



Metropolitan Transportation Authority

Audit Committee Meeting

July 2023

Committee Members

J. Barbas, Chair
S. Soliman
L. Sorin

Audit Committee Meeting

Monday, 7/17/2023

12:00 - 1:00 PM ET

**MTA Board Room -20th Floor
2 Broadway**

1. PUBLIC COMMENTS

2. APPROVAL OF MINUTES

Minutes of May 22, 2023 Meeting - Page 3

3. AUDIT COMMITTEE WORK PLAN

2023 WORKPLAN - Condensed - Page 7

2023 WORKPLAN - Detailed - Page 9

4. QUARTERLY FINANCIAL STATEMENTS - 1ST QUARTER 2023

Draft - MTA Consolidated Financial Statements - Q1 2023 - Page 14

5. 2022 PENSION PLANS

Draft - MTA Deferred Compensation Program - Page 146

Draft - MNCR Company Cash Balance Plan - Page 191

Draft - MTA Retiree Welfare Benefits Plan (OPEB) - Page 221

Draft - LIRR Company Plan for Additional Pensions - Page 257

Draft - MaBSTOA Pension Plan - Page 298

Draft - MTA Defined Benefit Pension Plan - Page 359

6. MANAGEMENT REVIEW OF PENSION PLAN AUDITS

Management Review of 2022 Pension Audits - Page 414

7. 2022 SINGLE AUDIT

Draft - MTA Single Audit Report - Page 421

8. 2022 MANAGEMENT LETTER REPORTS

Draft - MTA 2022 Consolidated Management Letter - Page 451

9. REVIEW OF MTA INSPECTOR GENERAL'S OFFICE

Draft - 2022 MTA OIG Report - Page 491

10. ENTERPRISE RISK MANAGEMENT UPDATE

Enterprise Risk Management Status Report - Page 494

11. ETHICS AND COMPLIANCE UPDATE

Ethics and Compliance Report - Page 505

12. FINANCIAL INTEREST REPORTS

Annual Report on 2022 Financial Interest Reporting Compliance - Page 520

FDS Filers Employee Memorandum Reminder - Page 521

13. 2023 AUDIT PLAN STATUS UPDATE

2023 MidYear Audit Committee Status Presentation - Page 522

14. OPEN AUDIT RECOMMENDATIONS

Remediation Plans Monitoring Report - Six Months Past Due - Page 529

**MINUTES OF MEETING
AUDIT COMMITTEE OF THE BOARD
MONDAY, MAY 22, 2023 – 2:00 P.M.
RONAN BOARD ROOM – 20TH FLOOR
2 BROADWAY**

The following were present:

Honorable:

Jamey Barbas

Sherif Soliman

Lisa Sorin

M. Woods – MTA

K. Willens - MTA

J. Strohmeyer - Deloitte

L. Kearse – MTA

J. McGovern - MTA

K. Makrakis - Deloitte

P. Zurita - Deloitte

A. Lam - Deloitte

D. Patel - Deloitte

Also in attendance were:

P. Graves - MTA

E. Eisland - MTA

J. Patel - MTA

1. PUBLIC COMMENTS PERIOD

There were two speakers: Jason Anthony and an individual named Michael. Refer to the video recording of the meeting produced by the MTA and maintained in MTA records for the content of their statements.
<https://new.mta.info/transparency/board-and-committee-meetings/may-2023>.

2. APPROVAL OF MINUTES

Since there was no quorum at the last Audit Committee meeting, the minutes of both the October 24, 2022 and February 21, 2023 Audit Committee were approved.

3. AUDIT COMMITTEE WORK PLAN

The Auditor General (Michele Woods) noted that there were no changes to the Work Plan.

4. MANAGEMENT REVIEW OF MTA CONSOLIDATED FINANCIAL STATEMENTS

Jim McGovern, MTA Acting Deputy Chief from the Comptroller's Office, briefed the committee on management's review of the 2022 MTA consolidated financial statements. This review includes changes in capital, net assets, other assets and operating revenues and expenses. He proceeded to note that the presentation is "condensed" and not in accordance with GAAP. McGovern stated that they have added a new slide this year for the MTA Component Units, and noted a new Component Unit – specifically, Grand Central Madison. With respect to the Component Units, McGovern noted that eight of the 10 entities (Component Units) have their own separate audit report and hence their own separate levels of materiality and testing. Therefore, as the MTA adds more Component Units, they add more costs. McGovern then referenced a slide that listed the standard audit reports issued each year for each agency. He then referenced and discussed two slides on GASB Accounting Standards and focused on GASB 87. In regards to GASB 87 (Leases), McGovern emphasized to the Committee members the significance of implementation of this

new pronouncement. Specifically, GASB 87 provides financial statement users with improved accounting and financial reporting for leases. Under GASB 87, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. Because of GASB 87, they had to restate 2021 and the impact to the MTA's consolidated financial statements was a \$1 billion increase in assets and a \$1 billion increase in liabilities to the Balance Sheet. The net difference to the Income Statement (Income and Expenses) was relatively small, which is consistent to how this accounting pronouncement has been implemented universally. The billion dollars represents about 1,200 leases and each lease required its own individual calculation of the net present value of cash flows. Over 5,000 leases were reviewed and evaluated, of which 400 leases were selected for testing this year by Deloitte due to the significance of the new pronouncement. McGovern then outlined all the actions taken to implement GASB 87 which included: leveraging the YARDI software package with MTA Real Estate; creating a new process in Procurement to identify new leases and a new process whereby accounting reviews all requisitions relating to leases; and, adding about 60 new general ledger accounts to track right-of-use assets, deferred liabilities, accounts receivables, and deferred inflows. He noted that one difference between the private sector and government sector with respect to GASB 87 is that government must also account for the receivable side which doubles the level of effort. McGovern noted the large number of meetings required to implement GASB 87 and the involvement of many entities (Procurement, MTA Real Estate, MTA IT, the Operating Units, MTA Legal, MTA Audit and Deloitte). He thanked all the people who helped with implementation of GASB 87 especially Lisa Tan who was his main point person on this project.

McGovern then referenced a slide showing the assets and liabilities and noted (preliminarily) that the MTA has \$116 billion in assets versus \$113 billion in the prior year. With respect to the change in assets (year to year), he noted that the biggest change in "Cash & Investments" was due to the ARPA Grants and that the change in "Receivables" was due to the CRRSAA Grants last year being accrued for as a receivable and then the monies being received in 2022. In regards to liabilities, McGovern explained that the change was caused by redemption in 2022 of MTA grant and bond anticipation notes. The change in pension liabilities was caused primarily due to changes in NYCERS asset value. McGovern then referenced a slide that showed the scale by agency with respect to assets and liabilities. He noted that the chart confirms that NYC Transit is the substantial entity on the asset side and on the liabilities side, the chart shows that the MTA and TBTA (Bridges & Tunnels) holds the most debt. McGovern then referenced a slide on relevant capital assets and liabilities and highlighted a small section on the chart entitled "Right of Use Assets" which reflects the GASB implementation and commented that this shows that a lot of work was performed for a small percentage of the assets. McGovern then referenced two slides on the Consolidated Income Statement and noted that the year-to-year changes in both the Income Statement and Statement of Cash Flows were caused mostly by receipt of federal grant monies during 2022. Lastly, McGovern referenced a slide that listed the footnotes that accompany the financial statements and stated that these footnotes are required.

The Committee Chair Jamey Barbas inquired as to whether McGovern was conformable that the systems are improved going forward to handle the GASB requirements. In response, McGovern stated that he is comfortable and that they are addressing issues.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records for the details.

5. 2022 FINANCIAL STATEMENTS

Jill Strohmeyer, Managing Director, from Deloitte, briefed the Committee on the results of their review of the 2022 MTA Consolidated Year End Financial Statements. Prior to starting her presentation, she thanked the entire MTA team for assisting with the audit and introduced her team (Kostas Makrakis,

Patricia Zurita, Anissa Lan and Darshan Patel). Strohmeier said that they have conducted their audits in accordance with both AICPA and Government Auditing Standards, and they expect to issue their reports by the target date of May 31. She noted that as previously discussed by Jim McGovern there was one change in accounting policy this year – specifically GASB 87 and leases. Deloitte has evaluated the impact of GASB 87 including the accounting practices, policies and estimates used in determining the assets and liabilities recorded because of its implementation. There were no uncorrected misstatements or disclosure items passed for this year’s audits. Also, they were not aware of any material corrected misstatements that were brought to the attention of management throughout the performance of their audits. Strohmeier added that there were no disagreements with management and that they received the full cooperation of management throughout their audits. She added that MTA management brought to the attention of Deloitte an error this year relating to \$355 million of FEMA revenue that was previously recorded as a third-party liability but which was corrected this year and recorded as revenue. This error was not material to either the prior year’s or to the 2022 financial statements. While this error related to FEMA and a federal grant, these amounts were correctly reported, in the correct year, on all the MTA’s schedules reported to the federal audit clearing house (federal awarding agencies). As a result of GASB 87, the auditor’s opinion will include an “Emphasis of Matter” paragraph. This paragraph will alert the users of the financial statements that the MTA implemented the lease standard and that there was restatement of the 2021 balances as a result. She noted, however, that it is still an unmodified “clean” opinion for all the audits. Lastly, Strohmeier noted that some control deficiencies identified by Deloitte during their audits will be brought to the attention of the Committee at the July Committee meeting. These are just better business practices and low-level deficiencies (and nothing of high severity).

A motion was made and seconded to accept the 2022 Year End Financial Statements and to be recommended to the full board for final approval.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records for the details.

6. 2022 INVESTMENT COMPLIANCE REPORT

Jill Strohmeier, Managing Director, briefed the Committee on Deloitte’s review of the MTA’s compliance with the guidelines governing investment practices. She referenced the one-page Investment Compliance Report in the Audit Committee Book and noted that this a “negative assurance” report. During performance of their annual audit of the MTA’s consolidated financial statements, they tested the investment balances and nothing came to their attention during their testing of those account balances that would indicate that any of any of the investments were not in accordance with MTA Investment Guidelines or the guidelines set forth by the State of New York.

A motion was made and seconded to accept the Investment Compliance Report and to move to the full board for final approval.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records for the details.

7. OPEN AUDIT RECOMMENDATIONS

Lamond Kears, the Chief Compliance Officer briefed the Committee on the quarterly report on the status of open and past due audit recommendations previously accepted by the agencies. Kears referenced the presentation in the Audit Committee Book and noted that there are currently 99 remediation plans which the departments have indicated they have implemented but they are awaiting confirmation that they are in fact prepared to be closed. As background, Kears explained that when MTA Audit issues a

finding, or when Compliance does a test and that test fails, that generates a finding and because of that finding Compliance works with the department to create a remediation plan. He then referenced a slide that indicates the number of remediation plans that the departments have reported as being done. However, that must be confirmed by both MTA Audit and Compliance that in fact it is done, and that there is sufficient documentation to support it in case it ever gets questioned. Kearsé then referenced a slide that showed that there are 84 remediation plans that are six months past due, of which 20 (at the time of this report) are of high priority. However, the number of high priority remediation plans has now been reduced to only 13. Kearsé thanked both Lisette Camilo and Kevin Willens for their support in addressing these past due plans. Kearsé then referenced a slide that showed the number of high priority remediation plans summarized by department and noted that the number of past due IT remediation plans has been cut by two-thirds. He thanked both Lisette Camilo and Rafail Portnoy in their assistance in closing out these items. Lastly, Kearsé referenced a slide that showed the number of remediation plans created by quarter. To put things in perspective as far as the inflows and outflows, Kearsé noted that last quarter (first quarter 2023) 102 new remediation plans were created and 125 plans were closed in that same quarter. He added that a significant amount of work is being done by the departments to open, correct and close out the remediation plans and that the 84 overdue remediation plans did not get lost.

Committee member Sorin inquired as to what are the timelines from the point that the finding is received to the point that it is remediated. In response, Kearsé noted that when the finding is generated, there is a time put in place as to when the department believes they can actually implement the remediation action. That date is negotiated in the beginning when the finding is generated.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records for the details.

8. **EXECUTIVE SESSION**

Upon motion duly made and seconded, the Committee voted to convene an executive session to discuss proposed, pending, or current litigation in accordance with NYS Public Officers Law 105.1d.

9. **MOTION TO ADJOURN**

Upon motion duly made and seconded, the committee adjourned the meeting.

Respectfully submitted,



Michele Woods
Auditor General

2023 AUDIT COMMITTEE WORK PLAN

I. RECURRING AGENDA ITEMS

Responsibility

Each Meeting:

Approval of Minutes
Audit Work Plan

Committee Chair & Members
Committee Chair & Members

As Appropriate:

Pre-Approval of Audit and Non-Auditing Services
Follow-Up Items
Status of Audit Activities

Committee Chair & Members

Executive Sessions

Auditor General
Auditor General/MTA IG/
CCO/CFO/
Controllers/External Auditor/
Committee Chair & Members

II. SPECIFIC AGENDA ITEMS

February 2023

Quarterly Financial Statements – 3rd Quarter 2022
Enterprise Risk Management Update
and Internal Control Guidelines
Compliance with the Internal Control Act
2022 Audit Plan Status Report
2023 Audit Plan
Information Technology Report
Open Audit Recommendations

External Auditor
Chief Compliance Officer

Chief Compliance Officer
Auditor General
Auditor General
Chief Technology Officer
Chief Compliance Officer

May 2023

2022 Audited Financial Statements
Management's Review of Consolidated
Financial Statements
Investment Compliance Report
Open Audit Recommendations
Contingent Liabilities/Third Party
Lawsuits (Executive Session)

External Auditor/CFO
Deputy Chief, Controller's Office

External Auditor
Chief Compliance Officer
General Counsels/External Auditor

July 2023

Quarterly Financial Statements – 1st Quarter 2023
Pension Audits (2022)
Management’s Review of Pension Audits
Single Audit Report
Management Letter Reports
Review of MTA/IG’s Office (FY 2022)
Enterprise Risk Management Update
Ethics and Compliance Program
Financial Interest Reports
MTAAS 2023 Audit Plan Status Report
Open Audit Recommendations

External Auditor
External Auditor/Deputy Chief, Controller
Deputy Chief, Controller’s Office
External Auditor/CFOs
External Auditor/CFOs/Controllers
External Auditor
Chief Compliance Officer
Chief Compliance Officer
Chief Compliance Officer
Auditor General
Chief Compliance Officer

October 2023

Quarterly Financial Statements – 2nd Quarter 2023
Appointment of External Auditors
Audit Approach Plans/Coordination
Review of Audit Committee Charter
Security of Sensitive Data & Systems
(Executive Session)
Open Audit Recommendations
Annual Audit Committee Report

External Auditor
Committee Chair & Members
External Auditor
CCO and Committee Chair
Chief Technology Officer

Chief Compliance Officer
Committee Chair

2023 AUDIT COMMITTEE WORK PLAN

I. RECURRING AGENDA ITEMS

Each Meeting

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.

As Appropriate

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

FEBRUARY 2023

Quarterly Financial Statements - 3rd Quarter 2022

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 2022.

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 the Internal Control Act

The Committee will be briefed by the MTA Chief Compliance Officer 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.

MTAAS 2022/2023 Audit Plans

i. 2022 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 2022.

ii 2023 Audit Plan

A discussion by Audit Services of the areas scheduled to be reviewed in 2023 as well as the guidelines and policies that were used to assess audit risk and their application in the development of the audit work plan.

Information Technology Report

The MTA Chief Technology 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 will report to the Committee on the status of audit recommendations previously accepted by their respective agency.

MAY 2023

2022 Financial Statements

The MTA public accounting firm will review the results and conclusions of their examination of the 2022 Financial Statements. The CFO/Deputy Chief, Controller's Office will be available to the Committee to answer any questions regarding the submission of their audit representation letters to the external audit firm.

Management's Review of MTA Consolidated Financial Statements

The Deputy Chief, Controller's Office will present a management's review of the 2022 MTA consolidated financial statements, including changes in capital, net assets, other assets and operating revenues and expenses.

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.

Open Audit Recommendations

The MTA Chief Compliance Officer 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 2023

Quarterly Financial Statements – 1st Quarter 2023

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 2023.

