performance since 2013, with +4.9% growth for the year. Unlike developed markets, the IMF expects growth in emerging markets to remain buoyant through the next five years. Inflation remains subdued across the developed markets while currency depreciation and devaluations in emerging markets have led to spikes in inflation.

In 2017, a continued rise in populism globally led to a continued backlash against globalization and the liberal economic tenets that underpinned the global economy since World War II. Discontent over economic policies that produced an uneven economic recovery led to a continued questioning of the viability of the institutions of the European Union and the euro. The political stability that Europe has largely enjoyed since World War II has been eroded by elections in key countries where populist parties, on both the right and the left, have gained influence at the expense of the established broad, centrist political parties. The global trade and political regime seems to have shifted from one of cooperation and coordination to one of confrontation and competition. Large scale trade agreements, such as Trans-Pacific Partnership and North American Free Trade Agreement, will be replaced by bi-lateral agreements, raising the risk of weak implementation, confusion, and non-compliance.

The U.S. is now entering its ninth year of economic expansion following the financial crisis. Measured gains in GDP and robust job growth provided strong underpinnings for domestic equities. The U.S. economy will likely continue to grow, supported by accommodative financial conditions, including tax cuts and regulatory changes. At the same time, the excess economic capacity will provide fuel to the ongoing expansion. There is no doubt that the U.S. Federal Bank Reserve (“Fed’s”) slow pace of raising interest rates has bolstered easy financial conditions. The Fed’s will likely remain relatively accommodative, barring surprises in inflation or the labor market. The moderate unwinding of the Fed’s balance sheet and the untested impact on capital markets will continue to influence investors’ calculus of risk and reward.

Outside the United States, gradualism is the policy of choice for other major central banks: The European Central Bank’s quantitative easing program continues to expand (now at a slower rate), while the Bank of Japan is carrying on its accommodative monetary policy. Europe continues to be impacted by high levels of public debt, fractious politics and low economic growth. Like emerging markets, a significant portion of Europe’s export engine is tied to Chinese demand and growth. Lower growth in China will place pressures on Europe, in particular net exporters, such as Germany. Debt levels have not yet moderated post-financial crisis and flare-ups in periphery countries, such as in Greece, Portugal, Italy, and Spain, are likely to continue as growth remains challenged and reforms and austerity lose support. Banks will continue their deleveraging cycle should new rules (Basel III) on risk capital be implemented. In Japan, where banks are in better health, high public debt, low growth, a weakening regional economic picture, and aging demographics will challenge the government in delivering their growth and inflation targets.

Emerging markets posted solid returns in 2017 as the impact of capital flows due to the U.S. interest rate increases were much lower than expected. All eyes will continue to be on China. So far, China’s move towards an economy emphasizing services and innovation over manufacturing has taken place with minimal disruptions. We expect the country’s careful restraint over its monetary and fiscal policies to offer a smooth path for China’s massive economic evolution. That said, the world’s second largest economy remains at risk to world markets due to its sizable contribution to global growth.

United States

Markets in the U.S. were strong for the year and were amongst the best performers in 2017. U.S. equities outperformed in 2017 achieving new highs, the S&P 500 Index spent its ninth straight year in the black. The flagship U.S. index has posted 14 consecutive months of gains with only one of the last 20 quarters in negative territory.

Large Cap stocks were strongly positive, with the S&P 500 and Russell 1000 indices posting returns of (+21.8%) and (+21.7%), respectively. Small Cap and Mid Cap indices underperformed large cap. Small Cap, as measured by the Russell 2000 Index, returned (+14.6%). The Russell Mid Cap Index lagged but still posted a (+18.5%) return. Of note, growth oriented investments outperformed the value counterpart with the Russell 1000 Growth (+30.2%) outpacing the Russell 1000 Value (+13.6%).

Fixed income markets took the three rate hikes by the Fed’s in stride in 2017. Treasuries returned (+2.3%) for the year, with the assets strongest quarter coming in second quarter of 2017. Credit outperformed Treasuries for the year, with (+6.2%), posting positive returns for four straight quarters. Following strong results in 2016, high yield high yield continued its upward trend and performing well in 2017, returning (+7.5%).

International Developed

International equity markets posted strong results in 2017 and outpaced U.S. equity markets for the first time since 2012. In U.S. dollars, both Europe and Japan equities posted positive performance in 2017 with MSCI Europe returning (+25.5%) and MSCI Japan returning (+24.0%). Strong returns in Europe were driven by positive market performance and a weakening US dollar. The small cap portion of international developed markets posted even stronger returns in 2017, (+33.0%).

Fixed income markets in Europe and Japan are largely centered on government bonds, with corporate and asset-backed issuance making up a fraction of the overall markets. Global Treasuries were positive in 2017, following a slightly positive year in 2016.

Emerging Markets

Emerging markets posted strong performance in 2017 and outpaced both U.S. and international developed markets across equity and debt. The broad emerging markets index returned (+37.3%) for the year. China, a significant exposure within the emerging market index, was a strong performer, returning (+54.3%) for the year. Performance of the bond markets of emerging markets was encouraging. Both hard currency and local currency bond posted solid years in performance. Hard currency bonds, which are predominately issued in U.S. dollar, returned (+10.3%) in 2017. Local currency bonds, which are issued in the local currency, returned (+15.2%) for the year.

Commodities

Commodities posted positive performance in 2017, with the broad Bloomberg Commodity Index up (+1.7%). Industrial metals and precious metals posted strong performance for the year while agriculture was negative. Oil continued its positive rebound from 2016 with another positive year in 2017.

Contact Information

This financial report is designed to provide a general overview of the Metropolitan Transportation Authority Defined Benefit Pension Plan's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Comptroller, Metropolitan Transportation Authority, 2 Broadway, 16th Floor, New York, NY 10004.

METROPOLITAN TRANSPORTATION AUTHORITY		
DEFINED BENEFIT PENSION PLAN		
STATEMENTS OF PLAN NET POSITION		
AS OF DECEMBER 31, 2017 AND 2016		
	2017	2016
ASSETS:		
Cash	\$ 11,812	\$ 5,437
Investments at fair value (Notes 2 and 3):		
Investments measured at readily determined fair value	675,812	579,272
Investments measured at net asset value	<u>3,369,156</u>	<u>2,848,414</u>
Total investments	<u>4,044,968</u>	<u>3,427,685</u>
Receivables:		
Accrued interest and dividends	1,882	1,516
Other receivable	<u>1,896</u>	<u>236</u>
Total receivables	<u>3,778</u>	<u>1,753</u>
Total assets	<u>4,060,557</u>	<u>3,434,875</u>
LIABILITIES:		
Due to broker for securities purchased	3,575	2,391
Due to broker for investment fee	1,909	3,535
Due to broker for administrative expenses	306	181
Due to MTA for administrative expenses	2,515	2,458
Due to MTA Long Island Railroad Additional Plan - Employer contribution	-	6,185
Other liabilities	<u>719</u>	<u>153</u>
Total liabilities	<u>9,024</u>	<u>14,904</u>
PLAN NET POSITION RESTRICTED FOR PENSIONS	<u>\$ 4,051,534</u>	<u>\$ 3,419,971</u>
See notes to financial statements.		

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

STATEMENTS OF CHANGES IN PLAN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017	2016
ADDITIONS:		
Investment income:		
Net realized and unrealized gains	\$ 527,182	\$ 252,282
Dividends	35,211	28,874
Interest	6,522	5,747
Total investment income	568,915	286,903
Less:		
Investment expenses	(52,762)	(39,195)
Net investment income	516,153	247,708
Contributions:		
Employer:		
Metro-North Commuter Railroad Company	120,515	99,083
Long Island Rail Road Company	111,459	99,800
Metropolitan Transportation Authority Headquarters	33,276	31,700
MTA Bus Company	50,479	44,300
Staten Island Rapid Transit Operating Authority	6,132	5,885
Employee	30,994	29,392
Total contributions	352,855	310,160
Total additions	869,008	557,868
DEDUCTIONS:		
Benefits paid to participants	231,321	209,623
Transfer of MTA Police Employer & Employee Contributions to NYSLERs	1,622	-
Administrative expenses	4,502	3,051
Total deductions	237,445	212,674
NET INCREASE IN PLAN NET POSITION	631,563	345,194
PLAN NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	3,419,971	3,074,777
End of year	\$ 4,051,534	\$ 3,419,971

See notes to financial statements.

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

1. PLAN DESCRIPTION

The following brief description of the Metropolitan Transportation Authority (the “Authority”) Defined Benefit Pension Plan (the “Plan”) is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General — The Plan represents a cost-sharing employer defined benefit pension plan sponsored by the Authority and administered by the Board of Managers of Pensions, covering:

- (a) management employees of the Long Island Rail Road Company (“MTA Long Island Rail Road”) hired after January 1, 1988 not governed by collective bargaining agreements;
- (b) management employees of the Metro-North Commuter Railroad Company (“MTA Metro-North Railroad”) not governed by collective bargaining agreements;
- (c) represented MTA Long Island Rail Road employees hired after January 1, 1988, covered by collective bargaining agreements which provide for participation in the plan effective January 1, 2004;
- (d) certain represented MTA Metro-North Railroad employees covered by collective bargaining agreements which provide for participation in the plan effective on or after January 1, 2004;
- (e) represented and non-represented MTA Long Island Rail Road employees hired prior to January 1, 1988;
- (f) Metropolitan Suburban Bus Authority (“MTA Long Island Bus”) provided public service in Nassau and Queens Counties. The Authority’s Lease and Operating Agreement with Nassau County, dated January 15, 1973, as amended, was terminated effective December 31, 2011. As of January 1, 2012, the MTA Long Island Bus is no longer a member of the MTA Group. Represented and management Metropolitan Suburban Bus Authority (“MTA Long Island Bus”) employees hired prior to January 24, 1983 and any MTA Long Island Bus person employed by the MSBA Employees’ Pension Trust prior to July 29, 1998 under the MSBA Employees’ Pension Plan remained vested employees in the plan;
- (g) represented and management employees of the Staten Island Rapid Transit Operating Authority (“MTA Staten Island Railway”) effective January 1st, 2005;
- (h) certain represented and management employees of MTA Bus Company (“MTA Bus”), including represented and non-represented employees who were formerly employed by Liberty Lines Express, Inc., New York Bus Tours, Inc., Command Bus Company, Green Bus Lines Inc., Jamaica Buses Inc., Triboro Coach Corporation and represented and most non-represented employees formerly employed by Queens Surface Corporation; and
- (i) participants in the MTA Defined Benefit Pension Plan 20 Year Police Retirement program (“MTA Police”).

The Plan contains multiple and distinct benefit structures for MTA Metro-North Railroad and MTA Long Island Rail Road management employees, for MTA Metro-North Railroad and MTA Long Island

Rail Road represented employees, MTA Police, MTA Long Island Bus employees and MTA Staten Island Railway employees. In addition, there are multiple but distinct benefit structures for the employees of MTA Bus which are based on the plans covering those employees prior to their becoming MTA Bus employees. MTA Bus non-represented employees and employees represented by the UTLO are covered by separate programs. Assets and liabilities are pooled and a single cash contribution amount and annual pension cost is determined. The Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) and 501(b) of the Internal Revenue Code. Accordingly, the Plan is tax-exempt and is not subject to the provisions of the Employee Retirement Income Security Act ("ERISA") of 1974.

Membership of the Plan consisted of the following as of January 1, 2017 and 2016, respectively, the date of the latest actuarial valuations:

	2017	2016
Active Plan Members	18,048	17,670
Retirees and beneficiaries receiving benefits	10,861	10,701
Vested formerly active members not yet receiving benefits	<u>1,433</u>	<u>1,439</u>
Total	<u>30,342</u>	<u>29,810</u>

Funding for the Plan is provided by the Authority, MTA Metro-North Railroad, MTA Long Island Rail Road, MTA Bus and MTA Staten Island Railway which are public benefit corporations that receive a significant portion of their operating and capital financing requirements from New York City, New York State, federal and regional governmental units and from the sale of bonds to the public. Certain funding is made on a discretionary basis. The continuance of funding for the Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

Plan Administration – The Defined Benefit Plan is administered by the Board of Managers of Pensions which comprised of:

- (a) the persons holding the following positions:
 - (i) the Chairman of the MTA;
 - (ii) the MTA Chief Financial Officer;
 - (iii) the MTA Director of Labor Relations; and
 - (iv) the agency head of each participating Employer.
- (b) Designation of Others – Any member of the Board of Managers, serving as such by virtue of holding a position described in (a) of this section, may, by written authorization filed with the Secretary who shall notify the other members of the Board of Managers, designate another individual, not then a member of the Board of Managers, to serve in that member's stead, in accordance with procedures established with the approval of the Executive Director. Any such authorization may be revoked by the designating member at any time in writing filed in the same manner.
- (c) The Board of Managers shall be the agent for the service of legal process with respect to the Plan. No bond or other security is required in any jurisdiction of the Board of Managers or any member thereof except as required by law.

Pension Benefits — Retirement benefits are paid from the Plan to covered MTA Metro-North Railroad, MTA Staten Island Railway and post—1987 MTA Long Island Rail Road employees as service retirement allowances or early retirement allowances. A participant is eligible for a service retirement allowance upon termination if the participant satisfied both age and service requirement. A participant is eligible for an early retirement allowance upon termination if the participant has attained age 55 and completed at least 10 years of credited service. Terminated participants with 5 or more years of credited

service who are eligible for a deferred vested benefit are not eligible to receive a service retirement allowance or early retirement allowance. Deferred vested benefits are payable on an unreduced basis on the first day of the month following the participant sixty-second birthday. Effective in 2007, members and certain former members who become (or became) employed by another MTA agency which does not participate in the Plan continue to accrue service credit based on such other employment. Upon retirement, the member's vested retirement benefit from the Plan will be calculated on the final average salary of the subsequent MTA agency, if higher. Moreover, the Plan benefit will be reduced by the benefit, if any, payable by the other plan based on such MTA agency employment. Such member's disability and ordinary death benefit will be determined in the same way.

Retirement benefits are paid from the Plan under the MTA 20-Year Police Retirement Program. A participant is eligible for service retirement at the earlier of completing 20 years of credited Police service or attainment of age 62. Terminated participants with five years of credited police service, who are not eligible for retirement, are eligible for a deferred benefit. Deferred vested benefits are payable on the first of the month following the participant's attainment of age 55.