Pension Audits

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

The Deputy Chief, Controller's Office will present a management's review of the 2022 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 firm 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.

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.

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.

Review of the MTA Inspector General's Office

Representatives of MTA's public accounting firm will provide the results of their 2022 "agreed-upon" review procedures on the MTA/IG's operating expenses to ensure compliance with applicable policies and procedures.

Enterprise Risk Management Update

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.

Ethics and 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.

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.

MTAAS 2023 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.

Open Audit Recommendations

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

OCTOBER 2023

Quarterly Financial Statements – 2nd Quarter 2023

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 2023.

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

Representatives of MTA's public accounting firm will review their audit approach for the 2023 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 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 2023 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).

Security of Sensitive Data & Systems

The MTA Chief Technology Officer will make a presentation to the Committee on the security of sensitive data and systems at the MTA.

Open Audit Recommendations

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

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 2023. 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.

DRAFT

**Metropolitan
Transportation Authority**
(A Component Unit of the State of New York)

Independent Auditor's Review Report

Interim Financial Statements as of and
for the Three-Month Period Ended March 31, 2023

Table of Contents

MANAGEMENT’S DISCUSSION AND ANALYSIS	3
BUSINESS-TYPE ACTIVITIES CONSOLIDATED INTERIM FINANCIAL STATEMENTS AS OF MARCH 31, 2023 AND DECEMBER 31, 2022 AND FOR THE THREE-MONTH PERIODS ENDED MARCH 31, 2023 AND 2022.....	18
Consolidated Interim Statements of Net Position.....	18
Consolidated Interim Statements of Revenues, Expenses, and Changes in Net Position.....	20
Consolidated Interim Statements of Cash Flows	22
FIDUCIARY ACTIVITIES FINANCIAL STATEMENTS AS OF DECEMBER 31, 2022 AND 2021.....	24
Statements of Fiduciary Net Position	24
Statements of Changes in Fiduciary Net Position.....	25
NOTES TO CONSOLIDATED INTERIM FINANCIAL STATEMENTS.....	26
REQUIRED SUPPLEMENTARY INFORMATION.....	102
Schedule of Changes in the MTA’s Net Pension Liability and Related Ratios for Single Employer Pension Plans.....	102
Schedule of the MTA’s Proportionate Share of the Net Pension Liabilities of Cost-Sharing Multiple-Employer Pension Plans	106
Schedule of the MTA’s Contributions for All Pension Plans	107
Notes to Schedule of the MTA’s Contributions for All Pension Plans.....	109
Schedule of Changes in the MTA’s Net OPEB Liability and Related Ratios and Notes to Schedule	123
Schedule of the MTA’s Contributions to the OPEB Plan.....	124
Notes to Schedule of the MTA’s Contributions to the OPEB Plan	125
SUPPLEMENTARY INFORMATION: COMBINING FIDUCIARY FUNDS FINANCIAL STATEMENTS.....	126
Pension and Other Employee Benefit Trust Funds - Combining Statement of Fiduciary Net Position for the Year-Ended December 31, 2022	126
Pension and Other Employee Benefit Trust Funds - Combining Statement of Fiduciary Net Position for the Year-Ended December 31, 2021	127
Pension and Other Employee Benefit Trust Funds - Combining Statement of Changes in Fiduciary Net Position for the Year-Ended December 31, 2022.....	128
Pension and Other Employee Benefit Trust Funds - Combining Statement of Changes in Fiduciary Net Position for the Year-Ended December 31, 2021	129
SUPPLEMENTARY INFORMATION:	130
Schedule of Consolidated Reconciliation Between Financial Plan and Financial Statements for the Three-Month Period Ended March 31, 2023.....	130
Schedule of Consolidated Subsidy Accrual Reconciliation Between Financial Plan and Financial Statements for the Three-Month Period Ended March 31, 2023.....	131
Schedule of Financial Plan to Financial Statements Reconciliation for the Three-Month Period Ended March 31, 2023.....	132

(A Component Unit of the State of New York)

MANAGEMENT'S DISCUSSION AND ANALYSIS

**AS OF MARCH 31, 2023 AND DECEMBER 31, 2022 AND FOR THE THREE-MONTH PERIODS
ENDED MARCH 31, 2023 AND 2022**

(\$ In Millions, except as noted)

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.

The Reporting entity includes:

(1) the MTA is comprised of the following:

- 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 Construction and Development Company ("MTA Construction and Development"), formerly called MTA Capital Construction Company, 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.
- MTA Grand Central Madison Operating Company ("MTA GCMOC") operates and maintains the infrastructure and structures supporting Long Island Rail Road access into Grand Central Terminal.
- MTAHQ, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Staten Island Railway, FMTAC, MTA Capital Construction, and MTA Bus, and MTA GCMOC 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 MTA provides transportation services in the New York metropolitan area, operations of seven bridges and two tunnels within New York City and primary insurance coverage. The MTA engages in Business-Type Activities.

(2) Fiduciary Funds comprised of Pension and Other Employee Benefit Trust Funds:

- Pension Trust Funds:
 - MTA Defined Benefit Pension Plan
 - The Long Island Railroad Company Plan for Additional Pensions ("Additional Plan")
 - Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA Plan")

- Metro-North Commuter Railroad Cash Balance Plan (“MNR Cash Balance Plan”)
- Other Employee Benefit Trust Funds
 - MTA Other Postemployment Benefits Plan (“OPEB Plan”)

The financial results of the MTA are reported as consolidated financial statements.

OVERVIEW OF THE CONSOLIDATED INTERIM FINANCIAL STATEMENTS

Introduction

This report consists of: Management’s Discussion and Analysis (“MD&A”), Consolidated Interim Financial Statements, Fiduciary Funds Financial Statements, Notes to the Consolidated Interim Financial Statements, Required Supplementary Information, Supplementary Information - Combining Fiduciary Fund Financial Statements, 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 March 31, 2023 and December 31, 2022 and for the three-month periods ended March 31, 2023 and 2022. 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.

The Fiduciary Funds Financial Statements

Fiduciary funds are used to account for resources held in a trustee capacity for the benefit of parties outside of a government entity. Fiduciary funds are not reported in the MTA’s consolidated financial statements because the resources of those funds are not available to support the MTA’s own programs. The MTA’s fiduciary funds are collectively reported as Pension and Other Employee Benefit Trust Funds.

The Statements of Fiduciary Net Position presents financial information about the assets, liabilities, and the fiduciary net position held in trust of the fiduciary funds of the MTA.

The Statements of Changes in Fiduciary Net Position presents fiduciary activities of the fiduciary funds as additions and deductions to the fiduciary net position.

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 and net other postemployment benefits (“OPEB”) liability, employer contributions for the OPEB and pension plans, actuarial assumptions used to calculate the net pension liability and net OPEB liability, historical trends, and other required supplementary information related to the MTA Group’s cost-sharing multiple-employer defined benefit pension plans.

Supplementary Information - Combining Fiduciary Funds Financial Statements

The supplementary information combining fiduciary funds financial statements includes the combining statements of fiduciary net position and the combining statements of changes in fiduciary net position which provides financial information on each fiduciary fund in which the MTA is functioning as a trustee for another party. The MTA’s fiduciary funds are categorized as Pension and Other Employee Benefit Trust Funds.

Supplementary Information

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

CONDENSED CONSOLIDATED INTERIM FINANCIAL INFORMATION AND CONDENSED CONSOLIDATED INTERIM FINANCIAL INFORMATION

The following sections discuss the significant changes in the MTA Group’s financial position as of March 31, 2023 and December 31, 2022 and for the three-month periods ended March 31, 2023 and 2022. 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

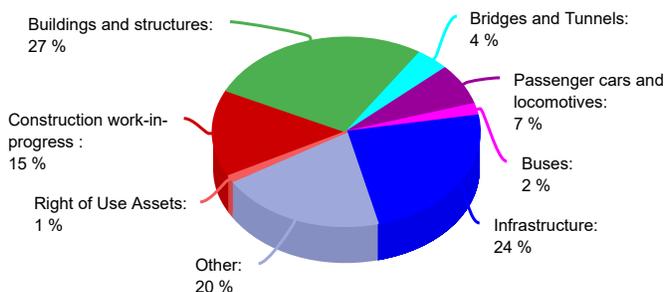
Capital assets include, but are not limited to: bridges, structures, tunnels, construction of buildings and the acquisition of buses, equipment, passenger cars, and locomotives. Right-of-use assets for leases on building, office space, storage space, equipment and vehicle have been included as a result of the implementation of GASB Statement No. 87, *Leases* with retroactive effect of this adoption as of January 1, 2021.

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. This also includes the receivable from leases of MTA’s land, building, station space, equipment, and right-of-way to third parties as a result of the implementation of GASB Statement No. 87, *Leases*.

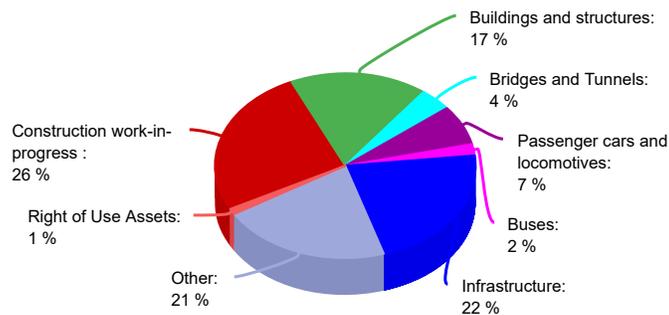
Deferred outflows of resources reflect: changes in fair values of hedging derivative instruments that are determined to be effective, unamortized loss on debt refunding, deferred outflows from pension activities, and deferred outflows from OPEB activities.

(In millions)	March 31, 2023	December 31, 2022	Increase / (Decrease)
Capital assets — net (see Note 6)	\$ 87,483	\$ 87,506	\$ (23)
Other assets	21,007	21,138	(131)
Total Assets	108,490	108,644	(154)
Deferred outflows of resources	8,143	8,274	(131)
Total assets and deferred outflows of resources	\$ 116,633	\$ 116,918	\$ (285)

Capital Assets, Net - March 31, 2023



Capital Assets, Net - December 31, 2022



Significant Changes in Assets and Deferred Outflows of Resources Include:**March 31, 2023 versus December 31, 2022**

- Net capital assets decreased by \$23. There was a decrease in construction in progress of \$9,505, a net increase in accumulated depreciation of \$762, and an increase in amortization of \$16. This decrease was offset by an increase in buildings and structures of \$8,192, and an increase in infrastructure of \$2,055. These changes were primarily due to capitalization and depreciation of Grand Central Madison terminal assets as revenue service began in January 2023. See Note 6 to the MTA's Consolidated Interim Financial Statements for further information. Some of the more significant projects offsetting the net decrease included:
 - Continued progress on the Grand Central Madison terminal, Second Avenue Subway and the subway action plan.
 - Infrastructure work including:
 - Repairs and improvements of all MTA Bridge and Tunnels' facilities.
 - Construction of a third track between Floral Park and Hicksville by MTA Long Island Railroad.
 - 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 passenger station rehabilitation for Penn Station and Grand Central Madison terminal.
 - 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 decreased by \$131 or 0.6%. The major items contributing to this change include:
 - A decrease in investments of \$2,290, primarily due to FTA grants received in 2022 offset by the redemption of MTA Grant Anticipation Notes.
Offsetting this decrease were:
 - A net increase in various other current and noncurrent assets of \$1,080, primarily due to an increase in prepaid pension expense resulting from MTA's prepayment of the 2023 and 2024 projected Actuarially Determined Contributions for MTA-Sponsored Pension Plans in January 2023.
 - An increase in cash of \$989 from net cash flow activities, including timing of New York State's funding towards the MTA Capital Program and processing of capital payments.
 - An increase of \$115 in federal and state government receivables.
- Deferred outflows of resources decreased by \$131 or 1.6%, primarily attributed to decreases in the amortization of loss on debt refunding of \$151, and deferred outflows related to pensions and other post-employment benefits of \$7, offset by an increase in changes in the fair value of derivative instruments of \$27.

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

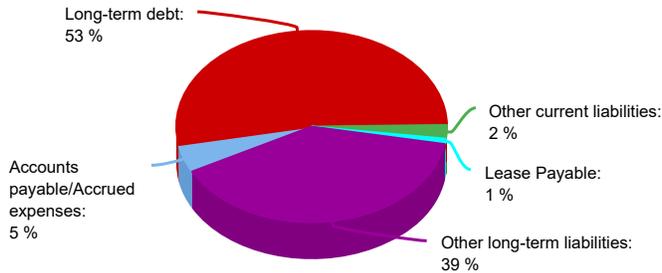
Current liabilities include: accounts payable, accrued expenses, current portion of long-term debt, pollution remediation liabilities, unredeemed fares and tolls, and other current liabilities. This also includes the current portion of long-term lease liability as a result of the implementation of GASB Statement No. 87, *Leases*.

Non-current liabilities include: long-term debt, claims for injuries to persons, post-employment benefits and other non-current liabilities. This also includes the long-term lease liability as a result of the implementation of GASB Statement No. 87, *Leases*.

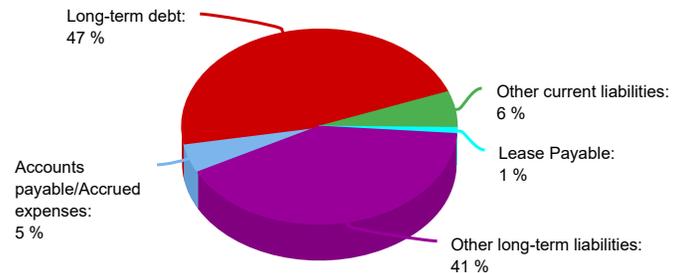
Deferred inflows of resources reflect unamortized gains on debt refunding, pension related deferred inflows, and deferred inflows from OPEB activities. As a result of the implementation of GASB Statement No. 87, *Leases*, a deferred inflow of resources from leases at the amount of the lease receivable was recognized.

(In millions)	March 31, 2023	December 31, 2022	Increase / (Decrease)
Current liabilities	\$ 10,782	\$ 10,552	\$ 230
Non-current liabilities	86,130	85,375	755
Total liabilities	96,912	95,927	985
Deferred inflows of resources	4,051	4,074	(23)
Total liabilities and deferred inflows of resources	<u>\$ 100,963</u>	<u>\$ 100,001</u>	<u>\$ 962</u>

Total Liabilities - March 31, 2023



Total Liabilities - December 31, 2022



Significant Changes in Liabilities and Deferred Inflows of Resources Include:

March 31, 2023 versus December 31, 2022

- Current liabilities increased by \$230 or 2.2%. The increase was primarily due to:
 - An increase in unearned revenue of \$908 due to timing of New York State’s funding towards the MTA Capital Program and processing of capital payments.
 - An increase in interest payable of \$506, mainly due to timing of interest payments on long-term debt.
 - An increase in accounts payable due to vendors of \$44.
 Offsetting decreases were as follows:
 - A decrease in the current portion of long-term debt of \$820, primarily from the redemption of MTA Grant Anticipation Notes and MTA Bond Anticipation Notes.
 - A decrease in capital accruals of \$226.
 - A net decrease of \$89 in employee related accruals.
 - A decrease in accrued expenses of \$78.
 - A net decrease in other current liabilities of \$37.
- Non-current liabilities increased by \$755 or 0.9%. This increase was mainly due to:
 - An increase in the non-current portion of long-term debt of \$660, which includes a \$1,254 increase from the issuance of MTA Bridges and Tunnels Sales Tax Revenue Bonds, \$828 from issuance of MTA Bridges and Tunnels General Revenue Bonds, and \$765 from issuance of MTA Bridges and Tunnels Payroll Mobility Tax Senior Lien Refunding Green Bonds.
 - An increase of \$81 in estimated liability arising from injuries to persons.
 - A net increase in derivative liabilities of \$15 resulting mainly from changes in market valuation and a reduction in the notional amount of derivative contracts.
 Offsetting decreases were:
 - A decrease in contract retainage payable of \$11.

- A decrease in lease payable of \$9.
- Deferred inflows of resources decreased by \$23 or 0.6%.

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

(In millions)	March 31, 2023	December 31, 2022	Increase / (Decrease)
Net investment in capital assets	\$ 37,986	\$ 34,886	\$ 3,100
Restricted for debt service	1,093	381	712
Restricted for claims	214	192	22
Restricted for other purposes	3,301	4,491	(1,190)
Unrestricted	(26,924)	(23,033)	(3,891)
Total Net Position	\$ 15,670	\$ 16,917	\$ (1,247)

Significant Changes in Net Position Include:

March 31, 2023 versus December 31, 2022

At March 31, 2023, total net position decreased by \$1,247 or 7.4%, when compared with December 31, 2022. This change is a result of an increase in net non-operating revenues of \$1,049, an increase in appropriations, grants and other receipts externally restricted for capital projects of \$529, offset by operating losses of \$2,825.

The net investment in capital assets increased by \$3,100 or 8.9%. Funds restricted for debt service, claims and other purposes decreased by \$456 or 9.0% in the aggregate, mainly due to scheduled debt service payments. Unrestricted net position decreased by \$3,891 or 16.9%.

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

(In millions)	Three-Month Period Ended		Increase / (Decrease)
	March 31, 2023	2022	
Operating revenues			
Passenger and tolls	\$ 1,615	\$ 1,370	\$ 245
Other	149	144	5
Total operating revenues	1,764	1,514	250
Non-operating revenues			
Grants, appropriations and taxes	1,147	2,247	(1,100)
Other	410	4,086	(3,676)
Total non-operating revenues	1,557	6,333	(4,776)
Total revenues	3,321	7,847	(4,526)
Operating expenses			
Salaries and wages	1,656	1,568	88
Retirement and other employee benefits	876	861	15
Postemployment benefits other than pensions	199	149	50
Depreciation and amortization	856	796	60
Other expenses	1,002	813	189
Total operating expenses	4,589	4,187	402
Non-operating expenses			
Interest on long-term debt	507	488	19
Other net non-operating expenses	1	1	-
Total non-operating expenses	508	489	19
Total expenses	5,097	4,676	421
(Loss) / Gain before appropriations, grants and other receipts			
externally restricted for capital projects	(1,776)	3,171	(4,947)
Appropriations, grants and other receipts			
externally restricted for capital projects	529	1,053	(524)
Change in net position	(1,247)	4,224	(5,471)
Net position, beginning of period	16,917	9,143	7,774
Net position, end of period	\$ 15,670	\$ 13,367	\$ 2,303

Revenues and Expenses, by Major Source:**Period ended March 31, 2023 versus 2022**

- Total operating revenues increased by \$250, or 16.5%. The increase was mainly due to increased ridership on trains and subways, as well as increased tolls from vehicle crossings. Fare and toll revenue had increases of \$217 and \$28, respectively. Other operating revenues increased by \$5 when compared with the same period in 2022 due to higher advertising revenues and higher paratransit reimbursement subsidy.
- Total non-operating revenues decreased by \$4,776, or 75.4%.
 - Other subsidies decreased by \$3,676, primarily due to a decrease of \$3,816 in funds from the Federal government's American Rescue Plan Act ("ARPA") to support operations, offset by increases in other net non-operating expenses of \$121 and subsidies from the Connecticut Department of Transportation for the MTA Metro-North Railroad of \$16.
 - Grants, appropriations, and taxes decreased by \$1,100 primarily due to a decrease in Metropolitan Mass Transportation Operating Assistance of \$649, due to timing of cash receipts, a decrease in Urban Tax of \$119, a decrease in Payroll Mobility Tax of \$112, a decrease in Mortgage Recording Tax of \$102, a decrease in Mansion Tax of \$75, a decrease in Operating Assistance of \$50, and a decrease in Mass Transportation Trust Fund from New York State of \$15. These were offset by increases in New York City Assistance Fund of \$10, Internet Sales Tax of \$7, and Aid Trust subsidies of \$5.
- Labor costs increased by \$153, or 5.9%, due to a \$88 increase in salaries and wages, and a net increase of \$65 in employee benefits, including post-retirement benefits.
- Non-labor operating costs increased by \$249, or 15.5%. The variance was primarily due to:
 - An increase in depreciation and amortization of \$60 primarily due to more assets placed in service during 2023, including \$26 in depreciation for capital assets associated with Grand Central Madison terminal.
 - An increase in material and supplies of \$37, mainly due to higher maintenance and repairs requirements.
 - An increase in professional service contracts of \$36.
 - An increase in paratransit service contracts of \$32.
 - An increase in maintenance and other operating contracts of \$27.
 - An increase in electric power of \$26 and fuel of \$4 due mainly to increased service levels and rates.
 - A net increase in other non-labor expenses of \$27.
- Total net non-operating expenses increased by \$19, or 3.9%, due to an increase in interest on long-term debt.
- Appropriations, grants and other receipts externally restricted for capital projects decreased by \$524, or 49.8% mainly due to 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 a myriad of economic forces. 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 ridership for first quarter 2023 continued to fall short of the pre-pandemic level, with ridership down 68.5 million trips (-19.9%) below 2020 first quarter ridership. Year-over-year improvements continued, with 2023 exceeding 2022 ridership levels by 72.1 million trips (21.3%). For the first quarter compared with the first quarter of 2023, MTA New York City Transit subway ridership increased by 53.6 million trips (24.3%), MTA New York City Transit bus increased by 8.0 million trips (10.2%), MTA Long Island Rail Road ridership increased by 3.9 million trips (37.5%), MTA Metro-North Railroad increased by 4.1 million trips (45.4%), MTA Bus increased by 2.4 million trips (12.6%), and MTA Staten Island Railway increased by 74 thousand trips (15.6%). Vehicle traffic at MTA Bridges and Tunnels facilities for the first quarter of 2023 exceeded 2020 levels by 8.8 million crossings (12.7%), and B&T traffic in the first quarter, compared with the first quarter of 2023, was up 4.8 million crossings (6.5%).

The Central Business District Tolling Program (CBDTP) was authorized by the MTA Reform and Traffic Mobility Act and enacted in April 2019. The CBDTP will impose a toll for vehicles entering or remaining in the Central Business District (CBD),

which is defined as Manhattan south of and inclusive of 60th Street, not including the FDR Drive or the West Side Highway (which includes the Battery Park underpass and or any surface roadway portion of the Hugh L. Carey Tunnel that connects to West Street). If implemented, changes in travel patterns are predicted as drivers to the CBD may avoid the toll by switching to transit or other modes, taking alternative routes, or not making the trip.

To implement the CBD Tolling Program on federal-aid roadways within the CBD, authorization is required from the Federal Highway Association (FHWA) under its Value Pricing Pilot Program (VPPP). In accordance with the National Environmental Policy Act, MTA Bridges and Tunnels, New York State Department of Transportation, and New York City Department of Transportation (collectively, the Project Sponsors), in cooperation with FHWA, were required to prepare an Environmental Assessment (EA) with robust public outreach. This process concluded in late June 2023, when the FHWA issued a Finding of No Significant Impact (FONSI). Contractors have up to 310 days from this approval to complete the design, development, testing and installation of the tolling system, and the TBTA Board must adopt a toll structure, before toll collection can begin.

Seasonally adjusted non-agricultural employment in New York City for the first quarter was higher in 2023 than in 2022 by 203.1 thousand jobs (4.5%). On a quarter-to-quarter basis, New York City employment gained 48 thousand jobs (1.0%), the tenth consecutive quarterly increase. These increases were preceded by the steep decline of 891.4 thousand jobs (19.0%) during the second quarter of 2020.

National economic growth, as measured by Real Gross Domestic Product (“RGDP”), increased at an annualized rate of 1.3% in the first quarter of 2023, according to the most recent estimate released by the Bureau of Economic Analysis; in the fourth quarter of 2022, the revised RGDP increased 2.6 percent. The increase in consumer spending reflected increases in both goods and services. Within goods, the leading contributor was motor vehicles and parts. Within services, the increase was led by health care and food services and accommodations. Within exports, an increase in goods (led by consumer goods, except food and automotive) was partly offset by a decrease in services (led by transport). Within federal government spending, the increase was led by nondefense spending. The increase in state and local government spending primarily reflected an increase in compensation of state and local government employees. Within nonresidential fixed investment, increases in structures and intellectual property products were partly offset by a decrease in equipment. The decrease in private inventory investment was led by wholesale trade (notably, machinery, equipment, and supplies) and manufacturing (led by other transportation equipment as well as petroleum and coal products). Within residential fixed investment, the leading contributor to the decrease was new single-family construction. Within imports, the increase reflected an increase in goods (mainly durable consumer goods and automotive vehicles, engines, and parts). Compared to the fourth quarter, the deceleration in real GDP in the first quarter primarily reflected a downturn in private inventory investment and a slowdown in nonresidential fixed investment. These movements were partly offset by an acceleration in consumer spending, an upturn in exports, a smaller decrease in residential fixed investment, and an increase in imports.

The New York City metropolitan area’s price inflation rate, as measured by the Consumer Price Index for All Urban Consumers (“CPI-U”), was lower than the national average in the first quarter of 2023, with the metropolitan area index increasing 5.5% while the national index increased 5.8% when compared with the first quarter of 2022. Regional prices for energy products increased 0.8%, and national prices of energy products rose 2.1%. In the metropolitan area, the CPI-U exclusive of energy products increased by 5.8%, while nationally, inflation exclusive of energy products increased 6.1%. The New York Harbor spot price for conventional gasoline decreased by 8.7% from an average price of \$2.79 per gallon to an average price of \$2.55 per gallon between the first quarters of 2022 and 2023.

In its announcement on June 14th, 2023, the Federal Open Market Committee (“FOMC”) held its target for the Federal Funds rate to the 5.00% to 5.25% range. The Federal Funds rate target had been in the 0.00% to 0.25% range from March 15, 2020 through March 16, 2022, when the FOMC increased the target to the 0.25% to 0.50% range. The target was further increased to the 0.75% to 1.00% range on May 4, 2022, to the 1.50% to 1.75% range on June 15, 2022, to the 2.25% to 2.50% range on July 27, 2022, to the 3.00% to 3.25% range on September 21, 2022, to the 3.75% to 4.00% range on November 2, 2022, to the 4.25% to 4.50% range on December 14, 2022, to the 4.5% to 4.75% range on February 1, 2023, to the 5.00% to 5.25% range on May 3, 2023, and most recently held the rate steady on June 14, 2023. In support of its actions, FOMC noted that job gains have remained robust, the unemployment rate has remained low, and inflation remains elevated and reflects supply and demand imbalances related to the pandemic, higher food and energy prices, and broader price pressures. In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in its previously announced plans. By holding the rate steady, the Committee will be able to assess additional information and its implications for monetary policy that may be appropriate to returning inflation to its 2 percent objective. The FOMC seeks to achieve maximum employment, with achieving a two percent inflation rate over the longer term and is prepared to adjust the stance of its monetary policy as appropriate if risks emerge that could impede its employment and inflation goals based on assessments of the economic outlook, considering information on public health, labor market conditions, inflation pressures and expectations, and financial and international developments.

Concern over banking conditions have been under heightened stress since Silvergate Bank, Silicon Valley Bank and Signature Bank failed in early March 2023. In response, U.S. federal bank regulators took measures to ensure all deposits at Silicon Valley Bank and Signature Bank would be honored, and the Federal Reserve established a Bank Term Funding Program to offer loans of up to one year to eligible depository institutions pledging qualifying assets as collateral. Silvergate Bank is winding down

its operations and liquidating its assets. Later in March, Switzerland-based Credit Suisse was acquired by UBS in a government brokered deal to prevent Credit Suisse from collapsing and causing a further crisis within the global banking system. Soon after the bank run at Silicon Valley Bank, depositors quickly began withdrawing funds from First Republic Bank. Despite a massive capital infusion from a group of major banks in March, First Republic's financial situation further destabilized. With the Federal Deposit Insurance Corporation (FDIC) prepared to take First Republic into receivership, the FDIC announced on May 1 that First Republic had been closed and sold to JPMorgan Chase. In light of these recent bank failures, the Federal Reserve is considering revisions of the central bank's oversight role.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security ("CARES") Act was signed into law and provided \$4.0 billion in funding to the MTA. The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 ("CRRSAA") became law on December 27, 2020 and provided the MTA with \$4.1 billion in aid. On March 11, 2021, the American Rescue Plan Act of 2021 ("ARPA") was signed in law, with the MTA receiving \$6.9 billion in aid from ARPA.

The influence of the Federal Reserve's monetary policy on the mortgage market is a matter of interest to the MTA, since variability of mortgage rates can affect real estate transactions and thereby impact receipts from the Mortgage Recording Taxes ("MRT") and the Urban Taxes, two important sources of MTA revenue. While real estate transaction activity initially was severely impacted by social distancing and the economic disruption caused by the COVID-19 pandemic, demand for suburban residential real estate, along with mortgage rates that were historically low until recently, significantly strengthened mortgage activity and refinancing of existing mortgages. Mortgage Recording Tax collections in the first quarter of 2023 were lower than the first quarter of 2022 by \$90.5 million (-47.8%). Average monthly receipts in the first quarter of 2023 were \$30.7 million (-48.2%) lower than the monthly average for 2006, just prior to the steep decline in Mortgage Recording Tax revenues during the Great Recession. MTA's Urban Tax receipts during the first quarter of 2023—which are derived from 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 \$152.8 million (-57.5%) lower than receipts during the first quarter of 2022. Average monthly receipts in the first quarter of 2023 were \$36.0 million (-48.9%) lower than the monthly average for 2007, just prior to the steep decline in Urban Tax revenues during the Great Recession.

Results of Operations

MTA Bridges and Tunnels - For the three months ended March 31, 2023, operating revenue from tolls totaled \$552.7, which was \$27.8, or 5.3%, higher than the three months of 2022. Paid traffic for the first quarter of 2023 totaled 77.6 million crossings, which was 4.8 million, or 6.5% above the first quarter of 2022. Traffic continued to recover from the impacts of the Covid-19 pandemic but is still below pre-pandemic levels. The continued increase in traffic volumes is due to the improvement in the regional economy and the rebound of traffic as COVID-19 pandemic impact eases.

MTA New York City Transit - For the three months ended March 31, 2023, revenue from fares was \$775, an increase of \$134, or 20.9%, compared to March 31, 2022. For the same comparative period, total operating expenses were higher by \$186, or 7.0%, totaling \$2,857 for the three months ended March 31, 2022.

MTA Long Island Rail Road – Total operating revenue for the three months ended March 31, 2023 was \$123, which was higher by \$29, or 30.9%, compared to three months ended March 31, 2022. For the same comparative period, operating expenses were higher by \$70, or 14.1%, totaling \$568 for the three months ended March 31, 2023.

MTA Metro-North Railroad – For the three months ended March 31, 2023, operating revenues totaled \$127, an increase of \$40, or 46.0%, compared to March 31, 2022. During the same period, operating expenses increased by \$28, or 6.6%, to \$454. For the three months ended March 31, 2023, fare revenue increased by 52.5% to \$122 compared to March 31, 2022. Passenger fares accounted for 96.1% and 91.9% of operating revenues in 2023 and 2022, 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 April 2023, the State appropriated \$2.7 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 March 31, 2023 was \$92 compared to \$194 at March 31, 2022.

Capital Programs

At March 31, 2023, \$19,057 had been committed and \$4,929 had been expended for the 2020-2024 MTA Bridges and Tunnels Capital Program, \$30,623 had been committed and \$23,851 had been expended for the combined 2015-2019 MTA Capital Programs and the 2015-2019 MTA Bridges and Tunnels Capital Program, and \$29,582 had been committed and \$27,639 had been expended for the combined 2010- 2014 MTA Capital Programs and the 2010-2014 MTA Bridges and Tunnels Capital Program, and \$24,122 had been committed and \$23,978 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.