Retirement benefits paid from the Plan to covered represented MTA Bus employees include service retirement allowances or early retirement allowances. Under the programs covering all represented employees at Baisley Park, Eastchester, La Guardia, Spring Creek, and Yonkers Depots and the represented employees at College Point Depot, JFK, Far Rockaway a participant is eligible for a service retirement allowance upon termination if the participant has attained age 65 and completed at least 5 years of credited service or if the participant has attained age 57 and completed at least 20 years of credited service. A participant hired prior to June 2009 from Baisley Park, College Point, and La Guardia Depots is eligible for an early retirement allowance if the participant has attained age 55 and completed 20 years of credited service. Terminated participants with 5 or more years of credited service who are not eligible to receive a service retirement allowance or early retirement allowance are eligible for a deferred vested benefit. Deferred vested benefits are payable on an unreduced basis on or after the participant attains age 65.

The MTA Bus retirement programs covering TWU, ATU and TSO represented employees are fixed dollar plans, i.e., the benefits are a product of credited service and a specific dollar amount.

The retirement benefits for certain former employees of the Alliance Companies are based on a participant's service and final average salary. A normal retirement benefit is payable when the participant attains age 62 with 5 years of service. An early retirement benefit is payable when the participant attains age 55 with 15 years of service. The retirement benefit is payable as a single life annuity or, for married participants, as an unreduced 75% joint and survivor annuity.

MTA Bus non-represented employees and employees represented by the UTLO as of January 1, 2017 will earn benefits under a new set of programs. For service prior to 2017, a component calculated by a flat monthly dollar rate multiplied by years of credited service will be added to a final average salary (FAS) component, based on the platforms provided to similarly situated MaBSTOA Pension Plan members. For service on or after January 1, 2017, the final average salary component platform will be based on date of hire, years of credited service and whether the participant holds an operating or non-operating title. Certain former Liberty Lines employees assigned to the former Liberty Lines bus routes also are eligible for a supplemental plan benefit of 0.75% of final average salary per year of Plan service.

An MTA Bus non-represented or UTLO operating employee hired prior to April 1, 2012 participates in a Tier 4 25/55 operating retirement platform. A Tier 4 25/55 operating retirement platform participant with 25 years of Allowable Service receives upon retirement at age 55 a flat rate benefit equal to \$1,380.00 (\$115 x 12) for each year of service prior to January 1, 2017, plus a FAS benefit equal to 2% multiplied by FAS multiplied by service accrued after January 1, 2017, up to 30 years of total service, plus 1.5% multiplied by FAS multiplied by service accrued after January 1, 2017 in excess of 30 years of total service.

An MTA Bus non-represented non-operating employee hired prior to April 1, 2012 participates in a Tier 4 57/5 non-operating retirement platform. A Tier 4 57/5 non-operating retirement platform participant receives upon retirement at age 57 a flat rate benefit equal to \$1,380.00 (\$115 x 12) for each year of service prior to January 1, 2017, plus a FAS benefit equal to, for those with less than 20 years of total service, 1 2/3% multiplied by FAS multiplied by total service accrued after January 1, 2017, or, for those with 20 or more years of total service, 2% multiplied by FAS multiplied by total service accrued after January 1, 2017, up to 30 years of total service, plus 1.5% multiplied by FAS multiplied by total service accrued after January 1, 2017 in excess of 30 years of total service.

An MTA Bus non-represented or UTLO operating employee hired on or after April 1, 2012 participates in a Tier 6 25/55 operating retirement platform. A Tier 6 25/55 operating retirement platform participant with 25 years of Allowable Service receives upon retirement at age 55 a flat rate benefit equal to \$1,380.00 (\$115 x 12) for each year of service prior to January 1, 2017, plus a FAS benefit equal to 2% multiplied by FAS multiplied by service accrued after January 1, 2017 up to 30 years of total service, plus 1.5% multiplied by FAS multiplied by service accrued after January 1, 2017 in excess of 30 years of total service. The flat rate benefit is vested after the completion of five years of total service and the FAS benefit is vested after the completion of ten years of total service.

An MTA Bus non-represented non-operating employee hired on or after April 1, 2012 participates in a Tier 6 63/10 non-operating retirement platform. A Tier 6 63/10 non-operating retirement platform participant receives upon retirement at age 63 a flat rate benefit equal to \$1,380.00 (\$115 x 12) for each year of service prior January 1, 2017, plus a FAS benefit equal to, for those with less than 20 years of total service, 1.67% multiplied by FAS multiplied by total service accrued after January 1, 2017, or, for those with 20 or more years of total service, 1.75% multiplied by FAS multiplied by total service accrued after January 1, 2017, up to 20 years of such service, plus 2% multiplied by FAS multiplied by total service accrued after January 1, 2017 in excess of 20 years of total service. The flat rate benefit is vested after the completion of five years of total service and the FAS benefit is vested after the completion of ten years of total service.

Reduced early retirement benefits are payable under all platforms. The Tier 6 definition of wages includes an overtime ceiling which limits overtime compensation for pension purposes to no more than \$15,721 for 2016, and \$16,048 for 2017, indexed annually thereafter. Any overtime compensation earned in excess of the overtime ceiling is excluded from the final average salary calculation. The Tier 6 definition of wages also excludes wages in excess of the annual salary paid to the New York State Governor, lump-sum payments for deferred compensation, sick leave, accumulated vacation or other credits for time not worked.

TWU, ATU and TSO members who retire after November 16, 2016, and UTLO members and non-represented employees who retire after January 1, 2017 will have their pension benefit increased by a Cost of Living Adjustment (COLA). The COLA is an annual adjustment to the retirement benefit based on the Consumer Price Index (CPI). The following retirees are eligible to receive a COLA: disability retirees, regardless of age, who have been retired for at least 5 years; retirees who are at least age 62 and have been retired for at least 5 years; and retirees who are at least age 55 and have been retired for at least 10 years. Surviving spouses receiving a joint-and-survivor option benefit are eligible to receive 50% of the monthly COLA that would have been paid to the retiree. For TWU, ATU and TSO members, the COLA calculation is based on the first \$18,000 of the retiree's normal retirement benefit. For UTLO members and non-represented employees, the COLA calculation is based on the first \$18,000 of the retiree's final average salary benefit component. The COLA amount may not be less than 1% nor more than 3% in any year. Once COLA payments begin, they continue automatically and increase each September.

Pre-1988 MTA Long Island Rail Road participants are eligible for a service retirement allowance upon termination if the participants have either: (a) attained age 65 and completed at least 5 years of credited service, or if an employee on January 1, 1988 completed at least 10 years of credited service, or

(b) attained age 50 and has completed at least 20 years of credited service. Terminated participants who were not employees on January 1, 1988 with 5 or more years of credited service are eligible for a deferred vested benefit. Pension benefits payable to age 65, where eligible, are calculated as 2% of the employee's applicable final average earnings for each year of qualifying service up to 25 years plus 1.5% of applicable final average earning of each year of qualifying service in excess of 25 years. For pension benefits payable at and after age 65 regardless of whether benefits commenced before or after the employee attained age 65, benefits are calculated in the same manner as pension benefits payable prior to age 65 except that the amount so determined is reduced by a percentage of the employee's annuity (not including supplemental annuity) value at age 65 under the Federal Railroad Retirement Act.

The reduction of pension benefits for amounts payable under the Federal Railroad Retirement Act is 50%.

Death and Disability Benefits — In addition to service retirement benefits, participants of the Plan are eligible to receive disability retirement allowances and death benefits. Participants who become disabled may be eligible to receive disability retirement allowances after 10 years of covered MTA Bus service; 10 years of credited service for covered MTA Metro-North Railroad and MTA Long Island Rail Road management and represented employees, covered MTA Staten Island Railway employees and covered MTA police participants.

The disability retirement allowance for covered MTA Metro-North Railroad and MTA Long Island Rail Road management and represented covered MTA Staten Island Railway employees is calculated based on the participant's credited service and final average salary ("FAS") but not less than $\frac{1}{3}$ of FAS. Under the MTA 20 Year Police Retirement Program, a disabled participant may be eligible for one of three forms of disability retirement: (a) ordinary disability which is payable if a participant has 10 years of credited Police service and is calculated based on the participant's credited Police service and FAS but not less than $\frac{1}{3}$ of FAS; (b) performance of duty, which is payable if a participant is disabled in the performance of duty and is $\frac{1}{2}$ of FAS, and (c) accidental disability, which is payable if a participant is disabled as the result of an on-the-job accidental injury and is $\frac{3}{4}$ of FAS subject to an offset of Workers' Compensation benefits. Pursuant to the MTA Bus programs, the disability benefit is the same as the service retirement benefit.

Pre-1988 MTA Long Island Rail Road participants who become disabled after accumulating 10 years of credited service and who meet the requirements as described in the Plan may be eligible to receive a disability benefit. Disability pension benefits are calculated based on the participant's qualified service and a percentage of final average compensation reduced by the full amount of the disability benefit under the Federal Railroad Retirement Act.

Survivorship benefits for pre-1988 MTA Long Island Rail Road participants are paid to the spouse when a survivorship option is elected or when an active participant has not divested their spouse of benefits. The survivorship benefit is payable at the time of death or when the vested participant would have attained an eligible age. The amount payable is in the form of an annuity. A lump sum death benefit no greater than \$5,000 is payable upon death on behalf of a non-vested participant or vested participant whose pension rights were waived.

Death benefits are paid to the participant's beneficiary in the event of the death of a covered MTA Metro-North Railroad, post-1987 MTA Long Island Rail Road or MTA Staten Island Railway employee after completion of one year of credited service. The death benefit payable is calculated based on a multiple of a participant's salary based on years of credited service up to three years and is reduced beginning at age sixty-one. There is also a post-retirement death benefit which, in the 1st year of retirement, is equal to 50% of the pre-retirement death benefit amount, 25% the 2nd year and 10% of the death benefit payable at age 60 for the 3rd and later years. For the Police 20 Year Retirement Program, the death benefit is payable after ninety days of credited MTA Police service, and is equal to three times their salary. For non-Police groups, this death benefit is payable in a lump sum distribution while for Police, the member or the beneficiary can elect to have it paid as an annuity. The MTA Police do not have a post retirement benefit.

In the MSBA Employees' Pension Plan, there are special spousal benefits payable upon the death of a participant who is eligible for an early retirement benefit, or a normal service retirement benefit, or who is a vested participant or vested former participant. To be eligible, the spouse and participant must have been married at least one year at the time of death. Where the participant was eligible for an early service retirement benefit or was a vested participant or former participant, the benefit is a pension equal to 40% of the benefit payable to the participant as if the participant retired on the date of death. Where the participant was eligible for a normal service retirement benefit, the eligible spouse can elect either the benefit payable as a pension, as described in the prior sentence, or a lump sum payment based on an actuarially determined pension reserve. If there is no eligible spouse for this pension reserve benefit, a benefit is payable to the participant's beneficiary or estate.

Moreover, an accidental death benefit is payable for the death of a participant who is a covered MTA Metro-North Railroad or post-1987 MTA Long Island Rail Road employee, a covered MTA Staten Island Railway employee or a covered MTA Police member and dies as the result of an on-the-job accidental injury. This death benefit is paid as a pension equal to 50% of the participant's salary and is payable to the spouse for life, or, if none, to children until age 18 (or 23, if a student), or if none, to a dependent parent.

For MTA Bus employees, there is varied death benefit coverage under the Plan. For all represented and non-represented MTA Bus employees at Eastchester and Yonkers Depots and represented MTA Bus employees at Baisley Park, College Point, Far Rockaway, JFK, La Guardia and Spring Creek Depots, if a participant dies prior to being eligible for a retirement benefit, the participant's beneficiary may elect to receive a refund of the participant's contributions plus interest.

Moreover, the spouses of the above employees who are vested are entitled to a presumed retirement survivor annuity which is based on a 50% Joint and Survivor annuity. The date as of which such annuity is determined and on which it commences varies among the different programs depending on whether the participants are eligible for retirement and for payment of retirement benefits.

In addition, the spouse of a non-represented MTA Bus employee at Spring Creek, JFK, La Guardia, Baisley Park and Far Rockaway, if such employee is age 55 and has 15 years of service and is a terminated member with a vested benefit which is not yet payable, may elect the presumed retirement survivor annuity or 1/2 the participant's accrued benefit paid monthly and terminating on the 60th payment or the spouse's death. The spouse of a non-represented MTA Bus employee at Yonkers Depot may also receive a pre-retirement survivor annuity from the supplemental plan. If there is no such spouse, the actuarial equivalent of such annuity is payable.

The dependent children of MTA Bus TWU employees of College Point, Baisley Park, and La Guardia hired prior to June 9, 2009 are also entitled to an annuity based on the spouse's pre-retirement survivor annuity (1/2 of the spouse's annuity is payable to each child, but no more than 100% of the spouse's annuity is payable). In addition, the dependent children of retirees who were MTA Bus employees at these Depots are entitled to an annuity based on the presumed retirement survivor's annuity (25% of the spouse's annuity; but no more than 50% of the spouse's annuity is payable).

Retirement benefits establishment and changes for represented employees are collectively bargained and must be ratified by the respective union and the MTA Board. For non-represented employees, retirement benefit adopted and modifications thereto, are presented to the MTA Board and must be accepted and approved by the MTA Board.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting — The Plan's financial statements are prepared on the accrual basis of accounting under which deductions are recorded when the liability is incurred and additions are recognized in the accounting period in which they are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Contributions from members are recorded when the employer

makes payroll deductions from plan members. Employer contributions are recognized when due in accordance with the terms of the Plan. Additions to the Plan consist of contributions (member and employer) and net investment income. Investment purchases and sales are recorded as of trade date.

The accounting and reporting policies of the Plan conform to accounting principles generally accepted in the United States of America (GAAP).