2020-2024 Capital Program – Capital programs totaling \$54,799 covering the years 2020-2024 for: (1) the commuter railroad operations of the MTA conducted by MTA Long Island Rail Road and MTA Metro-North Railroad (the “2020–2024 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 “2020–2024 Transit Capital Program”) were originally approved by the MTA Board on September 25, 2019. The capital programs were subsequently submitted to the Capital Program Review Board (“CPRB”) on October 1, 2019 and approved on January 1, 2020. The capital program for the toll bridges and tunnels operated by MTA Bridges and Tunnels (the “2020–2024 MTA Bridges and Tunnels Capital Program”) was approved by the MTA Board on September 25, 2019 and was not subject to CPRB approval. On December 15, 2021, the MTA Board approved an amendment to increase the 2020-2024 Capital Program by \$535 to support the Penn Station Access project. On July 27, 2022 the MTA Board approved an amendment to increase the 2020-2024 Capital Program by \$108 to reflect addition of new projects, additional support for existing projects and changes to existing project budgets. The capital programs were subsequently submitted to the CPRB on August 1, 2022 and approved on August 30, 2022. The revised 2020-2024 MTA Bridges and Tunnels Capital Program totaling \$3,327 as approved by the MTA Board on July 27, 2022, was not subject to CPRB approval.

By March 31, 2023, the revised 2020-2024 Capital Programs provided \$55,442 in capital expenditures. The combined funding sources for the 2020–2024 MTA Capital Programs and the 2020-2024 MTA Bridges and Tunnels Capital Program, include \$15,000 in Central Business District tolling sources, \$10,000 in new revenue sources, \$8,041 in MTA bonds and PAYGO, \$3,327 in MTA Bridges and Tunnels bonds, \$12,424 in Federal funds, \$3,101 in State of New York funding, \$3,007 in City of New York funding, and \$542 in other contributions.

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 May 31, 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. On September 25, 2019, the MTA Board approved a full amendment to increase the 2015-2019 Capital Program to \$33,913 reflecting updated project timing and cost estimates, new needs, and changing priorities. On February 21, 2020, the CPRB deemed approved the revised 2015-2019 Capital Program for the Transit and Commuter systems totaling \$30,977, as submitted. The revised 2015-2019 MTA Bridges and Tunnels Capital Program totaling \$2,936, as approved by the MTA Board in September 2019, was not subject to CPRB approval.

By March 31, 2023, the revised 2015-2019 Capital Programs provided \$33,969 in capital expenditures, of which \$16,749 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; \$6,142 relates to ongoing repairs of, and replacements to, the commuter

system operated by MTA Long Island Rail Road and MTA Metro-North Railroad; \$7,507 relates to the expansion of existing rail networks for both the transit and commuter systems; \$258 relates to Planning and Customer Service; \$376 relates to MTA Bus Company initiatives; and \$2,935 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 \$8,398 in MTA bonds, \$2,942 in MTA Bridges and Tunnels dedicated funds, \$9,196 in State of New York funding, \$7,638 in Federal funds, \$2,669 in City of New York funding, \$2,156 in pay-as-you-go (“PAYGO”) capital, \$806 from asset sale/leases, and \$163 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. On September 25, 2019, the MTA Board approved an amendment to decrease the 2010-2014 Capital Programs to \$31,704 reflecting administrative budget adjustments and updated project cost and timing assumptions. On February 21, 2020, the CPRB deemed approved the revised 2010-2014 Capital Programs for the Transit and Commuter systems totaling \$28,917, as submitted. The revised 2010-2014 MTA Bridges and Tunnels Capital Program totaling \$2,787, as approved by the MTA Board in September 2019, was not subject to CPRB approval.

By March 31, 2023, the 2010-2014 MTA Capital provided \$31,701 in capital expenditures, of which \$11,371 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; \$3,921 relates to ongoing repairs of, and replacements to, the commuter system operated by MTA Long Island Rail Road and MTA Metro-North Railroad; \$5,861 relates to the expansion of existing rail networks for both the transit and commuter systems to be managed by MTA Capital Construction; \$256 relates to a multi-faceted security program including MTA Police Department; \$216 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 \$7,757 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 \$11,701 in MTA Bonds, \$2,025 in MTA Bridges and Tunnels dedicated funds, \$7,327 in Federal Funds, \$132 in MTA Bus Federal and City Match, \$611 from City Capital Funds, and \$1,531 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 \$6,698 in insurance and federal reimbursement proceeds (including interim borrowing by MTA to cover delays in the receipt of such proceeds), \$18 in pay-as-you-go capital, supplemented, to the extent necessary, by external borrowing of up to \$887 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 \$24,353 in capital expenditures. By March 31, 2023, the 2005-2009 MTA Capital Programs budget increased by \$634 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 \$24,353 provided in capital expenditures, \$11,515 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; \$3,723 relates to ongoing repairs of, and replacements to, the commuter system operated by MTA Long Island Rail Road and MTA Metro-North Railroad; \$166 relates to certain interagency projects; \$7,671 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 \$11,189 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, \$7,776 in Federal Funds, \$2,823 in City Capital Funds, and \$1,114 from other sources.

CURRENTLY KNOWN FACTS, DECISIONS, OR CONDITIONS

The 2023 MTA February Financial Plan

The February Financial Plan (“the February Plan”) incorporates into the MTA baseline several Board-approved policies and other items that were captured “below-the-line” in the November Plan. Additionally, significant changes to the 2023 Adopted Budget and 2023-2026 Financial Plan are included:

MTA Operating Efficiencies - MTA operating agencies are engaged in an ambitious effort to identify innovative ways of doing business more efficiently and as a result reduce expenses and improve service to customers. Operating Agency and Headquarters leadership have identified concrete initiatives to generate sizable savings and help address the fiscal cliff. The remaining operating efficiency initiatives will generate \$44 million in 2023, \$48 million in 2024, \$46 million thereafter.

Savings from Deficit Note Repayment - MTA will use a portion of federal COVID aid to repay, rather than long-term bond, the Federal Reserve Municipal Liquidity Facility Bond Anticipation Note at maturity, eliminating debt service costs of \$111 million in 2023, \$178 million in 2024 and \$190 million in each of 2025 and 2026.

Provision for Increased Pension Costs -To conform with the increase in pension costs for NYCERS in New York City’s November Financial Plan, the MTA included a provision below-the-line totaling \$83 million in 2023, \$176 million in 2024, \$263 million in 2025 and \$344 million in 2026.

Financial Resources Stemming from COVID Aid for Operating and Debt Costs - MTA is proposing to use resources from federal COVID aid for direct deficit funding, best payments, pension payments and retiree health deposits over the financial period. Financial benefit from ARPA aid of \$598 million will be applied to MTA Bus and SIR deficits. Of the remaining financial resources from ARPA aid, \$4.635 million will be utilized through 2026 and \$1.255 million to offset liabilities beyond the financial plan period to moderate growth of deficits beyond the plan period.

New Government Funding or Additional MTA Actions - The November Plan included an assumption of \$600 million in additional government funding. On February 1, 2023, Governor Hochul released her first State Fiscal Year 2024 Executive Budget which addressed the need for \$600 million, as well as the deficits projected to start in 2024. Among her proposals to address the MTA fiscal imbalance are: increases in the top rate of the Payroll Mobility Tax which is anticipated to generate \$800 million annually: nearly \$500 million annually from New York City through increase City payments for paratransit costs

and student fares, as well as City-funded increase in PMT Offset payments to MTA related to forgone tax revenue of PMT exceptions for small businesses and K-12 schools at the higher rate: \$300 million in one-time State aid in SFY 2023 to address the extraordinary pandemic impact on MTA operating revenues; and, a share of licensing fees for up to three downstate casinos as well a share of annual tax revenues generated from these casinos no later than 2026.

More detailed information on the February Plan can be found in the MTA 2023 Adopted Budget – February Financial Plan 2023-2026 at www.MTA.info.

Impacts from Global Coronavirus Pandemic

On March 12, 2020, the World Health Organization declared the current novel coronavirus (“COVID-19”) outbreak to be a pandemic in the face of the global spread of the virus. By order of Governor Cuomo (“New York State on PAUSE”), effective March 2020, all non-essential businesses Statewide were required to be closed, among other restrictive social distancing and related measures. The impact of social distancing and subsequent State governmental orders limiting non-essential activities caused by the COVID-19 pandemic resulted in a severe decline in the utilization of MTA services, dramatic declines in MTA public transportation system ridership and fare revenues, and MTA Bridge and Tunnel crossing traffic and toll revenues. Social distancing mandates were eased, and the region moved into a late-pandemic phase. A significant development was the impact of COVID-19 vaccinations on the MTA region. Capacity restrictions on restaurants, bars, event venues and businesses put in place due to COVID-19 were mostly removed on May 19, 2021, and all remaining restrictions were eliminated on June 15, 2021 after the State reached its goal of 70% of adults receiving at least a first dose of the vaccine. Ridership levels continue to show improvement, although ridership remains significantly below pre-pandemic levels. MTA New York City Subway resumed 24 hours a day service on May 17, 2021, after subway service was shut down overnight for over a year to allow for thorough disinfecting of the system and other enhancements. MTA Metro-North Railroad currently operates on an 93% pre-pandemic service level during the week and 100% on weekends relative to pre-pandemic levels MTA Long Island Rail Road operated on an 87% pre-pandemic service level through the end of 2022. In January of 2023 the Grand Central Madison terminal was opened for LIRR service. Service was initially run as a shuttle between Jamaica and Grand Central Madison terminals. Full LIRR service to Grand Central Madison began in February, resulting in a 41% increase in overall LIRR service.

- ***Ridership and Traffic Update.*** Daily ridership on MTA facilities continues to be well-below 2019 levels. While ridership has been steadily increasing, ridership compared to the pre-pandemic equivalent day in 2019 is down 32% on the subways, 38% for bus (combined NYCT bus and MTA Bus Company), 36% on MTA Metro-North Railroad, and 38% on the MTA Long Island Rail Road. Traffic crossings at MTA Bridges and Tunnels facilities are closely resembling pre-pandemic levels.

For additional information, refer to Note 15 to Financial Statements regarding the impact from the COVID-19 pandemic.

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. A total of \$5.81 billion in FTA Emergency Relief Funding has been executed: seven repair/local priority resiliency grants totaling \$4.55 billion and seventeen competitive resiliency grants totaling \$1.26 billion. As of March 31, 2023, MTA has drawn down a total of \$3.99 billion in grant reimbursement for eligible operating and capital expenses. The balance of funds to be drawn down from all twenty-four 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 \$13.5 million 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.

All MTA-allocated Superstorm Sandy FTA emergency relief funding/grants have been executed.

Labor Update

During the first quarter of 2023, the MTA continued to negotiate equitable and financially prudent labor agreements whose economic provisions are patterned after the 2019-2023 agreement reached between New York City Transit and the Transport Workers Union (TWU Local 100).

The ensuing paragraphs describe in greater detail the terms of these new labor agreements, as well as the status of collective bargaining at each MTA agency through March 31, 2023.

MTA Long Island Rail Road – At the end of the first quarter of 2023, MTA Long Island Rail Road had approximately 7,306 employees. Approximately 6,512 of these employees are represented by 8 different unions in 19 bargaining units. Since June 2021, Long Island Rail Road has settled agreements with nearly all of its bargaining groups along the lines of the 2019-2023 TWU agreement, and as of March 31, 2023, therefore, around 90% of LIRR’s represented population was covered for this period.

The main group not yet to have settled by the end of the quarter was the International Brotherhood of Electrical Workers, whose previous agreement covered the 24-month period through April 15, 2021 and provided the first two (of four) established pattern wage increases of the 2019-2023 TWU deal. All effective railroad agreements are consistent with the MTA Financial Plan.

MTA Metro-North Railroad – As of March 31, 2023, Metro-North Railroad employed approximately 6,044 people. Among these were approximately 5,228 employees represented by ten different unions.

In the first quarter of 2023, the MTA Board approved two new labor agreements that follow the TWU-pattern wage increases (2.5% and 2.75%, respectively, for 2021 and 2022). These were with approximately 279 members of the International Association of Machinists and Aerospace Workers (IAM); and with approximately 179 members of the Sheet Metal Workers International Association (SMWIA). Both agreements span the 26-month period from June 2, 2021 through August 2, 2023 and include, as a partial offset to the wage increases, a two-month contract extension. Except for contract start and end dates, the terms of these deals are identical to those reached previously with the railroad's other unions for 2021-2023. Since collective bargaining resumed in early 2021, after the long pause imposed by COVID, all MNR's labor agreements have conformed to this overall pattern and all have therefore been anticipated in the MTA Financial Plan.

MTA Headquarters – As of March 31, 2023, MTA Headquarters employed approximately 4,907 people, of whom 3,372 are union members. With the MTA Board's approval of one new labor agreement in the first quarter, most represented Headquarters employees are currently under effective deals. In February, the MTA Board approved new agreement terms with approximately 359 employees in IT titles who are represented or technically covered by the Transportation Communications Union, Local 982 (TCU Local 982). Like the agreements with other TCU bargaining units at MTA Headquarters, which were approved by the Board in October 2022, the proposed deal with TCU Local 982 covers a four-year, two-month period, from January 1, 2020 through February 29, 2024 in this instance; and it provides the same TWU pattern wage increases. In addition, this agreement includes several distinct measures sought by management both to improve the recruitment and retention of high-quality IT professionals and to achieve much greater efficiency and productivity in their deployment. The net costs of the agreement are consistent with those of the other TCU bargaining units at MTA Headquarters.

MTA New York City Transit/Manhattan and Bronx Surface Transit Operating Authority – As of March 31, 2023, MTA New York City Transit and MaBSTOA currently employed approximately 46,822 people, 45,623 of whom are represented by 14 unions with 23 bargaining units. Together with the TWU Local 100 agreement, which covers approximately 33,000 current hourly employees, collective bargaining since 2021 has produced several pattern-following agreements that cover most of the Authorities' represented employees.

Among those anticipating new terms in the first quarter, however, were members of bargaining units whose labor agreements typically follow an economic pattern established by agreements between New York City and its employees of the American Federation of State, County and Municipal Employees (AFSCME). The other main groups seeking new agreements at the end of the first quarter were approximately 4,000 members of the Subway Surface Supervisors Association (SSSA); and around 1,000 Supervisory employees represented by various units of the Transit Supervisors Organization (TWU Local 106, TSO).

MTA Bus Company – As of December 31, 2022, MTA Bus Company has 3,846 employees, approximately 3,727 of whom are represented by three different unions (now including the United Transit Leadership Organization) and five bargaining units. The largest of these is TWU Local 100, whose members were co-parties to the agreement approved by the MTA Board in January 2020 and whose current agreement will run through May 14, 2023. In the final quarter of 2022, an agreement between MTA Bus Company and the Amalgamated Transit Union, Local 1181 (ATU-Local 1181) was approved and will run through October 31, 2023. The other operational employees represented by the Amalgamated Transit Union are members or Local 1179 and are covered by a TWU-based agreement that will run through October 31, 2023. There were no new labor agreements reached during the first quarter of 2023.

MTA Bridges and Tunnels – As of March 31, 2023, MTA Bridges and Tunnels had 905 employees, approximately 718 of whom were represented by three different labor unions (four bargaining units). During the first quarter, all four of the Authority's labor agreements had expired and their members will be seeking new terms going forward.

MTA Staten Island Railway – As of March 31 2023, MTA Staten Island Railway had 349 employees, approximately 332 of whom are represented by four different unions (five bargaining units). In February 2023, the MTA Board approved an agreement between the Railway and 17 members of the American Train Dispatchers Association (ATDA). The term of the agreement is April 17, 2019 through August 31, 2023 and includes the full schedule of wage increases present in the 2019-2023 TWU agreement (2.0%, 2.25%, 2.50 and 2.75%). The agreement also includes an enhanced death benefit, increased night differential, and the extension of commutation privileges to NYCT Express Bus and MTA Bus. Achieved savings include the ATDA's adoption of changes in the health care Plan as well as a four-and-a-half month contract extension (relative to the TWU deal). Accordingly, this agreement maintains cost consistency with the TWU deal and with the MTA Financial Plan. With this development, four of the five bargaining units at SIR were under effective agreements at the end of the first quarter of 2023.

(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENT OF NET POSITION AS OF MARCH 31, 2023
 AND CONSOLIDATED STATEMENT OF NET POSITION AS OF DECEMBER 31, 2022**

(\$ In millions)

	Business-Type Activities	
	March 31, 2023	December 31, 2022
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES		
CURRENT ASSETS:		
Cash unrestricted (Note 3)	\$ 446	\$ 403
Cash restricted (Note 3)	1,483	537
Unrestricted investments (Note 3)	6,421	9,559
Restricted investments (Note 3)	5,457	1,682
Restricted investments held under financed purchase obligations (Notes 3 and 9)	92	101
Receivables:		
Station maintenance, operation, and use assessments	161	113
State and regional mass transit taxes	243	158
Mortgage recording tax receivable	31	39
State and local operating assistance	5	10
Other receivable from New York City and New York State	156	180
Due from Build America Bonds	3	3
Capital project receivable from federal and state government	196	81
Other	810	904
Less allowance for doubtful accounts	(405)	(372)
Total receivables — net	<u>1,200</u>	<u>1,116</u>
Materials and supplies	691	681
Prepaid expenses and other current assets (Note 2)	<u>1,331</u>	<u>217</u>
Total current assets	<u>17,121</u>	<u>14,296</u>
NON-CURRENT ASSETS:		
Capital assets (Note 6):		
Land and construction work-in-progress	13,423	22,928
Other capital assets (net of accumulated depreciation and amortization)	74,060	64,578
Unrestricted investments (Note 3)	1,826	2,496
Restricted investments (Note 3)	1,354	3,623
Restricted investments held under financed purchase obligations (Notes 3 and 9)	279	258
Other non-current receivables	359	384
Receivable from New York State	10	10
Other non-current assets	<u>58</u>	<u>71</u>
Total non-current assets	<u>91,369</u>	<u>94,348</u>
TOTAL ASSETS	<u>108,490</u>	<u>108,644</u>
DEFERRED OUTFLOWS OF RESOURCES:		
Accumulated decreases in fair value of derivative instruments (Note 7)	136	109
Loss on debt refunding (Note 7)	389	540
Deferred outflows related to pensions (Note 4)	3,174	3,181
Deferred outflows related to OPEB (Note 5)	<u>4,444</u>	<u>4,444</u>
TOTAL DEFERRED OUTFLOWS OF RESOURCES	<u>8,143</u>	<u>8,274</u>
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	<u>\$ 116,633</u>	<u>\$ 116,918</u>

 See Independent Auditor's 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 MARCH 31, 2023
AND CONSOLIDATED STATEMENT OF NET POSITION AS OF DECEMBER 31, 2022**

(\$ In millions)

	Business-Type Activities	
	March 31, 2023	December 31, 2022
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION		
CURRENT LIABILITIES:		
Accounts payable	\$ 524	480
Accrued expenses:		
Interest	899	393
Salaries, wages and payroll taxes	436	525
Vacation and sick pay benefits	1,122	1,106
Current portion — retirement and death benefits	37	31
Current portion — estimated liability from injuries to persons (Note 11)	564	567
Capital accruals	328	554
Other Accrued Expenses	681	796
Total accrued expenses	<u>4,067</u>	<u>3,972</u>
Current portion — loan payable (Note 7)	11	12
Current portion — long-term debt (Note 7)	3,980	4,800
Current portion — pollution remediation projects (Note 13)	40	40
Derivative fuel hedge liability (Note 16)	4	-
Unearned revenues	2,156	1,248
Total current liabilities	<u>10,782</u>	<u>10,552</u>
NON-CURRENT LIABILITIES:		
Net pension liability (Note 4)	6,923	6,923
Estimated liability arising from injuries to persons (Note 11)	4,949	4,868
Net OPEB liability (Note 5)	24,956	24,956
Loan payable (Note 7)	69	71
Long-term debt (Note 7)	47,153	46,493
Lease Payable (Note 8)	824	833
Financed Purchase (Note 9)	187	170
Pollution remediation projects (Note 13)	121	116
Contract retainage payable	424	435
Derivative liabilities (Note 7)	159	144
Other long-term liabilities	365	366
Total non-current liabilities	<u>86,130</u>	<u>85,375</u>
TOTAL LIABILITIES	<u>96,912</u>	<u>95,927</u>
DEFERRED INFLOWS OF RESOURCES:		
Gain on debt refunding	22	24
Deferred inflows related to leases (Note 8)	279	300
Deferred Inflows related to pensions (Note 4)	1,055	1,055
Deferred inflows related to OPEB (Note 5)	2,695	2,695
TOTAL DEFERRED INFLOWS OF RESOURCES	<u>4,051</u>	<u>4,074</u>
NET POSITION:		
Net investment in capital assets	37,986	34,886
Restricted for debt service	1,093	381
Restricted for claims	214	192
Restricted for other purposes (Note 2)	3,301	4,491
Unrestricted	<u>(26,924)</u>	<u>(23,033)</u>
TOTAL NET POSITION	<u>15,670</u>	<u>16,917</u>
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	<u>\$ 116,633</u>	<u>\$ 116,918</u>

See Independent Auditor's 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**

THREE-MONTH PERIODS ENDED MARCH 31, 2023 AND 2022

(\$ In millions)

	Business-Type Activities	
	March 31, 2023	March 31, 2022
OPERATING REVENUES:		
Fare revenue	\$ 1,062	\$ 845
Vehicle toll revenue	553	525
Rents, freight, and other revenue	149	144
Total operating revenues	1,764	1,514
OPERATING EXPENSES:		
Salaries and wages	1,656	1,568
Retirement and other employee benefits	876	861
Postemployment benefits other than pensions (Note 5)	199	149
Electric power	158	132
Fuel	65	61
Insurance	9	1
Claims	97	91
Paratransit service contracts	120	88
Maintenance and other operating contracts	171	144
Professional service contracts	145	109
Pollution remediation projects (Note 13)	5	1
Materials and supplies	167	130
Depreciation and amortization (Note 2)	856	796
Other	65	56
Total operating expenses	4,589	4,187
OPERATING LOSS	(2,825)	(2,673)
NON-OPERATING REVENUES (EXPENSES):		
Grants, appropriations and taxes:		
Tax-supported subsidies — NYS:		
Mass Transportation Trust Fund subsidies	122	137
Metropolitan Mass Transportation Operating Assistance subsidies	-	649
Payroll Mobility Tax subsidies	515	627
MTA Aid Trust Account subsidies	57	52
Internet sales tax subsidies	88	81
Tax-supported subsidies — NYC and Local:		
Mortgage Recording Tax subsidies	92	194
Urban Tax subsidies	101	220
Mansion Tax	77	152
Other subsidies:		
Operating Assistance - 18-B program	7	57
Build America Bond subsidy	2	2
NYC Assistance Fund	86	76
Subtotal grants, appropriations and taxes	\$ 1,147	\$ 2,247

See Independent Auditor's 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**

THREE-MONTH PERIODS ENDED MARCH 31, 2023 AND 2022

(\$ In millions)

	Business-Type Activities	
	March 31, 2023	March 31, 2022
NON-OPERATING REVENUES (EXPENSES):		
Connecticut Department of Transportation	\$ 77	\$ 61
Subsidies paid to Dutchess, Orange, and Rockland Counties	(1)	(1)
Interest on long-term debt (Note 2)	(507)	(488)
Station maintenance, operation and use assessments	48	45
Operating subsidies recoverable from NYC	172	172
Federal Transit Administration reimbursement related ARPA	1	3,817
Other net non-operating expenses	112	(9)
Net non-operating revenues	1,049	5,844
(LOSS) / GAIN BEFORE APPROPRIATIONS, GRANTS AND OTHER RECEIPTS EXTERNALLY RESTRICTED FOR CAPITAL PROJECTS	(1,776)	3,171
APPROPRIATIONS, GRANTS AND OTHER RECEIPTS EXTERNALLY RESTRICTED FOR CAPITAL PROJECTS	529	1,053
CHANGE IN NET POSITION	(1,247)	4,224
NET POSITION— Beginning of period	16,917	9,143
NET POSITION — End of period	\$ 15,670	\$ 13,367

See Independent Auditor's 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
THREE-MONTH PERIODS ENDED MARCH 31, 2023 AND 2022
 (\$ In millions)

	Business-Type Activities	
	March 31, 2023	March 31, 2022
CASH FLOWS FROM OPERATING ACTIVITIES:		
Passenger receipts/tolls	\$ 1,593	\$ 1,342
Rents and other receipts	250	225
Payroll and related fringe benefits	(2,879)	(2,534)
Other operating expenses	(2,189)	(607)
Net cash used by operating activities	<u>(3,225)</u>	<u>(1,574)</u>
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:		
Grants, appropriations, and taxes	693	1,618
Operating subsidies from CDOT	74	57
Subsidies paid to Dutchess, Orange, and Rockland Counties	(14)	(9)
Federal Transit Administration reimbursement related to COVID-19	-	7,336
Other non-capital financing activities	(1)	-
Internet and Mansion Tax	292	-
Net cash provided by noncapital financing activities	<u>1,044</u>	<u>9,002</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
MTA bond proceeds	-	617
MTA Bridges and Tunnels bond proceeds	2,996	751
MTA bonds refunded/reissued	(1,102)	(175)
MTA Bridges and Tunnels bonds refunded/reissued	(991)	-
MTA anticipation notes redeemed	(800)	(5,139)
MTA credit facility refunded	-	(815)
Federal and local grants	445	352
Other capital financing activities	936	1,038
Payment for capital assets	(1,287)	(1,416)
Debt service payments	581	(96)
Internet and Mansion Tax	-	237
Receipts from leases	23	-
Payments from leases	(25)	-
Net cash provided by / (used by) capital and related financing activities	<u>776</u>	<u>(4,646)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of long-term securities	(1,447)	(7,473)
Sales or maturities of long-term securities	3,453	529
Net sales or maturities of short-term securities	285	5,132
Earnings on investments	103	1
Net cash provided by / (used by) investing activities	<u>2,394</u>	<u>(1,811)</u>
NET INCREASE IN CASH	989	971
CASH — Beginning of period	<u>940</u>	<u>782</u>
CASH — End of period	<u>\$ 1,929</u>	<u>\$ 1,753</u>

See Independent Auditor's 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
THREE-MONTH PERIODS ENDED MARCH 31, 2023 AND 2022
 (\$ In millions)

	Business-Type Activities	
	March 31, 2023	March 31, 2022
RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES:		
Operating loss (Note 2)	\$ (2,825)	\$ (2,673)
Adjustments to reconcile to net cash used in operating activities:		
Depreciation and amortization	831	795
Net increase (decrease) in payables, accrued expenses, and other liabilities	(337)	(43)
Net increase in deferred outflows related to pensions	(7)	(9)
Net decrease in receivables	98	338
Net decrease in materials and supplies and prepaid expenses	(995)	18
NET CASH USED BY OPERATING ACTIVITIES	\$ (3,235)	\$ (1,574)
NONCASH INVESTING, CAPITAL AND RELATED FINANCING ACTIVITIES:		
Noncash investing activities:		
Interest expense includes amortization of net (premium) / discount (Note 2)	\$ (67)	\$ 153
Total Noncash investing activities	(67)	153
Noncash capital and related financing activities:		
Capital assets related liabilities	328	351
Interest expense for leases	6,931	-
Interest income from leases	346	-
Total Noncash capital and related financing activities	7,605	351
TOTAL NONCASH INVESTING, CAPITAL AND RELATED FINANCING ACTIVITIES	\$ 7,538	\$ 504

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

(Concluded)

(A Component Unit of the State of New York)

STATEMENTS OF FIDUCIARY NET POSITION PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS

AS OF DECEMBER 31, 2022 AND 2021

(\$ In thousands)

	Fiduciary Activities	
	December 31, 2022	December 31, 2021
ASSETS:		
Cash	\$ 10,985	\$ 39,379
Receivables:		
Employee loans	26,521	26,082
Participant and union contributions	-	(20)
Investment securities sold	1,810	5,671
Accrued interest and dividends	6,011	4,882
Other receivables	2,680	3,770
Total receivables	37,022	40,385
Investments at fair value	9,319,985	10,144,509
Total assets	\$ 9,367,992	\$ 10,224,273
LIABILITIES:		
Accounts payable and accrued liabilities	\$ 6,319	\$ 8,315
Payable for investment securities purchased	9,992	14,759
Accrued benefits payable	76	74
Accrued postretirement death benefits (PRDB) payable	5,719	5,405
Accrued 55/25 Additional Members Contribution (AMC) payable	2,527	3,847
Other liabilities	1,082	2,987
Total liabilities	25,715	35,387
NET POSITION:		
Restricted for pensions	9,330,542	10,188,803
Restricted for postemployment benefits other than pensions	11,735	83
Total net position	9,342,277	10,188,886
Total liabilities and net position	\$ 9,367,992	\$ 10,224,273

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

(A Component Unit of the State of New York)

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(\$ In thousands)**

	Fiduciary Activities	
	December 31, 2022	December 31, 2021
ADDITIONS:		
Contributions:		
Employer contributions	\$ 1,418,340	\$ 1,362,952
Implicit rate subsidy contribution	57,989	52,933
Member contributions	60,069	58,840
Total contributions	<u>1,536,398</u>	<u>1,474,725</u>
Investment income:		
Net (depreciation) / appreciation in fair value of investments	(872,844)	1,112,770
Dividend income	126,737	115,369
Interest income	29,151	20,453
Less:		
Investment expenses	60,081	85,192
Investment income, net	<u>1,163,400</u>	<u>1,163,400</u>
Other additions:		
Total additions	<u>759,361</u>	<u>2,638,125</u>
DEDUCTIONS:		
Benefit payments and withdrawals	1,541,904	1,456,931
Implicit rate subsidy payments	57,989	52,933
Transfer to other plans	-	474
Distribution to participants	-	2,175
Administrative expenses	6,077	4,434
Total deductions	<u>1,605,970</u>	<u>1,516,947</u>
Net (decrease) / increase in fiduciary net position	(846,609)	1,121,178
NET POSITION:		
Restricted for Benefits:		
Beginning of year	<u>10,188,886</u>	<u>9,067,708</u>
End of year	<u>\$ 9,342,277</u>	<u>\$ 10,188,886</u>

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

(A Component Unit of the State of New York)

**NOTES TO CONSOLIDATED INTERIM FINANCIAL STATEMENTS
AS OF MARCH 31, 2023 AND DECEMBER 31, 2022 AND
FOR THE THREE-MONTH PERIODS ENDED MARCH 31, 2023 AND 2022**

(\$ 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”), which are listed below. The Business-Type activities in these consolidated financial statements purport the operations of the MTA Group.

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 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 Construction and Development (“MTA Construction and Development”) 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.
- MTA Grand Central Madison Operating Company (“MTA GCMOC”) operates and maintains the infrastructure and structures supporting Long Island Rail Road access into Grand Central Terminal.
- MTAHQ, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Staten Island Railway, FMTAC, MTA Capital Construction, and MTA Bus, and MTA GCMOC 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 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 Metropolitan Transportation Authority, Deputy Chief Controller’s Office, 2 Broadway, 15th Floor, New York, NY 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 March 31, 2023 and 2022 totaled \$1.1 billion and \$2.2 billion, respectively.

Basis of Presentation - Fiduciary Funds – The fiduciary fund financial statements provide information about the funds that are used to report resources held in trust for retirees and beneficiaries covered by pension plans and other employee benefit trust funds of the MTA. Separate financial statements are presented for the fiduciary funds.

The following MTA fiduciary component units comprise the fiduciary activities of the MTA and are categorized within Pension and Other Employee Benefit Trust Funds.

- Pension Trust Funds
 - MTA Defined Benefit Plan
 - The Long Island Railroad Company Plan for Additional Pensions (“Additional Plan”)
 - Manhattan and Bronx Surface Transit Operating Authority (“MaBSTOA Plan”)
 - Metro-North Commuter Railroad Company Cash Balance Plan (“MNR Cash Balance Plan”)
- Other Employee Benefit Trust Funds
 - MTA Other Postemployment Benefits Plan (“OPEB” Plan)

These fiduciary statements of the fiduciary funds are prepared using the accrual basis of accounting and a measurement focus on the periodic determination of additions, deductions, and net position restricted for benefits. For reporting purposes, the financial results of the MNR Cash Balance Plan are not material and therefore not included in the fiduciary statements.

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.