New Accounting Standards Adopted – The Plan adopted GASB Statement No. 73 *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. The requirements of GASB Statement No. 73, extend the approach to accounting and financial reporting established in Statement No. 68 to all pensions, with modifications as necessary to reflect that for accounting and financial reporting purposes, any assets accumulated for pensions that are provided through pension plans that are not administered through trusts that meet the criteria specified in Statement No. 68 should not be considered pension plan assets. It also requires that information similar to that required by Statement No. 68 be included in notes to financial statements and required supplementary information by all similarly situated employers and nonemployer contributing entities. This Statement also clarifies the application of certain provisions of Statement Nos. 67 and 68 with regard to the following issues: 1) Information that is required to be presented as notes to the 10-year schedules of required supplementary information about investment-related factors that significantly affect trends in the amounts reported; 2) Accounting and financial reporting for separately financed specific liabilities of individual employers and nonemployer contributing entities for defined benefit pensions; 3) Timing of employer recognition of revenue for the support of nonemployer contributing entities not in a special funding situation. There was no material impact on the Plan's financial statements as a result of the implementation of GASB Statement No. 73.

Recent Accounting Pronouncements — Not yet adopted

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
84	<i>Fiduciary Activities</i>	2019
85	<i>Omnibus 2017</i>	2018

Use of Estimates — The preparation of the Plan's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates include fair market value of investments, the annual required contribution and the unfunded actuarial accrued liability.

Benefits — Benefits are recorded when paid.

Contributions - As a condition of participation in the MTA Defined Benefit Pension Plan ("MTADBPP" or the "Plan"), employers and employees are required to contribute to the Plan. The amount of the employer contributions is determined by the Plan actuaries. Employee contribution rates for represented employees are determined by collective bargaining. Employee contribution rates for non-represented employees are set forth in the Plan document as adopted by the MTA Board. If an employee terminates employment with less than 10 (ten) years of credited service in the Plan, the employee may request a refund of his employee contributions with interest. Upon receipt of this refund of contributions, the employee has no claim on any future benefit from the Plan. Employees with more than 10 years of credited service, except for a small group of MTA Bus participants, cannot withdraw their contributions.

Members of the MTA Police Program who have transferred pursuant to Retirement and Social Security Law Section 343 and have not been employed in the MTA Police Program for 15 years may, upon termination of employment, withdraw member contributions. The withdrawal of such transferred police service member contributions shall not terminate membership and rights in the MTA Police Program attributable to Credited Police Service.

Income - Dividend and interest income are recorded when earned.

Securities - Purchases and sales of securities are recorded on a trade-date basis.

Asset Transfers — No assets were transferred to the MTA Defined Benefit Pension Plan for the years 2017 and 2016 respectively.

Administrative Expenses — Administrative expenses of the Plan are paid for by the Plan.

3. CASH AND INVESTMENTS

Investment Policy – The Plan's policy statement is issued for the guidance of fiduciaries, including the members of the Board and investment managers, in the course of investing the assets of the Trust. The investments of the Trust will be made for the exclusive benefit of the Plan participants and their beneficiaries. Policy guidelines may be amended by the Board upon consideration of the advice and recommendations of the investment professionals.

In order to have a reasonable probability of achieving the target return at an acceptable risk level, the Board has adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on, at least, a quarterly basis and will be readjusted when an asset class weighting is outside its target range. The following was the MTA Defined Benefit Pension Plan Board adopted asset allocation policy as at December 31, 2017.

Asset Class	Target Allocation (%)	Target Range (%)	Policy Benchmark
Equities	29.0	24-34	
Domestic Large Cap	10.0	5-15	S&P 500
Domestic Small Cap	5.5	2-10	Russell 2000
International Developed Markets Equities	10.0	5-15	MSCI EAFE
Emerging Markets Equities	3.5	2-6	MSCI Emerging Markets
Fixed Income	15.0	9-21	Manager Specific
Global Asset Allocation*	20.0	15-33	50% World Equity/ 50% Citigroup WGBI unhedged
Opportunistic Investments	6.0	0-15	Manager Specific
Absolute Return	15.0	10-22	Manager Specific
Real Assets	5.0	0-10	Manager Specific
Real Estate	3.0	0-10	Manager Specific
Private Equity	7.0	0-10	Venture Economics
Total	100.0		

* The Global Asset Allocation managers will invest across numerous liquid asset classes including: stocks, bonds, commodities, TIPS and REITs.

Investment Objective — The investment objective of the funds is to achieve consistent positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation.

Investment Guidelines — The Board of Pension Managers executes investment management agreements with professional investment management firms to manage the assets of the Plan. The fund managers must adhere to guidelines that have been established to limit exposure to risk.

All securities managers shall be registered advisors under the Investment Advisors Act of 1940.

The overall capital structure targets and permissible ranges for eligible asset classes of the Trust are detailed within the Investment Policy Statement. Full discretion, within the parameters of the guidelines described herein and in any individual investment policy associated with that allocation, is granted to the investment managers regarding the asset allocation, the selection of securities, and the timing of transactions. It is anticipated that the majority of investment managers will be funded through commingled funds, however, in some cases (likely equity and fixed income mandates) separate account vehicles may be utilized. For separate accounts, individual manager guidelines and/or exemptions are specified in each approved investment management agreement (“IMA”). Should there be conflicts, the individual manager guidelines set forth in the IMA supersede the general guidelines in the Investment Policy Statement. For commingled funds, investment guidelines and/or exemptions are specified in such vehicle’s offering documents. Should there be conflicts, the individual vehicle’s investment guidelines supersede the general guidelines in the Investment Policy Statement.

Individual investment manager benchmarks and performance requirements are specified within the Investment Policy Statement. Performance of the Trust will be evaluated on a regular basis. Evaluation will include the degree to which performance results meet the goals and objectives as herewith set forth. Toward that end, the following standards will be used in evaluating investment performance:

1. The compliance of each investment manager with the guidelines as expressed herein, and
2. The extent to which the total rate of return performance of the Trust achieves or exceeds the targeted goals.

Fixed Income Investment Managers

- Domestic fixed income investments are permitted, subject to the guidelines reflected in Investment Policy Statement. Yankee bonds, which are dollar denominated foreign securities, may be held by each domestic manager in proportions which each manager shall deem appropriate.
- International fixed income securities are permitted, subject to the guidelines reflected in Investment Policy Statement. Generally defined, the Citigroup World Government Bond Index represents the opportunity set for international developed markets. The J.P. Morgan Emerging Markets Bond Index-Global represents the opportunity set for international emerging markets denominated in USD. The J.P. Morgan GBI-EM Global Diversified Index represents the opportunity set for international emerging markets denominated in local currency. These index references are guidelines and do not prohibit investment in securities outside those indexes.
- Investment managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments regardless of the classifications provided by rating agencies.
- The average duration (interest rate sensitivity) of an actively managed fixed income portfolio shall range within two years of the benchmark’s duration.
- For domestic fixed income portfolios, individual manager account for the securities of an individual issuer, excepting the U.S. government and U.S. government agencies, shall not constitute more than 5% at market at any time.
- For international bond portfolios, individual manager account for the securities of any non-governmental issuer shall not constitute more than 5% at market at any time.

Equity Investment Managers

- Domestic equity investments are permitted, subject to the guidelines. American Depositary Receipts (ADRs), which are dollar denominated foreign securities traded on the domestic U.S. stock exchanges (e.g., Reuters, Nestle, Sony) may be held by each domestic stock manager in proportions which each manager shall deem appropriate.
- International equities are permitted, subject to the guidelines. Generally defined, the Morgan Stanley EAFE (Europe, Australasia and the Far East) Index represents the opportunity set for international developed markets. The Morgan Stanley Emerging Markets Free Index represents the opportunity set for international emerging markets. These index references are guidelines and do not prohibit investment in securities outside those indexes.
- The equity specialists may vary equity commitment from 90% to 100% of assets under management.
- Individual manager account may hold no more than 8% at market or 1.5x the manager's benchmark weight (whichever is greater) of any single company's stock.

Overlay Manager(s).

- For a variety of reasons, the investment program may carry large amounts of cash throughout the year. In order to achieve the actuarial assumed returns on the total investment program, the Board may retain a futures overlay manager. The overlay manager shall use exchange traded futures contracts to expose the cash to the long-term target asset allocation.
- In addition, the overlay manager may be utilized for the following:
 - a) Expose un-invested assets of domestic and international equity investment managers to their respective equity benchmarks through the use of futures contracts,
 - b) Assist the Board in rebalancing, transitions, and/or gaining exposure to approved asset classes,
 - c) Provide the market (or "beta") exposures in a portable alpha program.
 - d) The overlay manager shall ensure that all futures positions are fully collateralized and the manager is prohibited from leveraging any portion of the portfolio.

Alternative Investments Managers

Alternative investments are broadly categorized into the following categories:

- Opportunistic
- Real assets
- Real estate
- Absolute return
- Private equity

Common features of alternative investments are limited liquidity, the use of derivatives, leverage and shorting, lower regulatory oversight, limited transparency, and high fees. Compensating for these risks, these investments offer the potential of diversification and/or higher rates of return over time

Derivatives Policy

Where appropriate, investment managers may use derivative securities for the following reasons:

- Hedging. To the extent that the portfolio is exposed to clearly defined risks and there are derivative contracts that can be used to reduce those risks, the investment managers are permitted to use such derivatives for hedging purposes, including cross-hedging of currency exposures.

- **Creation of Market Exposures.** Investment managers are permitted to use derivatives to replicate the risk/return profile of an asset or asset class provided that the guidelines for the investment manager allow for such exposures to be created with the underlying assets themselves.
- **Management of Country and Asset Allocation Exposure.** Investment managers charged with tactically changing the exposure of their portfolio to different countries and/or asset classes are permitted to use derivative contracts for these purposes.
- Additional uses of derivatives shall be approved by the Board or set forth in the individual investment guidelines or the offering documents prior to implementation and shall be restricted to those specific investment managers.

Ineligible Investments (Separately Managed Accounts)

Unless specifically approved by the Board or set forth in the individual investment guidelines, certain securities, strategies and investments are ineligible for inclusion within separately managed accounts. Among these are:

- Privately-placed or other non-marketable debt, except securities issued under Rule 144a,
- Lettered, legend or other so-called restricted stock,
- Commodities
- Short sales, and,
- Direct investments in private placements, real estate, oil and gas and venture capital, or funds comprised thereof.

Exceptions:

The Board of Managers, in recognition of the benefits of commingled funds as investment vehicles (i.e., the ability to diversify more extensively than in a small, direct investment account and the lower costs which can be associated with these funds) may, from time to time, allow investment in such funds. The Board recognizes that it cannot give specific policy directives to a fund whose policies are already established; therefore, the Board is relying on the investment consultant to assess and monitor the investment policies of any funds used by the Plan to ascertain whether they are appropriate.

Investment Valuation and Income Recognition — Investments are presented at fair value based on information provided by JP Morgan Chase (the “trustee”), New England Pension Consultant (“NEPC”), and the investment managers. The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available, or net asset value, which is determined to be a practical expedient for measuring fair value. Many factors are considered in arriving at that value. Corporate debt securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings. All investments are registered, with securities held by the Plan’s trustee, in the name of the Plan. Gains and losses on investments that were sold during the year are included in the statement of plan net position.

Risks and Uncertainties — The Plan’s investments are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities and level of uncertainty related to changes in the value of investment securities, it is possible that changes in risks in the near term would materially affect the amounts reported in the Plan’s financial statements.

The financial markets, both domestically and internationally, have demonstrated significant volatility on a daily basis, which affects the valuation of investments. The Plan utilizes asset allocation strategies that are intended to optimize investment returns over time in accordance with investment objectives and with acceptable levels of risk.

Investments measured at readily determined fair value (FV)
(In Thousands)

	December 31, 2017	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity Securities:				
Separate account large-cap equity funds	\$ 261,754	261,754	\$ -	\$ -
Separate account small-cap equity funds	180,105	180,105	-	-
Separate account small-Real Estate Investments	41,206	41,206	-	-
Total equity investments	483,065	483,065	-	-
Debt Securities				
Separate account debt funds	192,747	-	192,747	-
Total debt investments	192,747	-	192,747	-
Total investments by fair value	\$ 675,812	483,065	192,747	\$ -

Investments measured at the net asset value (NAV)				
(In Thousands)				
	December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Comingled large cap equity funds	\$ 128,693	\$ -	Daily	None
Comingled international equity funds	539,445	-	Daily	None
Comingled emerging market equity funds	138,633	-	Daily, monthly	None
Total equity investments measured at the NAV	806,772	-		
Debt Securities				
Comingled debt funds	347,413	-	Daily, monthly, quarterly	None
Mutual fund	63,601	-	Daily	None
Total debt investments measured at the NAV	411,013	-		
Absolute return:				
Directional	111,615	-	Monthly	3-60 days
Direct lending	158,246	11,201	Bi-annually	60 plus days
Distressed securities	41,882	-	Not eligible	N/A
Credit long	63,562	-	Quarterly	3-30 days
Credit long/short	73,602	-	Quarterly	3-60 days
Equity long/short	59,718	-	Quarterly	3-60 days
Event driven	89,310	1,872	Quarterly, Bi-annually	60-120 days
Global macro	84,451	-	Monthly	3-30 days
Global tactical asset allocation	271,887	-	Daily, monthly	3-30 days
Multistrategy	117,063	-	Monthly	3-30 days
Risk parity	365,708	-	Not eligible	N/A
Structured credit	16,029	-	Not eligible	N/A
Total absolute return measured at the NAV	1,453,073	13,073	Not eligible	N/A
Private equity - private equity partnerships	276,817	189,147		N/A
Real assets			Not eligible	N/A
Comingled commodities fund	-	-	Not eligible	N/A
Comingled real estate funds	215,313	-	Not eligible	N/A
Energy	56,951	17,863	Not eligible	N/A
Infrastructure	23,995	7,879	Not eligible	N/A
Total real assets measured at the NAV	296,259	25,742		
Short term investments measured at the NAV	125,222			
Total investments measured at the NAV	\$ 3,369,156	\$ 227,962		

Investments measured at readily determined fair value (FV)				
(In Thousands)				
		Quoted Price in		
		Active Markets for		Significant
	December 31,	Identical Assets	Significant Other	Significant
	2016	Level 1	Observable Inputs	Unobservable Inputs
			Level 2	Level 3
Equity Securities:				
Separate account large-cap equity funds	\$ 223,862	\$ 223,862	\$ -	\$ -
Separate account small-cap equity funds	152,723	152,723	-	-
Separate account real estate investment trust	34,456	34,456	-	-
Total equity investments	411,040	411,040	-	-
Debt Securities				
Separate account debt funds	168,231	-	168,231	-
Total debt investments	168,231	-	168,231	-
Total investments at readily determined FV	\$ 579,272	\$ 411,040	\$ 168,231	\$ -

Investments measured at the net asset value (NAV)

(In Thousands)

	December 31, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 99,078	\$ -	Daily	None
Commingled international equity funds	392,792	-	Daily	None
Commingled emerging market equity funds	102,928	-	Daily, monthly	None
Total equity investments measured at the NAV	594,798	-		
Debt Securities				
Commingled debt funds	328,325	-	Daily, monthly, quarterly	None
Mutual funds	45,969	-	Daily	None
Total debt investments measured at the NAV	374,294	-		
Absolute return:				
Directional	94,619		Monthly	3-60 days
Direct lending	150,769	10,371	Bi-annually	60 plus days
Distressed securities	34,332	-	Not eligible	N/A
Credit long	55,796	-	Quarterly	3-30 days
Credit long/short	67,706	-	Quarterly	3-60 days
Equity long/short	67,891	-	Quarterly	3-60 days
Event driven	85,468	1,893	Quarterly, Bi-annually	60-120 days
Global macro	84,803	-	Monthly	3-30 days
Global tactical asset allocation	205,446	-	Daily, monthly	3-30 days
Market neutral	154	-	Quarterly	3-60 days
Multistrategy	106,269	-	Quarterly	3-60 days
Risk parity	331,439	-	Monthly	3-30 days
Structured credit	17,871	44,613	Not eligible	N/A
Total absolute return measured at the NAV	1,302,562	56,877		
Private equity - private equity partnerships	216,042	183,553	Not eligible	N/A
Real assets				N/A
Commingled commodities fund	98,087	-	Not eligible	N/A
Commingled real estate funds	102,127	-	Not eligible	N/A
Energy	44,762	28,025	Not eligible	N/A
Infrastructure	13,849	18,292	Not eligible	N/A
Total real assets measured at the NAV	258,825	46,317		
Short term investments measured at the NAV	101,893	-		
Total investments measured at the NAV	2,848,414	\$ 286,746		
Total investments at fair value	\$ 3,427,685			

Concentration of Credit Risk – Individual investments held by the Plan that represents 5.0% or more of the Plan's net assets available for benefits at December 31, 2017 and 2016 are as follows:

(In Thousands)

2017

2016

Investments at fair value as determined by quoted
market prices:

GAM Unconstrained Bond Fund \$ - \$ 174,184

Credit Risk — At December 31, 2017 and 2016, the following credit quality rating has been assigned by a nationally recognized rating organization:

(In Thousands)				
	2017	Percentage of	2016	Percentage of
Quality Rating	Fair Value	Fixed Income	Fair Value	Fixed Income
		Portfolio		Portfolio
AAA	\$ 158,310	19.05 %	\$ 57,582	7.07 %
AA	28,001	3.37	18,098	2.22
A	85,769	10.32	63,204	7.77
BBB	119,714	14.41	148,521	18.25
BB	93,143	11.21	89,104	10.95
B	60,596	7.29	57,947	7.12
CCC	7,443	0.90	9,812	1.21
CC	956	0.11	1,516	0.19
C	84	0.01	3,592	0.44
D	17	-	-	-
Not Rated	<u>138,278</u>	<u>16.64</u>	<u>132,234</u>	<u>16.24</u>
Credit risk debt securities	692,311	83.31	581,611	71.46
U.S. Government bonds	<u>138,715</u>	<u>16.69</u>	<u>232,312</u>	<u>28.54</u>
Total fixed income securities	831,026	<u>100.00 %</u>	813,922	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>3,213,942</u>		<u>2,613,763</u>	
Total investments	<u>\$ 4,044,968</u>		<u>\$ 3,427,685</u>	

Interest Rate Risk Exceptions — Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice versa. Duration is an indicator of bond price's sensitivity to 100 basis point change in interest rates.

Investment Fund (In Thousands)	2017		2016	
	Fair Value	Duration	Fair Value	Duration
Chase	\$ 192,071	11.44	\$ 170,836	11.54
Allianz Structured Alpha Fund	111,615	0.13	92,480	0.25
Wellington Blended Emerging Market Debt	78,753	5.70	47,716	5.55
Bridgewater All Weather Fund	86,942	7.70	96,686	9.00
Wellington Opportunistic Fund	34,515	1.70	23,202	1.91
Bridgewater Pure Alpha Fund	(121,986)	(7.90)	2,174	(3.54)
Bridgewater Markets Fund	(13,934)	(0.80)	9,137	1.40
GAM Unconstrained Bond Fund	168,253	(0.17)	174,184	0.25
Northern Trust William Capital	8,341	-	8,374	-
Park Square Capital Credit Opportunities Fund	33,041	-	33,504	0.54
Libremax Partners Fund	15,677	3.87	5,498	5.02
Gramercy Distressed Opportunistic Fund	12,765	(0.05)	9,605	(0.48)
Makuria Credit Fund	31,449	5.50	14,118	1.05
Crescent Capital High Income Fund	30,205	2.43	28,697	2.61
Fir Tree realization Value Fund	6	-	100	-
Wellington Global Managed Risk Fund	103,617	10.60	52,670	6.70
State Street Real Asset Fund	25,237	5.84	-	-
EIG Energy Fund XV	4,109	-	-	-
EIG Energy Fund XVI	5,638	-	-	-
Wellington rust Collective Investment Fund and Diversified Inflation Fund	-	-	23,384	0.88
Canyon Value Realization Fund	24,712	2.50	21,558	1.90
Total fixed income securities	831,026		813,922	
Portfolio modified duration		6.96		4.60
Investments with no duration reported	\$ 3,213,942		\$ 2,613,763	
Total investments	\$ 4,044,968		\$ 3,427,685	

Foreign Currency Risk — Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Each investment manager, through the purchase of units in a commingled investment trust fund or international equity mutual fund establishes investments in international equities. The Plan also holds investments in American Depositary Receipts (“ADRs”) which are not included in the below schedule since they are denominated in U.S. dollars and accounted for at fair market value.

In addition, the Plan has investments in foreign stocks and/or bonds denominated in foreign currencies. The Plan's foreign currency exposures as of December 31, 2017 and 2016 are as follows (amounts in U.S. dollars, in thousands):

Foreign Currency Holdings in US \$ (In Thousands)	December 31, 2017	December 31, 2016
Argentina Peso	\$ 3,930	\$ 363
Dollar (Australian)	28,143	58,400
Bahraini Dinar	432	358
Bangladesh (Taka)	425	390
Bermuda Dollar	837	-
Botswana Pula	160	94
Brazil Cruzeiro Real	15,263	10,503
Bulgarian Lev	17	7
Dollar (Canadian)	19,021	26,236
Chilean Peso	5,975	1,362
China (Yuan Renminbi)	17,595	10,295
Colombian Peso	4,206	2,870
Croatia Kuna	536	374
Czech Koruna	(1,015)	2,888
Krone (Danish)	2,495	1,780
Egyptian Pound	2,801	421
Euro	76,248	115,900
Ghanaian Cedi	302	36
Georgian Lari	2,114	1,543
Dollar (Hong Kong)	15,402	14,804
Hungary (Forint)	1,344	357
Icelandic Krona	4,254	416
Indian Rupee	26,221	23,028
Indonesia Rupiah	15,783	15,133
Israeli (Shekel)	1,299	933
Yen (Japan)	9,483	40,601
Jordanian Dinar	458	360
Kazakhstani Tenge	638	345
Kenyan Shilling	419	804
Kuwait Dinar	862	777
Lebanese Pound	120	111
Malaysian (Ringgit)	7,775	3,962
Mauritius (Rupee)	926	706
Mexican New Peso	6,784	5,419
Morocco Dirham	431	382
Dollar (New Zealand)	5,465	4,191
Nigerian Naira	423	668
Krone (Norwegian)	5,452	(893)
Omanian Rial	434	376
Pakistani Rupee	2,142	2,852
Panama Balboa	163	163
Peru Sol	2,655	2,051
Philippines Peso	2,215	1,559
Polish (New Zloty)	2,944	1,371
Pound (Sterling)	73,238	97,920
Qatar Riyal	1,164	715
Romanian Leu	590	349
Russian Federation Rouble	5,393	2,655
Saudi Riyal	430	421
Singapore Dollar	5,758	1,260
South African Rand	9,652	5,724
South Korean Won	30,450	10,671
Sri Lankan Rupee	421	346
Krona (Swedish)	22,321	4,488
Franc (Swiss)	10,449	11,516
Thai (Bhat)	4,937	5,184
Dollar (Taiwan, New)	24,812	24,917
Tunisian Dinar	175	136
Turkish Lira	4,774	1,343
UAE Dirham	2,175	1,491
Uruguayan Pesos	513	-
Vietnam Dong	689	362
Other	(14,625)	3,294
Total	\$ 476,894	\$ 527,086

Additional Information — The Plan holdings are part of the MTA Master Trust of which the MTA Defined Benefit Plan participates on a percentage basis. The percentage of the Plan ownership for the year ended December 31, 2017 and December 31, 2016 was 82.54% and 83.48% respectively.

	Master Trust Total Plan	MTA Defined Benefit Plan	Master Trust Total Plan	MTA Defined Benefit Plan
	December 31, 2017		December 31, 2016	
	(In thousands)			
Total Investments:				
Investments measured at readily determined fair value	\$ 818,785	\$ 675,812	\$ 693,868	\$ 579,272
Investments measured at the NAV	<u>4,074,432</u>	<u>3,369,156</u>	<u>3,411,910</u>	<u>2,848,414</u>
Total investments measured at fair value	\$ 4,893,218	\$ 4,044,968	\$ 4,105,778	\$ 3,427,685

4. NET PENSION LIABILITY

The components of the net pension liability of the Plan at December 31, 2017 and 2016 were as follows (in thousands):

	December 31, 2017	December 31, 2016
Total pension liability	\$ 5,072,814	\$ 4,761,877
Fiduciary net position	<u>4,051,534</u>	<u>3,419,971</u>
Net pension liability	<u><u>1,021,280</u></u>	<u><u>1,341,906</u></u>
Fiduciary net position as a percentage of the total pension liability	79.87%	71.82%
Covered payroll	1,805,156	1,724,219
Net position liability as a percentage of covered payroll	56.58%	77.83%

Actuarial Methods and Assumptions

The total pension liability as of December 31, 2017 was determined by an actuarial valuation date of January 1, 2017, that was updated to roll forward the total pension liability to the respective year-end. Actuarial valuations are performed annually as of January 1.

Discount Rate

The discount rate used to measure the total liability as of December 31, 2017 and 2016 was 7.0%. The projection of cash flows used to determine the discount rate assumed that plan contributions will be made in accordance with the Employer funding policy as projected by the Plan's actuary. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current and inactive plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Plan, calculated using the discount rate of 7.00 percent; as well as what the Plan's net pension would be if it were calculated using a discount rate that is 1-percentage point lower (6.00 percent) or 1-percentage point higher (8.00 percent) than the current rate:

2017

(in thousands)

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Net pension liability	\$1,648,216	\$1,021,280	\$492,284

2016

(in thousands)

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Net pension liability	\$1,936,639	\$1,341,906	\$840,176

Additional Important Actuarial Valuation Information

Valuation date	January 1, 2017
Valuation timing	Actuarially determined contributions calculated as of December 31, for the fiscal year and discounted to expected payment dates (July 1 for these projections).
Actuarial cost method	Frozen Initial Liability
Amortization method	For FIL bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA
Actuarial assumptions:	
Investment rate of return	7.0%
Projected salary increases	Varies by years of employment, and employee group; 3.0% GWI increases for TWU Local 100 MTA Bus hourly employees
COLAs	55% of inflation assumption or 1.375%, if applicable
Inflation/Railroad Retirement wage base	2.5%; 3.5%
Valuation date	January 1, 2016
Valuation timing	Actuarially determined contributions calculated as of December 31, for the fiscal year and discounted to expected payment dates (July 1 for these projections).
Actuarial cost method	Frozen Initial Liability
Amortization method	For FIL bases, period specified in current valuation report. Future gains/ losses are amortized through the calculation of the normal cost in accordance with FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA
Actuarial assumptions:	
Investment rate of return	7.0%
Projected salary increases	Varies by years of employment, and employee group; 3.5% for MTA Bus hourly employees
COLAs	55% of inflation assumption or 1.375%, if applicable
Inflation/Railroad Retirement wage base	2.5%; 3.5%

Calculation on Money-Weighted Rate of Return

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the middle of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month.

2017 Schedule of Calculations of Money-Weighted Rate of Return

(In thousands)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2017	\$3,419,971	12.00	1.00	\$3,931,052
Monthly net external cash flows:				
January	(8,616)	12.00	1.00	(9,904)
February	6,313	11.00	0.92	7,177
March	6,277	10.00	0.83	7,047
April	7,810	9.00	0.75	8,670
May	6,832	8.00	0.67	7,501
June	9,805	7.00	0.58	10,629
July	9,805	6.00	0.50	10,395
August	9,805	5.00	0.42	10,395
September	8,150	4.00	0.33	8,533
October	9,805	3.00	0.25	10,152
November	9,805	2.00	0.17	10,039
December	39,620	0.25	0.02	39,731
Ending Value - December 31, 2017				\$4,051,534
Money-Weighted Rate of Return	14.94%			

2016 Schedule of Calculations of Money-Weighted Rate of Return**(In Thousands)**

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2016	\$3,074,777	12.00	1.00	3,319,713
Monthly net external cash flows:				
January	(7,049)	12.00	1.00	-7,610
February	6,605	11.00	0.92	7,087
March	6,605	10.00	0.83	7,038
April	6,605	9.00	0.75	6,995
May	8,618	8.00	0.67	9,072
June	8,678	7.00	0.58	9,073
July	8,695	6.00	0.50	9,035
August	8,622	5.00	0.42	8,904
September	8,622	4.00	0.33	8,843
October	8,622	3.00	0.25	8,789
November	8,622	2.00	0.17	8,735
December	24,241	0.36	0.03	24,397
Ending Value - December 31, 2016				\$3,419,971
Money-Weighted Rate of Return	7.97%			

Calculation on Long-Term Expected Rate of Return

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2017 and 2016.