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	Required Year of Adoption
94	Public-Private and Public-Public Partnerships and Availability Payment Arrangements	2023
96	Subscription-based Information Technology Arrangements	2023
99	Omnibus 2022	2023
100	Accounting Changes and Error Corrections	2024
101	Compensated Absences	2024

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, GCMOC, FMTAC, MTA Bus, MTA Construction and Development, 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 financed purchases 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 March 31st 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 fair values at March 31, 2023 and December 31, 2022.

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

Materials and Supplies — Materials and supplies are valued at average cost, net of obsolescence reserve at March 31, 2023 and December 31, 2022 of \$222 and \$231, respectively.

Prepaid Expenses and Other Current Assets — Prepaid expenses and other current assets primarily reflect advance payment of insurance premiums as well as farecard media related to 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. Leases recorded under GASB Statement No. 87, *Leases*, are classified as right-of-use assets. Accumulated depreciation and amortization are reported as reductions of capital and right-of-use 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. Right-of-use assets and leasehold improvements are amortized over the term of the lease or the life of the asset whichever is less.

Leases – as a result of the adoption of GASB Statement No. 87, certain lease agreements are classified as financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. Lease receivables and liabilities are measured at the present value of payments expected to be made during the lease term, using an applicable discount rate stated or implicit in the lease and if not available, using incremental borrowing rate at the time of valuation. Lease assets and deferred inflows are amortized on a straight-line basis over the term of the lease.

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, lease amortization, etc.) are reported as operating expenses. All other expenses (e.g. interest on long-term debt, interest on leases, subsidies paid to counties, etc.) are reported as non-operating expenses.

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.

Federal Transit Administration CARES Act — On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act, also known as the CARES Act, was signed into law in response to the economic fallout of the COVID-19 pandemic. The CARES Act through the Federal Transit Administration’s (“FTA”) formula funding provisions provided the MTA with \$4.010 billion of operating assistance. More detailed information about the CARES Act is presented in Note 15 to the consolidated interim financial statements.

Coronavirus Response and Relief Supplemental Appropriations Act of 2021 — On December 27, 2020, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (“CRRSAA”) was signed into law in response to the economic fallout of the COVID-19 pandemic. CRRSAA, through the FTA’s formula funding provision provided the MTA with \$4.1 billion of operating assistance. Additional information about the CRRSAA is presented in Note 15 to the consolidated interim financial statements.

American Rescue Plan Act (“ARPA”) - On March 11, 2021, President Biden signed into law the American Rescue Plan Act of 2021 (“ARPA”). The \$1.9 trillion package is intended to combat the COVID-19 pandemic, including the public health and economic impacts. The MTA received \$6.1 billion in aid from ARPA in 2022. In September of 2022, Additional Assistance Funding was made available to transit systems demonstrating additional pandemic associated needs. MTA received approximately \$769 million in such additional aid.

Non-operating Revenues

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

Mortgage Recording Taxes (“MRT”) — Under New York State law, the MTA receives capital and operating assistance through a Mortgage Recording Tax (“MRT-1”). MRT-1 is collected by New York City 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 New York State 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 March 31, 2023, the MTA paid to Dutchess, Orange and Rockland Counties the 2021 excess amounts of MRT-1 and MRT-2 totaling \$7.5.

- In addition, MTA New York City Transit receives operating assistance directly from New York City 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 New York State 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 districts; 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 New York 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 New York State 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 New York State, 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.

Congestion Zone Surcharges – In April 2018, the approved 2018-2019 New York State Budget enacted legislation that provided additional sources of revenue, in the form of surcharges and fines, as defined by Article 29-C, Chapter 59 of the Tax Law, to address the financial needs of the MTA. Beginning on January 1, 2019, the legislation imposed the following:

- A surcharge of \$2.75 on for-hire transportation trips provided by motor vehicles carrying passengers for hire (or \$2.50 in the case of taxicabs that are subject to the \$0.50 cents tax on hailed trips that are part of the MTA Aid Trust Account Receipts), other than pool vehicles, ambulance and buses, on each trip that (1) originates and terminates south of and excluding 96th Street in New York City of New York, in the Borough of Manhattan (the “Congestion Zone”), (2) originates anywhere in New York State and terminates within the Congestion Zone, (3) originates in the Congestion Zone and terminates anywhere in New York State, or (4) originates anywhere in New York State, enters into the Congestion Zone while in transit, and terminates anywhere in New York State.

- A surcharge of \$0.75 cents for each person who both enters and exits a pool vehicle in New York State and who is picked up in, dropped off in, or travels through the Congestion Zone.

The Congestion Zone Surcharges do not apply to transportation services administered by or on behalf of MTA, including paratransit services.

The April 2018 legislation also created the New York City Transportation Assistance Fund, held by MTA. The fund consists of the three sub-accounts, the Subway Action Plan Account, the Outer Borough Transportation Account and the General Transportation Account.

- **Subway Action Plan Account** – Funds in this account may be used exclusively for funding the operating and capital costs, and debt service associated with the Subway Action Plan.
- **Outer Borough Transportation Account** - Funds in this account may be used exclusively for funding (1) the operating and capital costs of, and debt service associated with, the MTA facilities, equipment and services in the counties of Bronx, Kings, Queens and Richmond, and any projects improving transportation connections from such counties to Manhattan, or (2) a toll reduction program for any crossing under the jurisdiction of MTA or MTA Bridges and Tunnels.
- **General Transportation Account** - Funds in this account may be used exclusively for funding the operating and capital costs of MTA. In each case, funds may be used for various operations and capital needs or for debt service and reserve requirements.

Dedicated Revenues - In April 2019, the approved 2019-2020 New York State Budget enacted legislation that included new, dedicated revenue streams for the MTA. The additional sources of revenue include a Central Business District Tolling Program, which has an implementation date of December 31, 2020. The Central Business District Tolling Program will assess a toll for vehicles entering the Central Business District, defined as south of 60th Street in Manhattan, but will exclude vehicles traveling on the FDR Drive or the West Side Highway, which includes the Battery Park underpass and or any surface roadway portion of the Hugh L. Carey Tunnel that connects to West Street.

The enacted State Budget also included provisions for a new Real Property Transfer Tax Surcharge (referred to as the “Mansion Tax”) on high-priced residential property sales in New York City and an Internet Marketplace Sales Tax. The Mansion Tax went into effect on July 1, 2019 and increases the transfer tax on a sliding scale by a quarter percent starting at \$2, with a combined top rate of 4.15%, on the sale of New York City residential properties valued at \$25 or above. The Internet Marketplace Sales Tax went into effect on June 1, 2019 and requires internet marketplace providers to collect and remit sales tax from out of state retailers on their sites that have gross receipts exceeding \$500,000 (dollars) and delivering more than one hundred sales into New York State in the previous four quarters. The sales tax will be collected at the normal rate of 4% plus local sales tax.

The proceeds from the Central Business District Tolling Program, the Internet Marketplace Sales Tax and the Real Property Transfer Tax Surcharge will be deposited into the MTA’s Central Business District Tolling Program capital lock box and may only be used to support financing of the 2020-2024 Capital Program.

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 2020 and 2021 billings are still open.

Reimbursement of Expenses — The cost of operating and maintaining the passenger stations of the Commuter Railroads in New York State is assessable by the MTA to New York City and the other counties in which such stations are located for each New York State fiscal year ending December 31, under provisions of the New York State 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 MTA 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 million per annum to the MTA toward the cost of the program. In 2009, the State reduced their \$45 million reimbursement to \$6.3 million. Beginning in 2010, the State increased their annual commitment to \$25.3 million while New York City's annual commitment remained at \$45 million. These commitments have been met by both the State and New York City for both 2021 and 2022. For the year ended December 31, 2022, the MTA received \$100.3 million from the State and New York City combined, which include \$30.0 million prepayment for the year 2023 from New York City.

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 \$0.6 in the three months ended March 31, 2023 and \$1.8 in the three months ended March 31, 2022 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 March 31, 2023 and 2022 were \$6.2 and \$6.1, respectively. The amounts recovered for the periods ended March 31, 2023 and 2022 were approximately \$4.0 and \$4.0, 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 \$70.6 for the three months ended March 31, 2023 and \$60.3 for the three months ended March 31, 2022.

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.

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 November 1, 2012, the self-insured retention limits for ELF were increased to the following amounts: \$10 for MTA New York City Transit, MaBSTOA, MTA Bus, MTA Long Island Rail Road and MTA Metro-North Railroad; \$3 for MTA Staten Island Railway; and \$2.6 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 March 31, 2023, the balance of the assets in this program was \$183.10.

MTA also maintains an All-Agency Excess Liability Insurance Policy that affords the MTA Group additional coverage limits of \$357.5 for a total limit of \$407.5 (\$357.5 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, 2023, the “nonrevenue fleet” automobile liability policy program was renewed. This program provides third-party auto liability insurance protection for MTA Long Island Rail Road, MTA Staten Island Railway, MTA Police, MTA Metro-North Railroad, MTA Inspector General, MTA Construction & Development Company and MTA Headquarters. The program limit is \$11 per occurrence on a combined single limit with a \$1 per occurrence deductible. Primary limits of \$6 were procured through the commercial marketplace. Excess limits of \$5 were procured through FMTAC. FMTAC renewed its deductible buy back policy, where it assumes the liability of the agencies for their deductible.

On March 1, 2023, the “Access-A-Ride” automobile liability policy program was renewed. This program provides third-party auto liability insurance coverage to vendors under the Access-A-Ride contract, to perform services on behalf of MTA New York City Transit. This policy provides a \$3 per occurrence to fund self-insured losses.

On December 15, 2022, 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, 2023, FMTAC renewed the all-agency property insurance program. For the annual period commencing May 1, 2023, 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 All Risk program annual limit is \$500 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. In addition to the noted \$25 per occurrence self-insured deductible, MTA self-insures above that deductible for \$147.08 within the overall \$500 per occurrence property program as follows: \$20.277 (or 40.55%) of the primary \$50 layer, plus \$23.777 (or 47.55%) of the \$50 excess \$50 layer, plus \$14.792 (or 29.58%) of the \$50 excess \$100 layer, plus \$8.827 (or 17.65%) of the \$50 excess \$150 layer, plus \$4.484 (or 8.96%) of the \$50 excess \$200 layer, plus \$12.548 (or 25.09%) of the \$50 excess \$250 layer, plus \$13.547 (or 27.09%) of the \$50 excess \$300 layer, plus \$14.997 (or 29.99%) of the \$50 excess \$350 layer, plus \$18.664 (or 37.32%) of the \$50 excess \$400 layer, and \$15.164 (or 30.32%) of the \$50 excess \$450 layer.

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.

Supplementing the \$500 per occurrence noted above, FMTAC’s property insurance program has been expanded to include a further layer of \$100 of fully collateralized 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 19, 2023 to April 30, 2026. The expanded protection is reinsured by MetroCat Re Ltd. 2023-1, a Bermuda special purpose insurer independent from the MTA and formed to provide FMTAC with capital markets based property reinsurance. The MetroCat Re Ltd. 2023-1 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.

With respect to acts of terrorism, FMTAC provides direct coverage that is reinsured by the United States Government for 80% of “certified” losses, as covered by the Terrorism Risk Insurance Program Reauthorization Act (“TRIPRA”) of 2019. The remaining 20% 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 \$200. The United States government’s reinsurance is in place through December 31, 2027.

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) 20% of any “certified” act of terrorism up to a maximum recovery of \$215 for any one occurrence and in the annual aggregate (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 \$200 TRIPRA trigger up to a maximum recovery of \$200 for any occurrence and in the annual aggregate.

Additionally, MTA purchases coverage for acts of terrorism which are not certified under TRIPRA to a maximum of \$215. 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, 2025.

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.

Postemployment Benefits Other Than Pensions — In accordance with the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* and GASB Statement No. 85, *Omnibus* for the OPEB Plan, the MTA recognizes a net OPEB liability, which represents the excess of the total OPEB liability over the fiduciary net position of the OPEB Plan, measured as of the measurement date of the plan.

Changes in the net OPEB liability during the year are recorded as OPEB expense, or as deferred outflows of resources or deferred inflows of resources relating to OPEB depending on the nature of the change, in the year incurred. Changes in net OPEB liability that are recorded as deferred outflows of resources or deferred inflows of resources that arise from changes in actuarial assumptions and differences between expected or actual experience are amortized over the weighted average remaining service life of all participants in the OPEB plan and recorded as a component of OPEB expense beginning with the year in which they are incurred. Projected earnings on qualified OPEB plan investments are recognized as a component of OPEB expenses. Differences between projected and actual investment earnings are reported as deferred outflows of resources or deferred inflow of resources as a component of OPEB expense on a closed basis over a five-year period beginning with the year in which the difference occurred.

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. As of March 31, 2023, restricted cash, primarily for capital projects, totaled \$1,483.

Cash, including deposits in transit, consists of the following at March 31, 2023 and December 31, 2022 (in millions):

	March 31, 2023		December 31, 2022	
	Carrying Amount	Bank Balance	Carrying Amount	Bank Balance
FDIC insured or collateralized deposits	\$ 97	\$ 95	\$ 117	\$ 116
Uninsured and not collateralized	1,832	1,807	823	801
Total Balance	\$ 1,929	\$ 1,902	\$ 940	\$ 917

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 March 31, 2023 and December 31, 2022 (in millions):

Investments by fair value level	March 31,	Fair Value Measurements		December 31,	Fair Value Measurements	
	2023	Level 1	Level 2	2022	Level 1	Level 2
Debt Securities:						
U.S. treasury securities	\$ 14,177	\$ 9,852	\$ 4,325	\$ 16,093	\$ 12,063	\$ 4,030
U.S. government agency	349	-	349	367	-	367
Commercial paper	-	-	-	300	-	300
Asset-backed securities	49	-	49	48	-	48
Commercial mortgage-backed securities	160	-	160	159	-	159
Foreign bonds	14	14	-	15	15	-
Corporate bonds	135	135	-	124	124	-
Tax Benefit Lease Investments:						
U.S. treasury securities	142	142	-	144	127	17
U.S. government agency	120	66	54	116	64	52
Repurchase agreements	175	175	-	249	217	32
Equity Securities	-	-	-	-	-	-
Total investments by fair value level	<u>15,321</u>	<u>\$ 10,384</u>	<u>\$ 4,937</u>	<u>17,615</u>	<u>\$ 12,610</u>	<u>\$ 5,005</u>
Financed Purchases	108			104		
Total Investments	<u>\$ 15,429</u>			<u>\$ 17,719</u>		

Investments classified as Level 1 of the fair value hierarchy, totaling \$10,384 and \$12,610 as of March 31, 2023 and December 31, 2022, 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 \$403 and \$419, U.S. treasury securities totaling \$4,325 and \$4,047, commercial paper totaling \$0 and \$300, asset-backed securities totaling \$49 and \$48, and commercial mortgage-backed securities totaling \$160 and \$159 as of March 31, 2023 and December 31, 2022, 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 fair 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 financed purchase obligations, are either insured or registered and held by the MTA or its agent in the MTA's name. Investments restricted for financed purchases 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 financed purchase obligations. Investments had weighted average yields of 2.03% and 2.78% for the three months ended March 31, 2023 and year ended December 31, 2022, respectively.

Credit Risk — At March 31, 2023 and December 31, 2022, the following credit quality rating has been assigned to MTA investments by a nationally recognized rating organization (in millions):

Quality Rating Standard & Poor's	March 31, 2023	Percent of Portfolio	December 31, 2022	Percent of Portfolio
A-1+	\$ 125	1%	\$ 153	1%
A-1	-	0%	300	2%
AAA	241	2%	217	1%
AA+	54	0%	52	0%
AA	35	0%	33	0%
A	76	1%	69	1%
A-	122	1%	122	1%
BBB	50	0%	47	0%
B	-	0%	-	0%
Not Rated	233	2%	322	2%
U.S. Government	14,385	93%	16,300	92%
Total	15,321	100%	17,615	100%
Equities and Financed Purchases	108		104	
Total investment	\$ 15,429		\$ 17,719	

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.

	March 31, 2023		December 31, 2022	
	Fair Value	Duration	Fair Value	Duration
(In millions)	(in years)		(in years)	
U.S. Treasuries	\$ 14,177	4.92	\$ 16,093	4.95
Federal Agencies	348	5.66	367	5.75
Tax benefits lease investments	263	6.15	259	5.89
Repurchase agreements	175	-	250	-
Commercial paper	0	-	300	-
Asset-backed securities ⁽¹⁾	49	3.79	48	3.59
Commercial mortgage-backed securities ⁽¹⁾	160	5.72	159	5.07
Foreign bonds ⁽¹⁾	14	5.10	15	5.77
Corporates ⁽¹⁾	135	5.91	124	5.81
Total fair value	15,321		17,615	
Modified duration		4.92		4.83
Investments with no duration reported	108		104	
Total investments	\$ 15,429		\$ 17,719	

⁽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:

- i. Public Authorities Law Sections 1265(4) (MTA), 1204(19) (MTA New York City Transit Authority) and 553(21) (MTA Bridges and Tunnels);
- ii. Public Authorities Law Section 2925 Investment of funds by public authorities and public benefit corporations; general provisions; and
- iii. 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 Railroad 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 Additional Plan is a fiduciary component unit of the MTA and is reflected in the Pension and Other Employee Benefit Trust Funds section of the MTA's basic financial statements.

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, MTA Deputy Chief, Controller's Office, 2 Broadway, 15th Floor New York, NY 10004 or at www.mta.info.

2. MaBSTOA Plan —

The MaBSTOA Plan is a multi-employer cost-sharing defined benefit retirement plan administered by MTA New York City Transit covering employees of MaBSTOA and MTA Headquarters. Prior to January 1, 2020, this was a single employer defined benefit retirement plan covering only MaBSTOA employees. Employees of MaBSTOA and MTA Headquarters are specifically excluded from participating in the New York City Employees' Retirement System (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 the 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 MaBSTOA Plan is a fiduciary component unit of the MTA and is reflected in the Pension and Other Employee Benefit Trust Funds section of the MTA's basic financial statements.

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 Deputy Chief, Controller's Office, 2 Broadway, 15th Floor New York, NY 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 were 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 Deputy Chief, Controller's Office, 2 Broadway, 15th Floor New York, NY 10004 or 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 Railroad non-represented employees hired after January 1, 1988, MTA Metro-North Railroad non-represented employees, certain employees of the former MTA Long Island Bus hired prior to January 24, 1983, MTA Police, MTA Long Island Railroad 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 Railroad, 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 MTA Defined Benefit Plan is a fiduciary component unit of the MTA and is reflected in the Pension and Other Employee Benefit Trust Funds section of the MTA’s basic financial statements.

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 Deputy Chief, Controller’s Office, 2 Broadway, 15th Floor New York, NY 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 is a fiduciary component unit of The City and is in the Pension and Other Employee Benefit Trust Funds section of The City’s Annual Comprehensive Financial Report (“ACFR”).

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’ plan. 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. The report can be accessed on the New York State Comptroller's website at: www.osc.state.ny.us/retire/about_us/financial_statements_index.php or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, NY 12244-001.

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.
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 3 Generally, members (with certain member exceptions) who joined on or after September 1, 1983, but before January 1, 2010.
- Tier 4 Members who joined on or after January 1, 2010, but before April 1, 2012.
- Tier 5 Members who joined on or after April 1, 2012.
- Tier 6

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 Railroad 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 nonrepresented 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 55/25Plan 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 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, 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 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, La Guardia 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, La Guardia 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, La Guardia 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, 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.

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 nonrepresented 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. Subsequent to March 31, 2022, legislation was passed that reduced the number of years of service credit from ten years to five years. Therefore, all Members are vested when they reach five years of service credit.

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 a 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 retirees who have attained age 62 and have been retired for five years; (ii) all retirees who have attained age 55 and have been retired for ten years; (iii) all disability retirees, 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, 2021 and January 1, 2020, the dates of the most recent actuarial valuations, membership data for the following pension plans are as follows:

Membership at:

	January 1, 2021				TOTAL
	MNR Cash Balance Plan	Additional Plan	MaBSTOA Plan	MTA Defined Benefit Plan	
Active Plan Members	-	23	8,533	18,556	27,112
Retirees and beneficiaries receiving benefits	23	5,298	6,020	11,788	23,129
Vested formerly active members not yet receiving benefits	5	19	1,125	1,541	2,690
Total	28	5,340	15,678	31,885	52,931

Membership at:

	January 1, 2020				TOTAL
	MNR Cash Balance Plan	Additional Plan	MaBSTOA Plan	MTA Defined Benefit Plan	
Active Plan Members	2	34	8,795	18,960	27,791
Retirees and beneficiaries receiving benefits	24	5,483	5,944	11,468	22,919
Vested formerly active members not yet receiving benefits	15	19	1,040	1,519	2,593
Total	41	5,536	15,779	31,947	53,303

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 Railroad's Board of Managers of Pensions (1.5% in 2021 and 2020), 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 Railroad's Board of Managers of Pensions (1.5% in 2021 and 2020).

Funding for the Additional Plan by the MTA Long Island Railroad is provided by MTA. Certain funding by MTA is made to the MTA Long Island Railroad on a discretionary basis. The continuance of the MTA Long Island Railroad'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. Per the January 1, 2020 valuation, there is no unfunded accrued liability and the actuarially determined contribution is \$0. Per the January 1, 2021 valuation, there is no unfunded accrued liability and the actuarially determined contribution is \$0.

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 Railroad 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 Railroad 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 Railroad 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 Railroad 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 Railroad 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).

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 MTA New York City 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 MTA New York City 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 these plans required 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 Construction and Development 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 for the years ended December 31, 2022 and 2021 are as follows:

Year-ended December 31, (\$ in millions)	2022	2021
	Actual Employer Contributions	Actual Employer Contributions
Additional Plan	\$ 70.8	\$ 70.6
MaBSTOA Plan	158.6	156.2
MNR Cash Balance Plan	-*	-*
MTA Defined Benefit Plan	404.2	396.1
NYCERS	797.3	842.2
NYSLERS	11.2	16.3
Total	<u>\$ 1,442.1</u>	<u>\$ 1,481.4</u>

*MNR Cash Balance Plan's actual employer contribution for the was \$0 and \$0, respectively.

Net Pension Liability

The MTA's net pension liabilities for each of the pension plans reported at December 31, 2022 and 2021 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,	2022		2021	
<u>Pension Plan</u>	<u>Plan Measurement Date</u>	<u>Plan Valuation Date</u>	<u>Plan Measurement Date</u>	<u>Plan Valuation Date</u>
Additional Plan	December 31, 2021	January 1, 2021	December 31, 2020	January 1, 2020
MaBSTOA Plan	December 31, 2021	January 1, 2021	December 31, 2020	January 1, 2020
MNR Cash Balance Plan	December 31, 2021	January 1, 2021	December 31, 2020	January 1, 2020
MTA Defined Benefit Plan	December 31, 2021	January 1, 2021	December 31, 2020	January 1, 2020
NYCERS	June 30, 2022	June 30, 2021	June 30, 2021	June 30, 2020
NYSLERS	March 31, 2022	April 1, 2021	March 31, 2021	April 1, 2020

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.

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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, 2021	January 1, 2020	January 1, 2021	January 1, 2020	January 1, 2021	January 1, 2020
Investment Rate of Return	6.50%, net of investment expenses.	6.50% per annum, net of investment expenses.	6.50%, net of investment expenses.	6.50% per annum, net of investment expenses.	3.00%, net of investment expenses.	3.00% per annum, net of investment expenses.
Salary Increases	3.00%	3.00%	Reflecting general wage, merit and promotion increases for operating and non-operating members. Varies by years of employment.	Reflecting general wage, merit and promotion increases of 3.5% to 4.0% for operating and non-operating employees per year. Larger increases are assumed in the first 5 years of a member's career.	Not applicable	Not applicable
Inflation	2.25%; 3.25% for Railroad Retirement Wage Base.	2.25%; 3.25% for Railroad Retirement Wage Base.	2.25%	2.25%.	2.25%	2.25%
Cost-of Living Adjustments	Not applicable	Not applicable	60% of inflation assumption or 1.35%, if applicable.	1.35% per annum.	Not applicable	Not applicable
Valuation Date:	MTA Defined Benefit Plan		NYCERS		NYSLERS	
	January 1, 2021	January 1, 2020	June 30, 2021	June 30, 2020	April 1, 2021	April 1, 2020
Investment Rate of Return	6.50%, net of investment expenses	6.50% per annum, net of investment expenses.	7.0% per annum, net of Investment Expenses	7.00% per annum, net of expenses.	5.90% per annum, including inflation, net of investment expenses.	5.90% per annum, including inflation, net of investment expenses.
Salary Increases	Varies by years of employment, and employee group; 2.75% GWI increases for TWU Local 100 MTA Bus hourly employees.	Varies by years of employment, and employee group; 2.75% General Wage Increases for TWU Local 100 MTA Bus hourly employees.	In general, Merit and Promotion Increases plus assumed General Wage Increase of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	4.4% in ERS, 6.2% in PFRS	4.4% in ERS, 6.2% in PFRS
Inflation	2.25%; 3.25% for Railroad Retirement Wage Base.	2.25%; 3.25% for Railroad Retirement Wage Base.	2.50%	2.50%	2.70%	2.70%
Cost-of Living Adjustments	60% of inflation assumption or 1.35%, if applicable.	60% of inflation assumption or 1.35%, if applicable.	AutoCOLA – 1.5% per year Escalation – 2.5% per year	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.	1.40% per annum.	1.40% per annum.

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

The actuarial assumptions used in the January 1, 2021 and 2020 valuations for the MTA plans are based on an experience study covering the period from January 1, 2012 to December 31, 2017, with certain assumptions modified subsequently. The mortality assumption used in the January 1, 2021 and 2020 valuations are based on an experience study for all MTA plans covering the period from January 1, 2011 to December 31, 2015. 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 in the January 1, 2021 and 2020 valuation was the RP-2014 Disabled Annuitant mortality table for males and females. 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, which are also generally used to determine the total pension liability, as applicable.

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 2020 valuation is based on the most recent actuarial experience study and recommendations prepared by Bolton, Inc. for the four-year and ten-year periods ended June 30, 2017. Based, in part, on this report issued in June 2019, the Actuary proposed and the Board of Trustees of NYCERS adopted changes in actuarial assumptions including a change to Mortality Improvement Scale MP-2018 beginning in Fiscal Year 2019. The actuarial assumptions used in the June 2018 valuation was based on the previous study by Gabriel, Roeder, Smith & Company (“GRS”) published in October 2015 for the four-year and ten-year periods ended June 30, 2013. Based, in part, on the GRS Report, the Actuary proposed, and the Boards of Trustees of the NYCERS adopted, new post-retirement mortality tables including the application of Mortality Improvement Scale MP-2015 for use in determining employer contributions beginning in Fiscal Year 2016. Scale MP-2015 replaced Mortality Improvement Scale AA.

NYSLERS:

The actuarial assumptions used in the April 1, 2021 valuation are based on the results of an actuarial experience study for the period April 1, 2015 – March 31, 2020. Annuitant mortality rates are based on April 1, 2015 – March 31, 2020 System experience with adjustments for mortality improvements based on the Society of Actuaries’ Scale MP-2020. The previous actuarial valuation as of April 1, 2020 used the same assumptions for the measure of total pension liability.

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, 2021	6.50%
MaBSTOA Plan	December 31, 2021	6.50%
MNR Cash Balance Plan	December 31, 2021	3.00%
MTA Defined Benefit Plan	December 31, 2021	6.50%
NYCERS	June 30, 2022	7.00%
NYSLERS	March 31, 2022	5.90%

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	10.50%	1.39%	10.50%	1.39%
US Long Bonds	2.00%	1.16%	2.00%	1.16%
US Bank / Leveraged Loans	1.50%	3.49%	1.50%	3.49%
US Inflation-Indexed Bonds	2.00%	0.60%	2.00%	0.60%
US High Yield Bonds	3.00%	3.92%	3.00%	3.92%
Emerging Markets Bonds	2.00%	3.98%	2.00%	3.98%
US Large Caps	18.00%	4.94%	18.00%	4.94%
US Small Caps	7.00%	6.73%	7.00%	6.73%
Foreign Developed Equity	12.00%	6.27%	12.00%	6.27%
Emerging Markets Equity	4.50%	8.82%	4.50%	8.82%
Emerging Markets Small Cap Equity	1.50%	8.89%	1.50%	8.89%
Global REITs	1.00%	5.60%	1.00%	5.60%
Private Real Estate Property	4.00%	4.61%	4.00%	4.61%
Private Equity	7.00%	10.36%	7.00%	10.36%
Private Credit	7.00%	6.93%	7.00%	6.93%
Commodities	4.00%	1.99%	4.00%	1.99%
Hedge Funds - MultiStrategy	13.00%	3.73%	13.00%	3.73%
	<u>100.00%</u>		<u>100.00%</u>	
Assumed Inflation - Mean		2.30%		2.30%
Assumed Inflation - Standard Deviation		1.23%		1.23%
Portfolio Nominal Mean Return		7.39%		7.39%
Portfolio Standard Deviation		12.15%		12.15%
Long Term Expected Rate of Return selected by MTA		6.50%		6.50%

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	10.50%	1.39%	100.00%	1.03%
US Long Bonds	2.00%	1.16%	-	-
US Bank / Leveraged Loans	1.50%	3.49%	-	-
US Inflation-Indexed Bonds	2.00%	0.60%	-	-
US High Yield Bonds	3.00%	3.92%	-	-
Emerging Markets Bonds	2.00%	3.98%	-	-
US Large Caps	18.00%	4.94%	-	-
US Small Caps	7.00%	6.73%	-	-
Foreign Developed Equity	12.00%	6.27%	-	-
Emerging Markets Equity	4.50%	8.82%	-	-
Emerging Markets Small Cap Equity	1.50%	8.89%	-	-
Global REITs	1.00%	5.60%	-	-
Private Real Estate Property	4.00%	4.61%	-	-
Private Equity	7.00%	10.36%	-	-
Private Credit	7.00%	6.93%	-	-
Commodities	4.00%	1.99%	-	-
Hedge Funds - MultiStrategy	13.00%	3.73%	-	-
	<u>100.00%</u>		<u>100.00%</u>	
Assumed Inflation - Mean		2.30%		2.34%
Assumed Inflation - Standard Deviation		1.23%		1.23%
Portfolio Nominal Mean Return		7.39%		3.37%
Portfolio Standard Deviation		12.15%		4.06%
Long Term Expected Rate of Return selected by MTA		6.50%		3.00%

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	27.00%	7.00%	32.00%	3.30%
International Public Market Equities	0.00%	0.00%	15.00%	5.85%
Developed Public Market Equities	12.00%	7.20%	0.00%	0.00%
Emerging Public Market Equities	5.00%	9.00%	0.00%	0.00%
Fixed Income	30.50%	2.50%	23.00%	0.00%
Private Equities	8.00%	11.30%	10.00%	6.50%
Alternatives (Real Assets, Hedge Funds)	0.00%	0.00%	3.00%	5.58%
Real Estate	7.50%	6.70%	9.00%	5.00%
Infrastructure	4.00%	6.00%	0.00%	0.00%
Absolute Return Strategies	0.00%	0.00%	0.00%	0.00%
Opportunistic Portfolio	6.00%	7.40%	3.00%	4.10%
Cash	0.00%	0.00%	1.00%	-1.00%
Credit	0.00%	0.00%	4.00%	3.78%
	<u>100.00%</u>		<u>100.00%</u>	
Assumed Inflation - Mean		2.50%		2.50%
Long Term Expected Rate of Return		7.00%		5.90%

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			
	2022		2021	
	Plan Measurement Date	Rate	Plan Measurement Date	Rate
Pension Plan				
Additional Plan	December 31, 2021	6.50%	December 31, 2020	6.50%
MaBSTOA Plan	December 31, 2021	6.50%	December 31, 2020	6.50%
MNR Cash Balance Plan	December 31, 2021	3.00%	December 31, 2020	3.00%
MTA Defined Benefit Plan	December 31, 2021	6.50%	December 31, 2020	6.50%
NYCERS	June 30, 2022	7.00%	June 30, 2021	7.00%
NYSLERS	March 31, 2022	5.90%	March 31, 2021	5.90%