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2017

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income	Barclays Aggregate	10.00%	1.96%
US High Yield Bonds	BAML High Yield	8.00%	4.62%
Global Bonds	Citi WGBI	10.00%	0.34%
Emerging Market Bonds	JPM EMBI Plus	3.00%	3.30%
US Large Caps	S&P 500	10.00%	4.31%
US Small Caps	Russell 2000	5.50%	5.57%
Global Equity	MSCI ACWI NR	10.00%	4.99%
Foreign Developed Equity	MSCI EAFE NR	10.00%	5.57%
Emerging Market Equity	MSCI EM NR	3.50%	7.91%
Global REITS	FTSE EPRA/NAREIT Developed	5.00%	5.62%
Private Real Estate Property	NCREIF Property	3.00%	3.64%
Private Equity	Cambridge Private Equity	7.00%	8.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	15.00%	3.35%
Assumed Inflation - Mean			2.50%
Assumed Inflation - Standard Deviation			1.85%
Portfolio Nominal Mean Return			6.80%
Portfolio Standard Deviation			11.54%
Long-Term Expected Rate of Return selected by MTA			7.00%

* Based on March 2014 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2016

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income	Barclays Aggregate	10.00%	1.67%
US High Yield Bonds	BAML High Yield	8.00%	5.04%
Global Bonds	Citi WGBI	10.00%	0.28%
Emerging Market Bonds	JPM EMBI Plus	3.00%	3.78%
US Large Caps	S&P 500	10.00%	4.80%
US Small Caps	Russell 2000	5.50%	6.06%
Global Equity	MSCI ACWI NR	10.00%	5.49%
Foreign Developed Equity	MSCI EAFE NR	10.00%	6.06%
Emerging Market Equity	MSCI EM NR	3.50%	8.39%
Global REITS	FTSE EPRA/NAREIT Developed	5.00%	5.77%
Private Real Estate Property	NCREIF Property	3.00%	3.64%
Private Equity	Cambridge Private Equity	7.00%	8.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	15.00%	3.45%
Assumed Inflation - Mean			2.50%
Assumed Inflation - Standard Deviation			1.85%
Portfolio Nominal Mean Return			7.03%
Portfolio Standard Deviation			11.54%
Long-Term Expected Rate of Return selected by MTA			7.00%

* Based on March 2014 Investment Policy

5. CONTRIBUTIONS

Employer contributions are actuarially determined on an annual basis. Amounts recognized as receivables for contributions include only those due pursuant to legal requirements. Employee contributions to the Plan are recognized in the period in which the contributions are due. There are no contributions required under the Metropolitan Suburban Bus Authority Employee's Pension Plan.

The following summarizes the types of employee contributions made to the Plan.

Effective January 1, 1994, covered MTA Metro-North Railroad and MTA Long Island Rail Road non-represented employees are required to contribute to the Plan to the extent that their Railroad Retirement Tier II employee contribution is less than the pre-tax cost of the 3% employee contributions. Effective October 1, 2000, non-represented employee contributions, if any, were eliminated after 10 years of making contributions to the Plan. MTA Metro-North Railroad employees may purchase prior service from January 1, 1983 through December 31, 1993 and MTA Long Island Rail Road employees may purchase prior service from January 1, 1988 through December 31, 1993 by paying the contributions that would have been required of that employee for the years in question, calculated as described in the first sentence, had the Plan been in effect for those years.

Police Officers who became participants of the MTA Police Program prior to January 9, 2010 contribute to that program at various rates. Police Officers who became participants on or after January 9, 2010 but before April 1, 2012 contribute 3% up to the completion of 30 years of service, the maximum amount of service credit allowed. Police Officers who become participants on or after April 1, 2012 contribute 3%, with additional new rates starting April 2013, ranging from 3.5%, 4.5%, 5.75%, to 6%, depending on salary level, for their remaining years of service.

MTA Bus represented participants make contributions in accordance with their respective collective bargaining agreements and arbitration awards. MTA Bus non-represented employees are accessed contributions for their flat rate benefit of \$10.33 for each week for the period from January 1, 2012 through December 31, 2016. Effective January 1, 2017, MTA Bus non-represented operating employee hired prior to April 1, 2012 contribute 2% of gross wages. MTA Bus non-represented non-operating

employee hired prior to April 1, 2012 contribute 4.85% of gross wages for ten years of service after January 1, 2017, and then 1.85% gross salary thereafter until retirement. Contributions levels for MTA Bus non-represented employees hired on or after April 1, 2012, which are required until retirement, are determined every year at the beginning of the calendar year, and are based on annual wages during the prior year and the following schedule:

Annual Wages Earned During the Prior Year	Contribution Rate
Up to \$45,000	3.00%
\$45,001 to \$55,000	3.50%
\$55,001 to \$75,000	4.50%
\$75,001 to \$100,000	5.75%
Greater than \$100,000	6.00%

In 2017, a reserve was established for fifteen former MTA employees in accordance with Chapter 533 of the Laws of 2015. The transfer of this reserve in the amount of \$1.6 million, to the New York State and Local Police and Fire Retirement System allowed former MTA Police employees to transfer membership and contributions to the New York State and Local Police and Fire Retirement System from the MTA Defined Benefit Plan.

Covered MTA Metro-North Railroad represented employees and MTA Long Island Rail Road represented employees who first became eligible to be Plan participants prior to January 30, 2008 contribute 3% of salary. MTA Staten Island Railway employees contribute 3% of salary except for represented employees hired on or after June 1, 2010 who contribute 4%. MTA Long Island Rail Road represented employees who became participants after January 30, 2008 contribute 4% of salary. For the MTA Staten Island Railway employees, contributions are not required after the completion of 10 years of credited service. MTA Long Island Rail Road represented employees are required to make the employee contributions for 10 years, or 10 years if hired after certain dates in 2014 as per collective bargaining agreements. Certain Metro-North represented employees, depending on their collective bargaining agreements, are required to make the employee contributions until January 1, 2014, January 1, 2017, June 30, 2017, or the completion of required years of credited service as per the relevant collective bargaining agreements.

Covered MTA Bus represented employees and certain non-represented employees are required to contribute a fixed dollar amount, which varies, by Depot. Currently, non-represented employees at certain Depots, contribute \$21.50 per week. Non-represented employees at Eastchester hired prior to 2007 contribute \$25 per week. Represented employees at Baisley Park, College Point, Eastchester, Far Rockaway, JFK, LaGuardia and Yonkers Depots contribute \$29.06 per week; Spring Creek represented employees contribute \$32.00 per week. Certain limited number of represented employees promoted prior to the resolution of a bargaining impasse continue to participate in the plan that was in effect before their promotion. Certain MTA Bus non-represented employees who are formerly employed by the private bus companies (Jamaica, Green, Triboro and Command) at Baisley Park, Far Rockaway, JFK, LaGuardia and Spring Creek Depots who are in the pension program covering only such employees make no contributions to the program.

MTA Bus is required to make significant annual contributions to the MTA Plan on a current basis. Pursuant to the January 1, 2017 and January 1, 2016 actuarial valuations for the MTA Plan, which included amounts for actuarial assets and liabilities relating to both active and retired members for most portions of the former private plans (excepting, for example, members of the Transport Workers Union — New York City Private Bus Lines Pension Trust who were working on school bus routes which did not become part of MTA Bus service), MTA Bus recorded pension expense equal to the valuation annual required contribution of \$50.5 and \$44.3 for the calendar years ended December 31, 2017 and

2016, respectively. Both of these employer contributions were paid to the MTA Plan in their respective years.

6. ACTUARIAL METHODS AND ASSUMPTIONS

A. Actuarial Valuation Method

The Frozen Initial Liability method was used for determining normal costs and the unfunded actuarial accrued liability. Entry Age Normal method is used for determining changes in the unfunded actuarial accrued liability due to plan provision and assumption changes. For MTA Bus members with benefits that are not pay-related, the Entry Age Level Dollar method is used. After establishment of the plan change base, for MTA Bus members with benefits indexed to general wage increases, assumed general wage increases is used rather than payroll to conform to a method compliant for GASB 67 purposes. For groups where service was reported as of the valuation date, Entry Age is based on an effective date of hire equal to the valuation date less provided service plus any purchased service, but not reflecting any military service purchased.

The Normal Cost equals the present value of future employer normal contributions divided by the average future working lifetime factor. This factor equals the present value of future compensation or service divided by current compensation or the member count (less certain retirements), depending if benefits are pay-related, and weighted by the present value of benefits. Service is used for MTA Bus members with hourly benefits and benefits indexed to general wage increases.

B. Asset Valuation Method

The Asset Valuation method smooths gains and losses over a 5-year period. The formula for the asset valuation method is as follows:

$$\text{Actuarial Value of Assets} = MV_t - .8UR_1 - .6UR_2 - .4UR_3 - .2UR_4$$

Where

MV_t = Market Value of assets as of the valuation date.

UR_n = Unexpected return during the n^{th} year preceding the valuation date. The unexpected return for a year equals the total investment return minus the total expected return. The total expected return equals the market value of assets at the beginning of the year plus the weighted net cash flow during the year multiplied by the expected rate of return.

The resulting value cannot be less than 80% or greater than 120% of the market value of assets.

C. Actuarial Assumptions Universal to all Groups

Interest — 7.00% per annum, compounded annually.

Railroad Retirement Wage Base — 3.50% per year.

Consumer Price Index — 2.50% per year.

Provision for Expenses — Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior three year's reported administrative expenses and are assumed payable in the middle of the plan year.

Valuation Compensation: The valuation compensation is equal to the annualized base salary as of December 31, 2016 as provided by MTA multiplied by the overtime assumption and assumed salary increases for the year. Salary increases are assumed to occur at mid-year on average.

Mortality — Preretirement and postretirement healthy annuitant rates are projected on a generational basis using Scale AA. As a generational table, it reflects mortality improvements both before and after the measurement date.

Preretirement — RP-2000 Employee Mortality Table for Males and Females with Blue collar adjustments.

Postretirement Healthy Lives — 95% of RP-2000 Healthy Annuitant mortality table for males with Blue Collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant mortality table for females.

Postretirement Disabled Lives — RP-2014 Disabled Annuitant mortality table for males and females.

Post-termination Death Benefits For current inactive participants eligible for post-retirement death benefits, an amount of \$25,000 (\$10,000 for certain M.S.B.A. inactive participants) is assumed to be payable at death. For current terminated vested members, \$100,000 is assumed to be payable at death prior to retirement, except for Police officers. A load of 8.75% is applied to the liability for Police officers.

Participant Data — Service for MTA Police, Metro-North Railroad and Long Island Rail Road represented and management members is based on the sum of credited service, purchased service and military service provided by MTA. Retirement status and benefits based on information provided in JP Morgan file as of the valuation date, except if reported as disability retirement previously, continued to treat as a disability retirement. For inactive participants, future offsets for Railroad Retirement benefits are estimated and assumed to occur at age 62 unless disabled or it appears offset has occurred. Benefits, net of any Railroad Retirement benefits, are estimated for vested members who terminated during the past year if not provided by the Authority.

Retroactive Wage Adjustments - Based on calculations completed by the MTA, adjustments to benefits were determined based on year of retirement: 2% for retirements prior to 2013, 5% for 2013 retirements, 8% for 2014 retirements and 11% for 2015 retirements. These adjustments were applied to liabilities of Metro-North and Long Island Rail Road represented members provided by the MTA who received a retroactive wage adjustment and a calculation was not finalized during 2016. Additional liabilities equal to the accumulated amount of estimated retroactive payments as of the valuation date were also included.

D. Changes in Actuarial Assumptions Universal to all Groups

The disability mortality table has been updated since the prior valuation.

E. Actuarial Assumptions — MTA Defined Benefit Pension Plan — Management

Salary Scale — Salaries are assumed to increase in accordance with the following schedule:

Years of Service	Rate of Increase
0	6.00 %
1	5.00
2	4.25
3	4.00
4+	3.50

Termination — Withdrawal rates vary by years of service and sex. Illustrative rates are shown below:

Years of Service	Male	Female
0 - 1	5.00 %	7.50 %
2 - 3	3.25	4.00
4	2.50	4.00
5 - 9	2.25	3.50
10 - 19	1.50	3.00
20+	1.00	1.50

Retirement — Rates vary by age and type of retirement. Illustrative rates are shown below:

A. For Management employees hired prior to January 31, 2008.

Age	Reduced Early Retirement	Unreduced Early Retirement
55	5.00 %	10.00 %
56	5.00	7.50
57	5.00	5.00
58	5.00	5.00
59	5.00	5.00

B. For Management employees hired on or after January 31, 2008.

Age	Reduced Early Retirement	Unreduced Early Retirement
55	3.00 %	10.00 %
56	3.00	7.50
57	3.00	5.00
58	3.00	5.00
59	3.00	5.00
60	3.00	30.00
61	3.00	30.00

C. For all management employees.

Normal Retirement:

- 5% per year if members have fewer than 10 years of service
- 15% per year if members have 10 but fewer than 20 years of service
- 30% per year if member have 20 or more years of service
- Certain retirement age is age 80

Disability — Rates vary by age, sex and type of disability beginning at benefit eligibility. Illustrative rates are shown below:

Age	Ordinary		Accidental		Age	Ordinary		Accidental	
	M	F	M	F		M	F	M	F
20	0.015 %	0.020 %	0.010 %	0.005 %	45	0.176 %	0.147 %	0.039 %	0.010 %
25	0.020	0.020	0.010	0.005	50	0.240	0.221	0.044	0.010
30	0.024	0.024	0.015	0.005	55	0.245	0.245	0.049	0.010
35	0.039	0.029	0.024	0.005	60	0.245	0.245	0.049	0.010
40	0.103	0.069	0.034	0.010	64	0.245	0.245	0.049	0.010

Marriage — 85% of members are assumed to be married with wives 3 years younger than their husbands.

Employee Contributions — No employee contributions have been anticipated for future years.

Changes in Actuarial Assumptions — None.

F. Actuarial Assumptions — MTA Defined Benefit Pension Plan — Metro-North Represented Employees

Salary Scale — Salaries are assumed to increase in accordance with the following schedule:

Years of Service	Rate of Increase
0	3.25 %
1	10.50
2	10.00
3	9.75
4	9.25
5	14.75
6+	3.25

Overtime - Members hired on or prior to New Participant Date are assumed to earn overtime equal to 25% of their rate of pay for years when they are retirement eligible and for members on after New Participant Date are assumed to earn overtime equal to 20% of their rate of pay for years when they are retirement eligible. Otherwise, members are assumed to earn overtime equal to 18% of their rate of pay.

Termination — Withdrawal rates vary by years of service. Illustrative rates are shown below:

Years of Service	Termination Rate
0	3.50 %
1	3.25
2 - 3	2.50
4 - 9	2.25
10 - 19	1.50
20+	1.00

Retirement — Rates vary by age and type of retirement. Illustrative rates are shown below:

A. For represented employees hired prior on or prior to New Participant Date:

Age	Reduced Early Retirement	Unreduced Early Retirement
55	4.50 %	10.00 %
56	4.00	7.50
57	3.00	5.00
58	3.00	5.00
59	3.50	5.00

B. For represented employees hired after new Participant Date:

Age	Reduced Early Retirement	Unreduced Early Retirement
55	3.00 %	10.00 %
56	3.00	7.50
57	3.00	5.00
58	3.00	5.00
59	3.00	5.00
60	3.00	30.00
61	3.00	30.00

Unreduced early retirement is not available to non-ACRE represented employees hired after New Participant Date.

C. For all represented employees.

Normal Retirement:

- 5% per year if members have fewer than 10 years of service
- 15% per year if members have 10 but fewer than 20 years of service
- 30% per year if member have 20 or more years of service
- Certain retirement age is age 80

Disability — Rates vary by age, sex and type of disability beginning at benefit eligibility. Illustrative rates are shown below:

Age	Ordinary		Accidental		Age	Ordinary		Accidental	
	M	F	M	F		M	F	M	F
20	0.17 %	0.25 %	0.01 %	0.01 %	45	0.27 %	0.41 %	0.06 %	0.01 %
25	0.17	0.25	0.01	0.01	50	0.50	0.75	0.06	0.01
30	0.17	0.25	0.02	0.01	55	0.95	1.43	0.07	0.01
35	0.18	0.27	0.03	0.01	60	1.93	2.90	0.07	0.01
40	0.20	0.31	0.05	0.01	64	1.93	2.90	0.07	0.01

Marriage — 80% of members are assumed to be married with wives 3 years younger than their husbands.

Changes in Actuarial Assumptions — None.

G. Actuarial Assumptions — MTA Defined Benefit Pension Plan — Long Island Rail Road Represented Employees

Salary Scale — Salaries are assumed to increase in accordance with the following schedule:

Years of Service	Rate of Increase
0	3.25 %
1	10.50
2	10.00
3	9.75
4	9.25
5	14.75
6+	3.25

Overtime - Members hired prior to January 31, 2008 are assumed to earn overtime equal to 30% of their pay for years when they are retirement eligible. Otherwise, members are assumed to earn overtime equal to 20% of their rate of pay.

Termination — Withdrawal rates vary by years of service. Illustrative rates are shown below:

Years of Service	Termination Rate
0	4.25 %
1 - 4	2.75
5 - 9	2.25
10+	1.25

Retirement — Rates vary by age and type of retirement. Illustrative rates are shown below:

A. For represented employees hired prior to January 31, 2008:

Age	Reduced Early Retirement	Unreduced Early Retirement
55	4.50 %	10.00 %
56	4.00	7.50
57	3.00	5.00
58	3.00	5.00
59	3.50	5.00

B. For represented employees hired on or after January 31, 2008:

Age	Reduced Early Retirement	Unreduced Early Retirement
55	3.00 %	10.00 %
56	3.00	7.50
57	3.00	5.00
58	3.00	5.00
59	3.00	5.00
60	3.00	30.00
61	3.00	30.00

C. For all other represented employees.

Normal Retirement:

- 5% per year if members have fewer than 10 years of service
- 15% per year if members have 10 but fewer than 20 years of service
- 30% per year if member have 20 or more years of service
- Certain retirement age is age 80

Disability — Rates vary by age, sex and type of disability beginning at benefit eligibility. Illustrative rates are shown below:

Age	Ordinary		Accidental		Age	Ordinary		Accidental	
	M	F	M	F		M	F	M	F
20	0.17 %	0.25 %	0.01 %	0.01 %	45	0.27 %	0.41 %	0.06 %	0.01 %
25	0.17	0.25	0.01	0.01	50	0.50	0.75	0.06	0.01
30	0.17	0.25	0.02	0.01	55	0.95	1.43	0.07	0.01
35	0.18	0.27	0.03	0.01	60	1.93	2.90	0.07	0.01
40	0.20	0.31	0.05	0.01	64	1.93	2.90	0.07	0.01

Marriage — 80% of members are assumed to be married with wives 3 years younger than their husbands.

Changes in Actuarial Assumptions - None.

H. Actuarial Assumptions — MTA 20-Year Police Retirement Program

Salary Scale — Salary increases vary by years of Police Service. Illustrative rates are shown below.

Years of Service	Rate of Increase
1	12.5 %
2	14.5
3 – 4	15.5
5	39.5
6 – 9	3.5
10	4.5
11 – 14	3.5
15	5.5
16 – 19	3.5
20	4.5
21 – 24	3.5
25	4.5
26+	3.5

Overtime - Members are assumed to earn overtime equal to 30% of their rate of pay. Overtime for those hired on and after January 9, 2010 is limited to 15% of their rate of pay.

Termination — Withdrawal rates vary by length of service. Illustrative rates are shown below:

Years of Service	Termination Rate
0	6.50 %
1	2.50
2 – 4	2.00
5	0.50
6 – 9	0.35
10+	0.30

Retirement — Rates vary by year of eligibility. Illustrative rates are shown below:

Years of Eligibility	Retirement Rate
1	17.00 %
2	12.00
3 – 9	10.00
10+	50.00

Retirement rates at ages 62 and above are 100% regardless of year of eligibility.

Disability — Rates vary by age and type of disability beginning at benefit eligibility. Illustrative rates are shown below:

Age	Ordinary	Accidental	Age	Ordinary	Accidental
20	0.043 %	0.095 %	45	0.256 %	0.500 %
25	0.043	0.095	50	0.559	0.527
30	0.062	0.095	55	0.819	0.539
35	0.096	0.115	60	0.896	0.544
40	0.138	0.316			

Cost of Living Expenses — assumed to be 1.375% per annum, compounded annually.

Marriage — 85% of members are assumed to be married with wives 3 years younger than their husbands.

Changes in Actuarial Assumptions — None

I. **Actuarial Assumptions — MSBA Employees Pension Plan**

Benefit Estimates — Due to the insignificant number of active employees, benefits are estimated based on plan provisions and actuarial assumptions used for management benefits, except for the overtime assumption.

Overtime — Members are assumed to earn overtime equal to the following percentage of their rates of pay:

Years of Service	Rate
25 years of service	17.00 %
25 to 29 years of service	20.00
30 or more years of service	23.00

Changes in Actuarial Assumptions - None.

J. Actuarial Assumptions — MTA Defined Benefit Plan — SIRTOA

Salary Scale — Salary increases vary by years of service. Illustrative rates are shown below.

Years of Service	Rate
0	10.00 %
1	9.50
2	9.25
3	9.00
4	8.75
5	6.00
6+	3.25

Overtime — Hourly employees are assumed to earn overtime equal to 7.50% of their rate of pay.

Termination — Withdrawal rates vary length of service. Illustrative rates are shown below:

Year of Service	Termination Rate
0	9.00 %
1 - 3	5.50
4 - 9	3.50
10 - 19	1.40
20+	0.50

Retirement — Rates vary by age and type of retirement. Illustrative rates are shown below:

Age	Reduced Early* Retirement	Normal Retirement	
		First Year Eligible	After First Eligibility
55	3.00 %	30.00 %	20.00 %
56	3.00	30.00	20.00
57	3.00	30.00	20.00
58	3.00	30.00	20.00
59	3.00	30.00	20.00
60	3.00	30.00	20.00
61	3.00	30.00	20.00

*Applies only to members of United Transportation Union and management employees.

For ages 62 to 80:

- 5% per year if members have fewer than 10 years of service
- 15% per year if members have 10 but fewer than 20 years of service
- 30% per year if member have 20 or more years of service
- Certain retirement age is age 80

Disability — Rates vary by age, sex and type of disability. Illustrative rates are shown below:

Age	Ordinary	Accidental	Age	Ordinary	Accidental
20	0.15 %	0.03 %	45	0.44 %	0.05 %
25	0.17	0.03	50	0.54	0.06
30	0.19	0.03	55	0.61	0.07
35	0.24	0.03	60	0.81	0.08
40	0.33	0.04			

Marriage — 80% of members are assumed to be married with wives 3 years younger than their husbands.

Benefits Not Valued — Accidental death benefits.

Changes in Actuarial Assumptions — None.

K. Actuarial Assumptions — LIRR Pension Plan – Base Benefits

Salary Scale — Rates of pay are assumed to increase at a rate of 3.0% per annum.

Overtime/Unused Vacation Pay — Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.

Termination — Withdrawal rates vary by age. Illustrative rates are shown below:

Age	Rate	Age	Rate
20	2.12 %	45	0.96 %
25	1.64	50	0.80
30	1.44	55	0.60
35	1.36	60	0.00
40	1.16		

Retirement — Assumed retirement rate varies by year of eligibility.

Eligibility Period	Rate of Retirement
First Year	40 %
Years 2–4	33
Years 5	37
Years 6–7	35
Years 8–9	33
Years 10–15	55
Years 16 and above	100

Terminated vested participants are assumed to retire upon first eligibility, or attained age if later.

Marriage — 80% of members are assumed to be married with wives 3 years younger than their husbands.

Interest on Employee Contributions — Assumed to be 3.5% per year for future years.

Tier 1 Railroad Offset — The Tier 1 Railroad offset, which is designed similar to a Social Security Benefit, was estimated by assuming that an individual would continue to earn compensation at the level

in effect at his date of termination until his eligibility for Railroad Benefits and further increased by 2% per year from the date of termination to age 65.

Benefits Not Valued — Disability benefits since the majority of active plan participants are at or near retirement eligibility.

Changes in Actuarial Assumptions — None.

L. Actuarial Assumptions — MTA Defined Benefit Pension Plan – Former New York Bus Service Employees

Salary Scale - Salaries are assumed to increase in accordance with the following schedule for former Liberty Lines Bus non-represented employees (Article 13) and for Certain Former non-represented Employees of Alliance Companies (Article 18):

Years of Service	Rate
0	6.00 %
1	5.00
2	4.25
3	4.00
4+	3.50

General Wage Increase (GWI) - The benefit level and contribution rate is assumed to increase 3% each year for TWU Local 100 (Arbitration Award) employees.

Termination — Withdrawal rates vary by years of service. Illustrative rates are shown below:

Year of Service	Termination Rate
0	17.50 %
1	4.75
2 - 9	2.75
10+	2.25

Retirement — Rates vary by age, service, employee type and retirement eligibility. Illustrative rates are shown below:

For TWU Local 100 (Arbitration Award), TSO (Article 14), and ATU (Article 14) represented members:

Age	Years of Service at Retirement		
	<u>≤5</u>	<u>5-10</u>	<u>10+</u>
57-64	N/A	N/A	30 %
65-79	0 %	5 %	30 %
80 +	100 %	100 %	100 %

For former New York Bus Service non-represented employees (Article 16):

Assumed to retire at age 62 or current age if later.

For former Queens Surface, Jamaica and Triboro Bus Service non-represented Employees (Article 15):

Age	Retirement Rate
55-56	10 %
57	20
58-60	15
61	20
62-63	45
64	40
65	100

For former Liberty Lines Bus non-represented employees (Article 14):

Age	Retirement Rate
60-61	7.50 %
62	40.00
63-64	20.00
65	100.00

For former Liberty Lines Bus non-represented employees (Article 13):

Assumed to retire at age 62 or current age if later.

For former Command Bus Service non-represented employees (Article 17):

Age	Retirement Rate	Age	Retirement Rate
50-52	5 %	59	34 %
53-54	10	60	35
55	30	61	36
56	31	62-64	40
57	32	65	100
58	33		

For former Green Bus Lines non-represented employees (Article 19):

Age	Rate of Retirement
55-59	5 %
60-61	10
62	100

For certain former non-represented employees of Alliance Companies (Article 18):

Age	Retirement Rate
55-56	6 %
57-58	8
59	9
60-61	13
62	25
63-64	15
65	100

Disability — Rates vary by age. Illustrative rates are shown below:

Age	Rate	Age	Rate
20	0.03 %	45	0.27 %
25	0.04	50	0.48
30	0.08	55	0.87
35	0.11	60	1.30
40	0.16		

Disability rates cease upon attainment of unreduced retirement eligibility.

Marriage — 80% of members are assumed to be married with wives 3 years younger than their husbands.

Interest on Employee Contributions — Future years assumed to be 3.5% per year.

Benefits Not Valued — The \$2,500 post-retirement death benefit for TWU Local 100 (arbitration Award), TSO (Article 14), and ATU (Article 14) represented members is not valued since premiums are paid outside of the Plan trust.

The \$10,000 post-retirement death benefit for former Queens Surface, Jamaica and Triboro Bus Service non-represented Employees (Article 15) is not valued since premiums are paid outside of the plan trust.

The accidental death and dismemberment benefit for former Queens Surface, Jamaica and Triboro Bus Service non-represented Employees (Article 15) is not valued as the costs are expected to be de minimis.

Form of payment - Normal Form, except for all former Liberty Lines Bus non-represented employees (Article 13) members are assumed to elect the lump sum payment option. Lump sums valued using the current (2017) lump sum mortality table published by the IRS and a 4.5% assumed interest rate.

Changes in Actuarial Assumptions — None.

7. CUSTODIAL AND OTHER PROFESSIONAL SERVICES

JP Morgan Chase Bank is the custodian and trustee of plan assets with the exception of Mellon asset management investments in which Mellon Bank N.A. is the custodian. JP Morgan Chase also provides cash receipt and cash disbursement services to the Plan. NEPC reviews the Plan's portfolio, the investment policies as stipulated by the Investment Committee and the performance of the Investment Managers. NEPC also provides audit services for the Plan's equity portfolios. Actuarial services were provided to the Plan by Milliman Inc.

8. SUBSEQUENT EVENTS

Subsequent to the measurement date, benefit modifications were implemented for MTA Bus represented members as described in the Impasse Award for ATU Local 1179 dated June 5, 2018 and the Memorandum of Understanding for ATU Local 1181 dated July 25, 2018. On October 24, 2018, the MTA Board approved a pension amendment for certain TWU Local 100 represented members of MTA Bus who are also participants in the TWU-Westchester Pension Plan as former employees of Liberty Lines, Inc. Such Plan participants will now receive pension credit for periods of employment prior to the MTA takeover date, and their Plan benefit will be offset by the benefit paid under the TWU-Westchester Pension Plan.

On August 2, 2018 GAM Investments announced the suspension of all subscriptions and redemptions in its Unconstrained/Absolute Return Bond Funds (“ARBF”) as at July 31, 2018, by the relevant fund boards of directors following high level of redemptions. The ARBF experienced a high level of redemption requests following the suspension of the Investment Director, Business Unit Head and leader of the Unconstrained Bond Fund portfolio management team after an internal review of the team’s risk controls and practices. GAM announced that although the funds have the necessary liquidity to meet these redemption requests, it believed that such actions would lead to a disproportional shift in their portfolio composition, which could compromise the interests of remaining investors.

On August 9, 2018, MTA Defined Benefit Pension Board of Managers approved the termination of the GAM Unconstrained Bond Fund. Since that time, GAM elected to formally close the fund and distribute the proceeds in an orderly manner. Sixty (60) percent of the Plan’s investment in the ARBF was returned on September 6, 2018 and an additional five (5) percent was received on October 4, 2018. GAM has indicated that it expects that twenty-five (25) percent will be returned during 2019. Ten (10) percent will be held back for some period, as the funds unwind.

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**METROPOLITAN TRANSPORTATION AUTHORITY
DEFINED BENEFIT PENSION PLAN**

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

(in thousands)

	2017	2016	2015
Total pension liability:			
Service cost	\$ 148,051	138,215	124,354
Interest	335,679	308,009	288,820
Changes of benefit terms	76,511	73,521	6,230
Differences between expected and actual experience	(27,059)	86,809	121,556
Changes of assumptions	10,731	-	(76,180)
Benefit payments and withdrawals	(232,976)	(209,623)	(199,572)
Net change in total pension liability	310,937	396,931	265,208
Total pension liability – beginning	4,761,877	4,364,946	4,099,738
Total pension liability – ending (a)	5,072,814	4,761,877	4,364,946
Plan fiduciary net position:			
Employer contributions	321,861	280,768	221,694
Member contributions	31,027	29,392	34,519
Net investment income	516,153	247,708	(45,122)
Benefit payments and withdrawals	(232,976)	(209,623)	(199,572)
Administrative expenses & Transfer to investments	(4,502)	(3,051)	(1,962)
Net change in plan fiduciary net position	631,563	345,194	9,557
Plan fiduciary net position – beginning	3,419,971	3,074,777	3,065,220
Plan fiduciary net position – ending (b)	4,051,534	3,419,971	3,074,777
Employer's net pension liability – ending (a)-(b)	\$ 1,021,280	1,341,906	1,290,169
Plan fiduciary net position as a percentage of the total pension liability	79.87%	71.82%	70.44%
Covered-employee payroll	\$ 1,805,156	1,724,219	1,603,924
Employer's net pension liability as a percentage of covered-employee payroll	56.58%	77.83%	80.44%

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

**METROPOLITAN TRANSPORTATION AUTHORITY
DEFINED BENEFIT PENSION PLAN**

SCHEDULE II

**Required Supplementary Information (Unaudited)
Schedule of Employer Contributions
(in thousands)**

Fiscal Year Ending December 31	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of covered Payroll
2008	\$ 107,759	\$ 107,759	\$ -	\$ -	N/A
2009	146,171	146,171	-	-	N/A
2010	155,318	155,318	-	-	N/A
2011	166,188	166,188	-	-	N/A
2012	212,397	212,397	-	-	N/A
2013	242,980	242,980	-	-	N/A
2014	271,523	331,259	(59,736) *	1,544,050	21.45%
2015	273,730	221,694	52,036	1,603,924	13.82%
2016	290,415	280,768	9,647	1,724,219	16.28%
2017	316,916	321,861	(4,945)	1,805,156	17.83%

* Excess for 2014 reflects a prepaid contribution toward the 2015 Actuarially Determined Contribution.

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

SCHEDULE II (continued)

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS

Note to Schedule II:

The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan for are as follows:

Valuation Dates	January 1, 2017	January 1, 2016	January 1, 2015
Actuarial cost method	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)
Amortization method	For FIL bases, period specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group	For FIL bases, period specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group	For FIL bases, period specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FIL cost method amortized based on expected working lifetime, weighted by salary, of the projected population for each group
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Interest rate	Net rate of 7.0% for 2017, per annum, net of investment expenses	Net rate of 7.0% for 2016, per annum, net of investment expenses	Net rate of 7.0% for 2015, per annum, net of investment expenses
Inflation	2.5% per annum	2.5% per annum	2.5% per annum
Railroad retirement wage base	3.5% per year	3.5% per year	3.0% per year
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using Scale AA
Separations other than for normal retirement	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Rates of normal retirement	Tables based on recent experience. Rates vary by age, years of service at retirement and Tier/Plan.	Tables based on recent experience. Rates vary by age, years of service at retirement and Tier/Plan.	Tables based on recent experience. Rates vary by age, years of service at retirement and Tier/Plan.
Salary increases	Varies by years of employment, and employee group; 3.0% General Wage Increases ("GWI") for TWU MTA Bus hourly employees	Varies by years of employment, and employee group; 3.0% General Wage Increases ("GWI") for TWU MTA Bus hourly employees	Varies by years of employment, and employee group; 3.5% for MTA Bus hourly employees
Overtime	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Cost-of-living adjustments	1.375% per annum (2)	1.375% per annum (2)	1.375% per annum (2)
Provision for expenses	An average of the prior three years' administrative charges added to the normal cost	An average of the prior three years' administrative charges added to the normal cost	An average of the prior three years' administrative charges added to the normal cost

(1) Under this actuarial method, the initial liability has been established by the Entry Age Actuarial Cost Method for determining changes in the Unfunded Actuarial Accrued Liability (UAAL) due to plan provision and assumption changes.

(2) Assumes a long-term consumer price inflation assumption of 2.5% per annum, compounded annually.

**METROPOLITAN TRANSPORTATION AUTHORITY
DEFINED BENEFIT PENSION PLAN**

SCHEDULE III

**Required Supplementary Information (Unaudited)
Schedule of Investment Returns**

The following table displays annual money-weighted rate of return, net of investment expense.

Fiscal Year Ending December 31	Net Money-Weighted Rate of Return
2008	N/A
2009	N/A
2010	N/A
2011	N/A
2012	N/A
2013	N/A
2014	3.58%
2015	-1.47%
2016	7.97%
2017	14.94%

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

Calculation on Long-Term Expected Rate of Return

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2017.

Metropolitan Transportation Authority
Department of Diversity and Civil Rights

Report to the Audit Committee

January 22, 2019



MTA Headquarters DDCR Update

Inactive Contracts – Status as of December 31, 2018

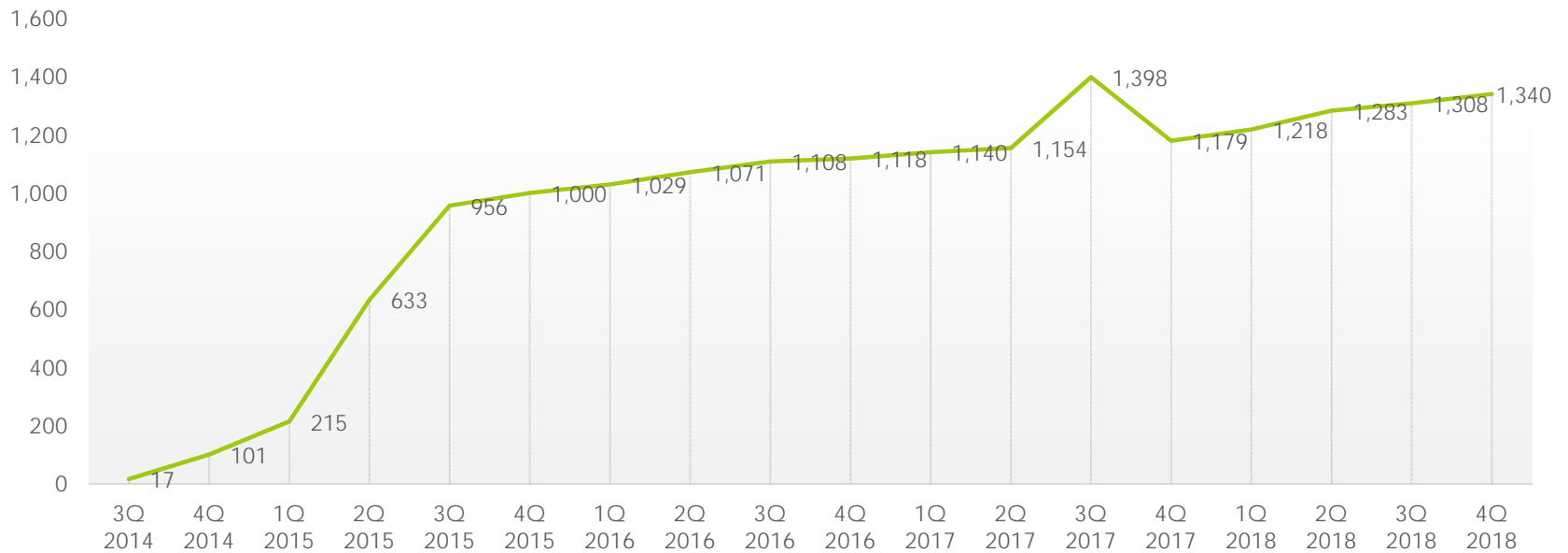
Inactive Contracts with Goals	#
1. Total Contracts Reviewed and Closed	1,046
2. Contracts Administratively Closed	294 ¹
Sub-Total	1,340 (95%)
3. Closeouts in Progress	28
4. Contracts Pending Agency Action	33
Total	1,401 (100%)

1. Contracts administratively closed because of the age of the contract (beyond the established seven-year record retention period).



MTA Headquarters DDCR Update

DDCR Contract Closeout Progression 3Q 2014 through 4Q 2018²



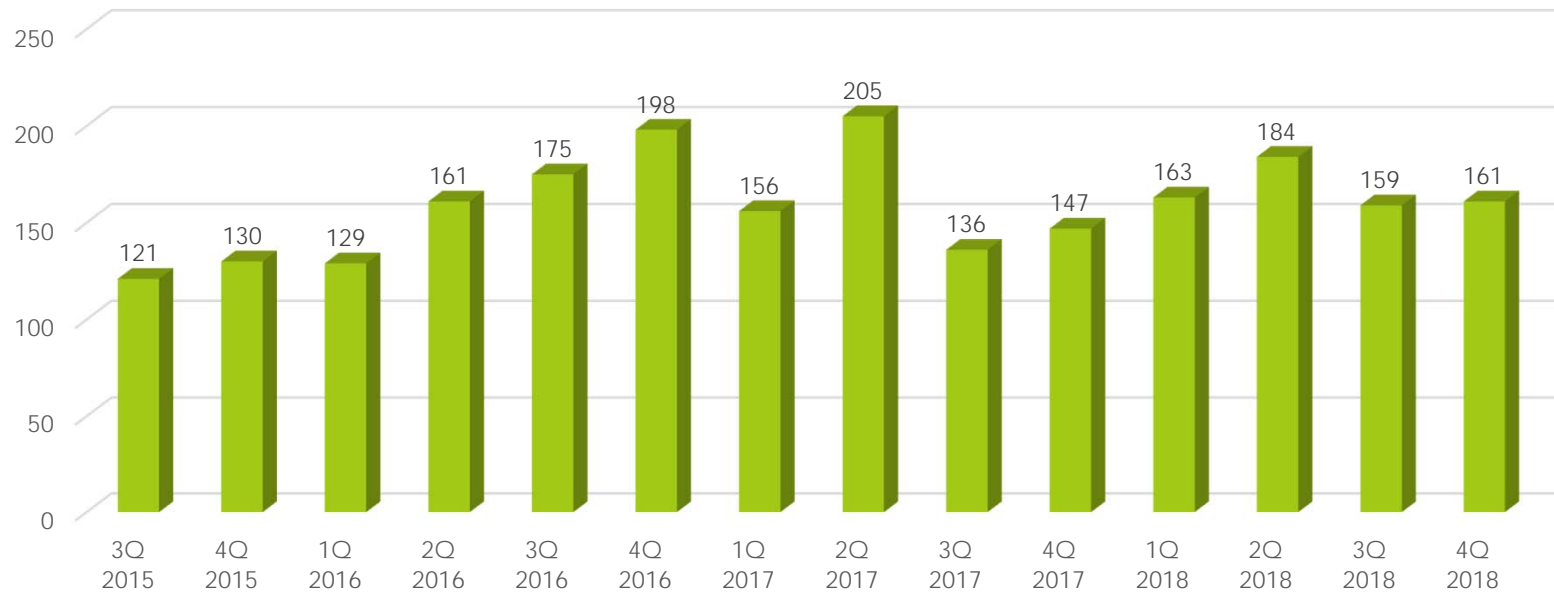
2. The decrease in closeouts between 3Q 2017 and 4Q 2017 is due to approx. 200 contracts being closed out in error, requiring subsequent re-activation.



MTA Headquarters DDCR Update

DDCR Project Site Visits: 3Q 2015 – 4Q 2018

Total Site Visits Performed = 2,225



MTA Headquarters DDCR Update

Goal Attainment on LIRR'S Third Track Projects As of 12/31/18

Managed By	Contract #	Prime Contractor	Current Contract Value	Start Date	Projected End Date	Assigned Goals	Current Attainment	Percentage of Completion
MTACC	6240 ³	3rd Track Constructors	\$1,457,117,010	1/12/2018	TBD	MBE - 15%	MBE - 1%	13%
						WBE - 15%	WBE - 2%	
						SDVOB - 6%	SDVOB - 0%	
MTACC	PS 868	Ove Arup & Partners	\$66,818,615	12/26/2017	TBD	MBE - 15%	MBE - 16%	17%
						WBE - 15%	WBE - 20%	
						SDVOB - 6%	SDVOB - 1%	

3. Goal attainment on this contract is as of November 30, 2018. There are currently 71 M/WBE and 7 SDVOB subcontractors.



MTA AUDIT SERVICES

2018 Year End Status and 2019 Proposed Audit Plan

January 22, 2019



2018 Audit Plan Summary

Financial/Operational/Technology

Projects Completed	153
Recommendations	472

Contracts

Projects Completed	150
Pre-Award / Overhead Reviews	169
\$ Audited	\$805 M



2018 - Highlights

Superstorm Sandy Recovery Oversight Audits (Since 2013)

Total Grant Expenditures	\$2.1 Billion
Total \$ Audited	\$350.8 Million
Projects Completed	112
Recommendations	296
Follow-up Audits Completed	10
Total Cost Adjustments	\$ 60.2 Million



2018 - Highlights

- ❑ **Executive Order 168**
- ❑ **Subway Action Plan**
- ❑ **MNR Sleep Apnea**
- ❑ **LIRR Train Approach Warning**
- ❑ **NYC Transit Utility Payments**
- ❑ **Commuter Railroad Fare Evasion**



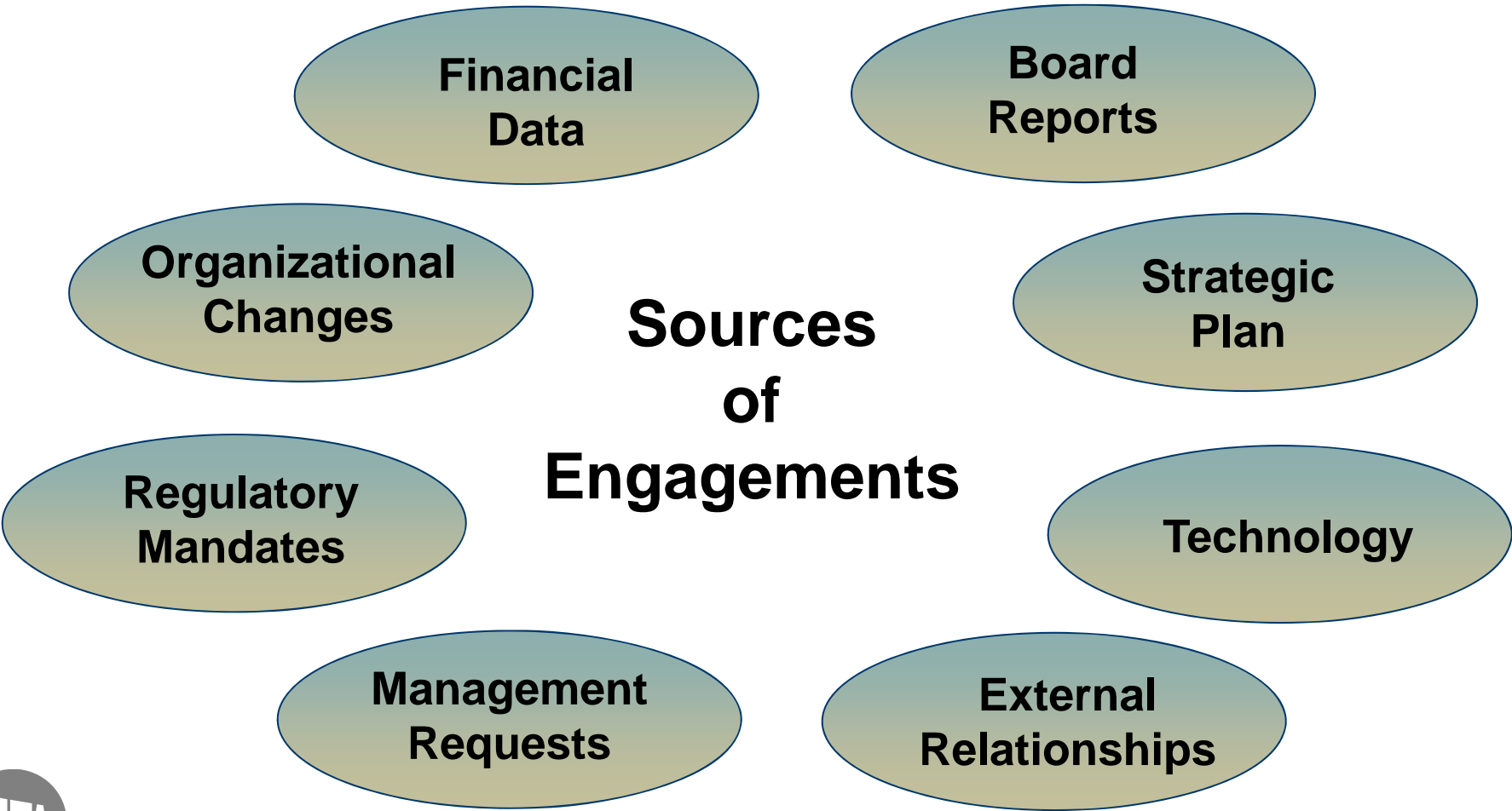
MTA Audit Services

2019 Audit Plan



The Audit Plan Sources

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.



Risk Factor Considerations

Financial Exposure

Nature of Operations

Control Activities

Previous Audit Results

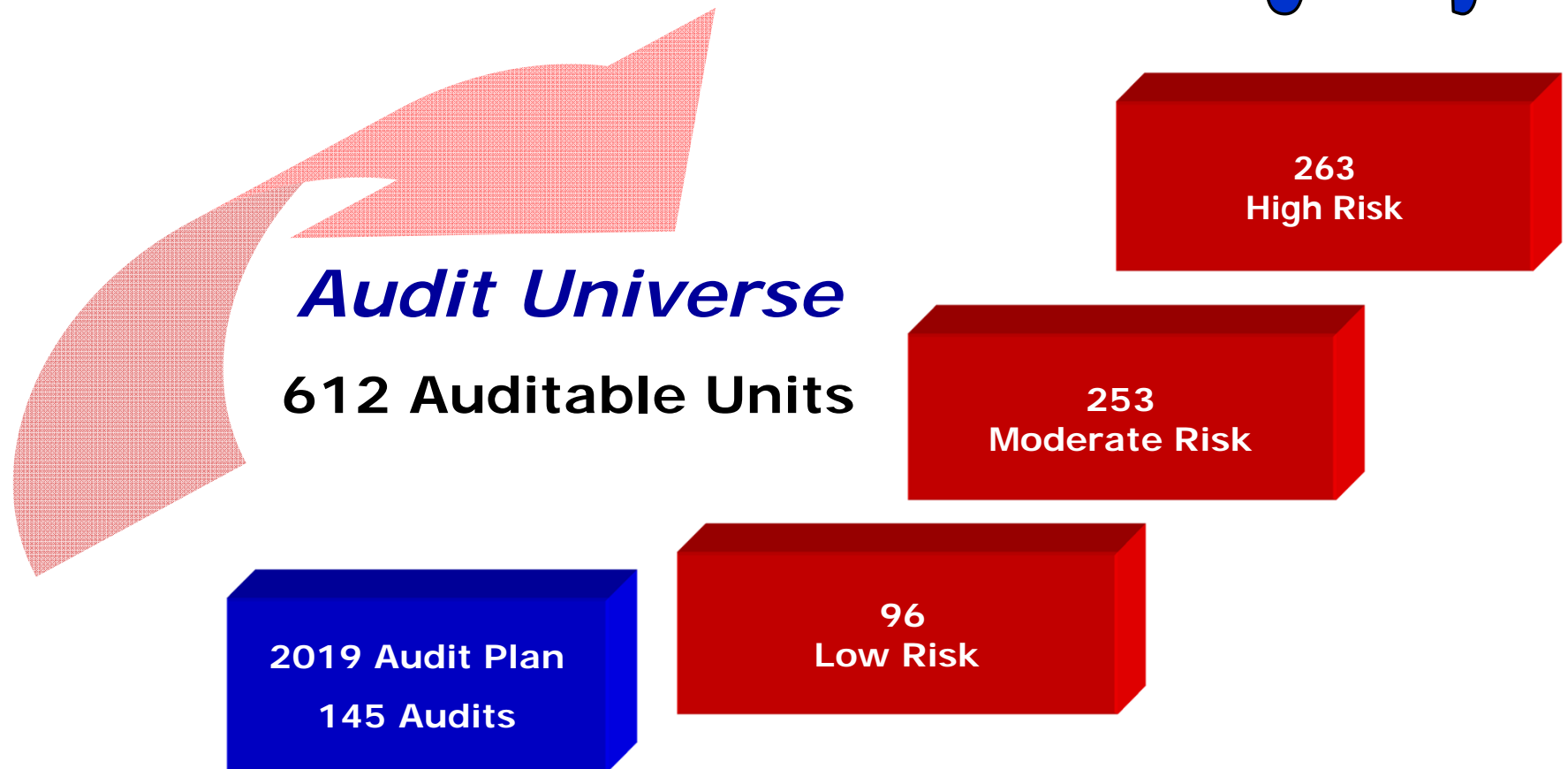
Management Input



**Conducted
91 Interviews**



Risk Assessment Results - All Agency



2019 Audit Areas

Service Delivery

NYC Transit Fast Forward
 LIRR Forward
 MNR Way Ahead
 Amtrak Agreements
 Customer Communications
 Paratransit
 NYC Transit Electronic Shop
 Car Maintenance
 Bus Depot Facilities
 Bridge & Tunnel Facilities

Finance

Pensions
 Treasury
 Payroll
 Overtime
 Timekeeping
 Accounts Payable
 Enterprise Asset Management
 Year-End Financial Statements
 Enterprise Risk Management
 Audit Recommendations

Safety

LIRR & MNR Positive Train Control
 Track Flagging
 Sandy Project Safety
 LIRR & MNR SAFER Program
 Hours of Service

Procurement

Board Cost Containment
 Enterprise Procurement Guidelines
 Enterprise Market Place
 Agencies Inventory Management
 M/WBE Program
 Agencies Operating Contracts

Revenue

NYC Transit Fare Evasion
 New Fare Media Program
 MetroCard Fair Fare Program
 E-ZPass Customer Services
 B&T Cashless Tolling
 MTA Rental & Advertising
 Railroads On-Board Revenue

Capital Program

All Agency Superstorm Sandy
 LIRR 3rd Track
 NYC Transit 2nd Avenue
 LIRR East Side Access
 Agencies CPM Policies

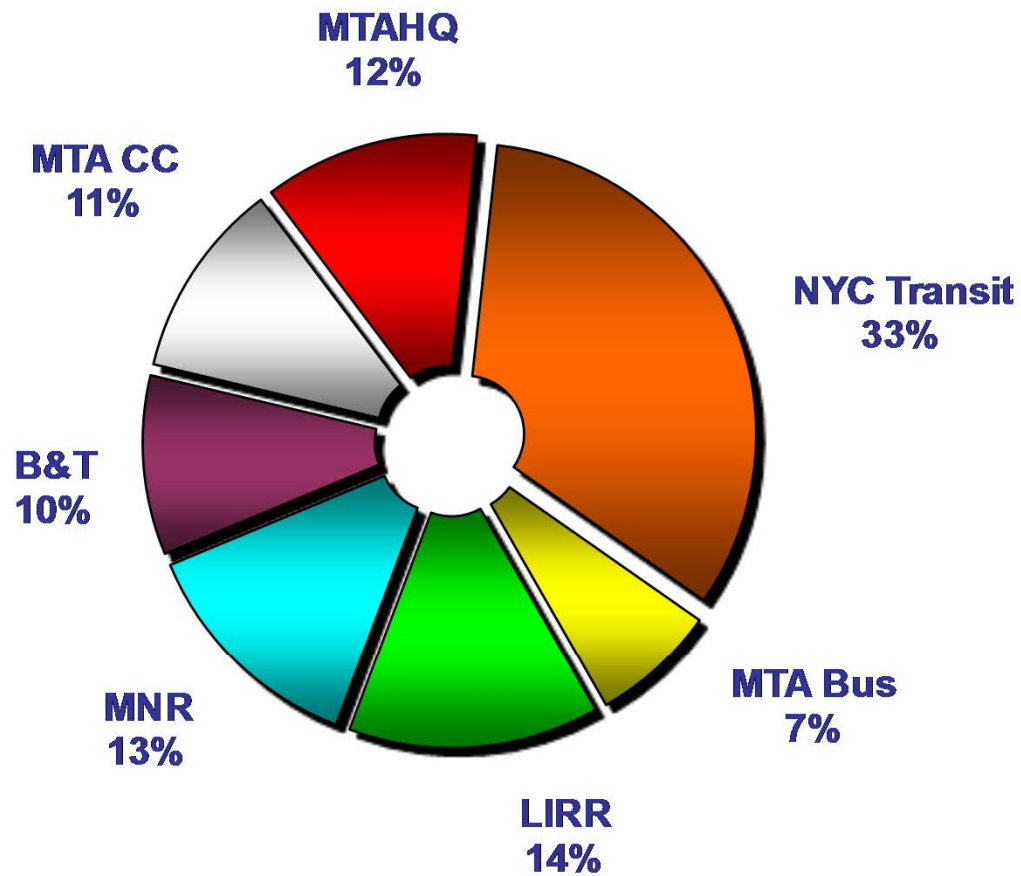
Human Resources

NYC Transit Employee Availability
 Agencies Medical Benefits
 Agencies Operational Training
 Agencies Mandatory Training

Technology

PeopleSoft System
 Cybersecurity
 Change Management
 ServiceNow
 Applications Controls
 Data Centers
 Business Continuity

2019 AGENCY RESOURCE ALLOCATION



2019 Audit Strategy

- ☐ **Focus Audit work on Governance, Risk, and Control Environment**
- ☐ **Review efficiency & effectiveness of Operations**
- ☐ **Evaluate Reliability of Internal and External Reporting**
- ☐ **Support Agency-wide Goals & Initiatives**
- ☐ **Coordinate Audit Activities with External Parties**



QUESTIONS?