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, 2022, based on the December 31, 2021 measurement date, and for the year ended December 31, 2021, based on the December 31, 2020 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, 2020	\$ 1,357,323	\$ 760,690	\$ 596,633	\$ 4,246,386	\$ 3,306,616	\$ 939,770
Changes for fiscal year 2021:						
Service Cost	260	-	260	93,934	-	93,934
Interest on total pension liability	83,489	-	83,489	274,270	-	274,270
Effect of economic /demographic (gains) or losses	3,729	-	3,729	(19,177)	-	(19,177)
Effect of assumption changes or inputs	26,300	-	26,300	72,032	-	72,032
Benefit payments	(148,630)	(148,630)	-	(245,427)	(245,427)	-
Administrative expense	-	(610)	610	-	(264)	264
Member contributions	-	73	(73)	-	24,935	(24,935)
Net investment income	-	95,247	(95,247)	-	416,287	(416,287)
Employer contributions	-	70,553	(70,553)	-	156,204	(156,204)
Balance as of December 31, 2021	<u>\$ 1,322,471</u>	<u>\$ 777,323</u>	<u>\$ 545,148</u>	<u>\$ 4,422,018</u>	<u>\$ 3,658,351</u>	<u>\$ 763,667</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, 2019	\$ 1,411,570	\$ 840,460	\$ 571,110	\$ 4,122,934	\$ 3,300,268	\$ 822,666
Changes for fiscal year 2020:						
Service Cost	453	-	453	95,514	-	95,514
Interest on total pension liability	86,918	-	86,918	266,588	-	266,588
Effect of economic /demographic (gains) or losses	10,428	-	10,428	(720)	-	(720)
Benefit payments	(152,046)	(152,046)	-	(237,930)	(237,930)	-
Administrative expense	-	(612)	612	-	(244)	244
Member contributions	-	140	(140)	-	24,709	(24,709)
Net investment income	-	4,024	(4,024)	-	60,327	(60,327)
Employer contributions	-	68,724	(68,724)	-	159,486	(159,486)
Balance as of December 31, 2020	<u>\$ 1,357,323</u>	<u>\$ 760,690</u>	<u>\$ 596,633</u>	<u>\$ 4,246,386</u>	<u>\$ 3,306,616</u>	<u>\$ 939,770</u>

	MNR Cash Balance Plan			MTA Defined Benefit 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, 2020	\$ 378	\$ 394	\$ (16)	\$ 6,950,035	\$ 5,012,765	\$ 1,937,270
Changes for fiscal year 2021:						
Service Cost	-	-	-	213,675	-	213,675
Interest on total pension liability	11	-	11	455,230	-	455,230
Effect of economic / demographic (gains) or losses	(11)	-	(11)	20,656	-	20,656
Effect of assumption changes or inputs	15	-	15	113,662	-	113,662
Benefit payments	(38)	(38)	-	(325,473)	(325,473)	-
Administrative expense	-	-	-	-	(3,513)	3,513
Member contributions	-	-	-	-	33,832	(33,832)
Net investment income	-	(5)	5	-	639,374	(639,374)
Employer contributions	-	-	-	-	396,144	(396,144)
Balance as of December 31, 2021	<u>\$ 355</u>	<u>\$ 351</u>	<u>\$ 4</u>	<u>\$ 7,427,785</u>	<u>\$ 5,753,129</u>	<u>\$ 1,674,656</u>

	MNR Cash Balance Plan			MTA Defined Benefit 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, 2019	\$ 448	\$ 455	\$ (7)	\$ 6,510,686	\$ 4,784,224	\$ 1,726,462
Changes for fiscal year 2020:						
Service Cost	-	-	-	213,494	-	213,494
Interest on total pension liability	14	-	14	427,672	-	427,672
Effect of economic / demographic (gains) or losses	10	-	10	92,019	-	92,019
Effect of assumption changes or inputs	11	-	11	-	-	-
Benefit payments	(105)	(105)	-	(293,836)	(293,836)	-
Administrative expense	-	3	(3)	-	(3,660)	3,660
Member contributions	-	-	-	-	32,006	(32,006)
Net investment income	-	32	(32)	-	99,045	(99,045)
Employer contributions	-	9	(9)	-	394,986	(394,986)
Balance as of December 31, 2020	<u>\$ 378</u>	<u>\$ 394</u>	<u>\$ (16)</u>	<u>\$ 6,950,035</u>	<u>\$ 5,012,765</u>	<u>\$ 1,937,270</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, 2021			December 31, 2020		
	1% Decrease (5.5%)	Discount Rate (6.5%)	1% Increase (7.5%)	1% Decrease (5.5%)	Discount Rate (6.5%)	1% Increase (7.5%)
	(in thousands)			(in thousands)		
Additional Plan	\$ 648,472	\$ 545,148	\$ 455,156	\$ 702,167	\$ 596,633	\$ 504,666
MaBSTOA Plan	1,269,779	763,667	335,356	1,421,343	939,770	531,498
MTA Defined Benefit Plan	2,615,168	1,674,656	884,831	2,812,063	1,937,270	1,200,642
	(in whole dollars)			(in whole dollars)		
MNR Cash Balance Plan	\$ 26,611	\$ 3,865	\$ (16,181)	\$ 7,343	\$ (15,852)	\$ (36,311)

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, 2021 and June 30, 2020 actuarial valuations, rolled forward to June 30, 2022 and June 30, 2021, respectively, and the proportion percentage of the aggregate net pension liability allocated to the MTA:

	NYCERS	
	June 30, 2022	June 30, 2021
	(\$ in thousands)	
MTA's proportion of the net pension liability	21.900%	22.218%
MTA's proportionate share of the net pension liability	\$ 3,964,996	\$ 1,424,952

The following table presents the MTA's proportionate share of the net pension liability of NYSLERS based on the April 1, 2021 and April 1, 2020 actuarial valuations, rolled forward to March 31, 2022 and March 31, 2021, respectively, and the proportion percentage of the aggregate net pension liability allocated to the MTA:

	NYSLERS	
	March 31, 2022	March 31, 2021
	(\$ in thousands)	
MTA's proportion of the net pension liability	0.316%	0.314%
MTA's proportionate share of the net pension liability	\$ (25,856)	\$ 313

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, 2022 and 2021 and to NYSLERS for the plan's fiscal year-end March 31, 2022 and 2021, 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, 2022			June 30, 2021		
	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
NYCERS	\$ 6,309,639	\$ 3,964,996	\$ 1,984,590	\$ 3,738,910	\$ 1,424,952	\$ (538,293)
Measurement Date:	March 31, 2022			March 31, 2021		
	1% Decrease (4.9%)	Discount Rate (5.9%)	1% Increase (6.9%)	1% Decrease (4.9%)	Discount Rate (5.9%)	1% Increase (6.9%)
NYSLERS	\$ 66,552	\$ (25,856)	\$ (103,150)	\$ 86,873	\$ 313	\$ (79,515)

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

For the three-month period ended March 31, 2023 and year ended December 31, 2022, the MTA recognized pension expense related to each pension plan as follows (in \$ thousands):

Pension Plan	March 31, 2023	December 31, 2022
Additional Plan	\$ 17,935	\$ 63,224
MaBSTOA Plan	40,033	132,278
MNR Cash Balance plan	-	3
MTA Defined Benefit Plan	111,543	385,288
NYCERS	189,091	453,150
NYSLERS	4,071	2,312
Total	\$ 362,673	\$ 1,036,255

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For the three-month period ended March 31, 2023 and year ended December 31, 2022, the MTA reported deferred outflow of resources and deferred inflow of resources for each pension plan as follows (in \$ thousands):

	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	\$ -	\$ -	\$ 10,906	\$ 16,683	\$ -	\$ -	\$ 185,955	\$ 10,359
Changes in assumptions	-	-	156,544	-	-	-	554,001	7,813
Net difference between projected and actual earnings on pension plan investments	-	16,341	-	111,214	-	3	-	178,327
Changes in proportion and differences between contributions and proportionate share of contributions	-	-	-	-	-	-	66,655	66,655
Employer contributions to the plan subsequent to the measurement of net pension liability	70,764	-	158,618	-	4	-	391,041	-
Total	<u>\$ 70,764</u>	<u>\$ 16,341</u>	<u>\$ 326,068</u>	<u>\$ 127,897</u>	<u>\$ 4</u>	<u>\$ 3</u>	<u>\$ 1,197,652</u>	<u>\$ 263,154</u>

For the Year Ended March 31, 2023

	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	\$ 343,902	\$ 87,149	\$ 1,958	\$ 2,540	\$ 542,721	\$ 116,731
Changes in assumptions	653	126,839	43,150	728	754,348	135,380
Net difference between projected and actual earnings on pension plan investments	724,648	-	-	84,666	724,648	390,551
Changes in proportion and differences between contributions and proportionate share of contributions	51,026	343,882	3,726	2,117	121,407	412,654
Employer contributions to the plan subsequent to the measurement of net pension liability	399,435	-	11,155	-	1,031,017	-
Total	<u>\$ 1,519,664</u>	<u>\$ 557,870</u>	<u>\$ 59,989</u>	<u>\$ 90,051</u>	<u>\$ 3,174,141</u>	<u>\$ 1,055,316</u>

	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
For the Year Ended December 31, 2022								
Differences between expected and actual experience	\$ -	\$ -	\$ 17,004	\$ 3,896	\$ -	\$ -	\$ 218,415	\$ 13,714
Changes in assumptions	-	-	121,560	-	-	-	535,702	17,580
Net difference between projected and actual earnings on pension plan investments	27,816	-	57,062	-	-	19	72,382	-
Changes in proportion and differences between contributions and proportionate share of contributions	-	-	-	-	-	-	78,760	78,760
Employer contributions to the plan subsequent to the measurement of net pension liability	70,553	-	156,204	-	-	-	396,144	-
Total	\$ 98,369	\$ -	\$ 351,830	\$ 3,896	\$ -	\$ 19	\$ 1,301,403	\$ 110,054

	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
For the Year Ended December 31, 2022						
Differences between expected and actual experience	\$ 365,770	\$ 164,835	\$ 3,822	\$ -	\$ 605,011	\$ 182,445
Changes in assumptions	1,318	176,775	57,548	1,085	716,128	195,440
Net difference between projected and actual earnings on pension plan investments	-	2,091,098	-	89,908	157,260	2,181,025
Changes in proportion and differences between contributions and proportionate share of contributions	55,095	353,104	3,424	2,823	137,279	434,687
Employer contributions to the plan subsequent to the measurement of net pension liability	451,816	-	16,284	-	1,091,001	-
Total	\$ 873,999	\$ 2,785,812	\$ 81,078	\$ 93,816	\$ 2,706,679	\$ 2,993,597

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.

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
Pension Plan			
Additional Plan	1.00	N/A	1.00
MaBSTOA Plan	6.40	N/A	6.40
MNR Cash Balance Plan	1.00	N/A	1.00
MTA Defined Benefit Plan	8.30	8.30	8.30
NYCERS	5.79	5.79	5.79
NYSLERS	5.00	5.00	5.00

For the three-month period ended March 31, 2023 and year ended December 31, 2022, \$1,031.0 and \$1,091.0 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, 2021 and December 31, 2020, respectively. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at December 31, 2022 will be recognized as pension expense as follows:

Year Ending December 31:	Additional Plan	MaBSTOA Plan	MNR Cash Balance plan	MTA Defined Benefit Plan	NYCERS	NYSLERS	Total
	(in thousands)						
2023	\$ 6,195	\$ 37,990	\$ (1)	\$ 129,154	\$ 27,732	\$ (5,818)	\$ 195,252
2024	(12,635)	(23,044)	(5)	36,940	99,838	(9,235)	91,859
2025	(188)	24,723	-	100,670	(58,363)	(21,989)	44,853
2026	(9,713)	(11,613)	3	58,386	489,105	(4,175)	521,993
2027	-	8,193	-	113,253	4,047	-	125,493
Thereafter	-	3,304	-	105,054	-	-	108,358
	<u>\$ (16,341)</u>	<u>\$ 39,553</u>	<u>\$ (3)</u>	<u>\$ 543,457</u>	<u>\$ 562,359</u>	<u>\$ (41,217)</u>	<u>\$ 1,087,808</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 Asset Allocation Programs offer two options for those participants who would like to make retirement investing easy – the MTA Target Year Funds and Goal maker. 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 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 – The Self-Directed Mutual Fund Option is designed for the more experienced investors. The fund 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 \$20,500 dollars or \$27,000 dollars for those over age 50 for the year ended December 31, 2021. The total combination of Roth after-tax contributions and regular before-tax contributions cannot exceed the IRS maximum of \$22,500 dollars or \$30,000 dollars for those over age 50 for the year ended December 31, 2022.

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 Construction and Development
- MTA Bus

Employer 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 – Effective in 2019, there are no employees receiving these employer contributions. Prior to 2019, 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:

<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.

MTA Headquarters – Commanding Officers - 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 contributions shall be made monthly and shall be considered MTA Police contributions. 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:

- i. Completing 5 years of service,
- ii. Attaining the Normal Retirement Age of 62 while in continuous employment, or
- iii. 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 accepts 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.

	<u>2022</u>	<u>2021</u>
	(In thousands)	
Employer 401K contributions	<u>\$3,833</u>	<u>\$3,939</u>

5. OTHER POSTEMPLOYMENT BENEFITS

The MTA participates in a defined benefit other postemployment benefits (“OPEB”) plan for its employees, the Metropolitan Transportation Authority Retiree Welfare Benefits Plan (“OPEB Plan”). A description of the Plan follows:

(1) Plan Description

The MTA Retiree Welfare Benefits Plan (“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. Postemployment benefits are part of an exchange of salaries and benefits for employee services rendered. Amounts contributed to the OPEB Plan are held in an irrevocable trust and may not be used for any other purpose than to fund the costs of health and welfare benefits of its eligible participants.

The OPEB 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 OPEB Plan Board of Managers, comprised of the MTA Chairman, MTA Chief Financial Officer and MTA Director of Labor Relations, are the administrators of the OPEB Plan. The MTA Board has the right to amend, suspend or terminate the OPEB Plan. The OPEB Plan is a fiduciary component unit of the MTA and is in the Pension and Other Employee Benefit Trust Funds section of the MTA’s basic financial statements.

The separate annual financial statements of the OPEB Plan may be obtained by writing to MTA Deputy Chief, Controller's Office, 2 Broadway, 15th Floor New York, NY 10004 or at www.mta.info.

Benefits Provided — The benefits provided by the OPEB Plan include medical, pharmacy, dental, vision, life insurance and a Medicare supplemental plan. The different types of benefits provided vary by agency, employee type (represented employees versus non-represented) and the relevant collective bargaining agreements. Certain benefits are provided upon retirement as defined in 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 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. Certain represented employees of MTA Metro-North Railroad participate in the 401(k) Plan. Eligible employees of the MTA may elect to join the New York State Voluntary Defined Contribution Plan ("VDC").

The MTA 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. 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, MTA Staten Island Railway represented employees as of March 1, 2010, June 1, 2010 or January 1, 2013 depending on the union 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.

OPEB Plan Eligibility — To qualify for benefits under the OPEB Plan, a former employee of the MTA must:

- i. have retired;
- ii. be receiving a pension (except in the case of the 401(k) Plan);
- iii. have at least 10 years of credited service as a member of NYCERS, NYSLERS, the MTA Defined Benefit Plan, the Additional Plan, the MaBSTOA Plan, the MNR Cash Balance Plan, the 401(k) Plan or the VDC; and
- iv. have attained the minimum age requirement (unless within 5 years of commencing retirement for certain members).
A represented retired employee may be eligible only pursuant to the relevant collective bargaining agreement.

Surviving Spouse and Other Dependents —

- 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.
- 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. The surviving spouse coverage continues until spouse is eligible for Medicare for represented employees of MTA New York City Transit and MTA Staten Island Railway, retiring on or after:
 - o May 21, 2014 for Transport Workers Union ("TWU") Local 100;
 - o September 24, 2014 for Amalgamated Transit Union ("ATU") Local 726;
 - o October 29, 2014 for ATU Local 1056;
 - o March 25, 2015 for Transportation Communication Union ("TCU"); and
 - o December 16, 2015 for United Transportation Union ("UTU") and American Train Dispatchers Association ("ATDA").
- 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.
- 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.

The OPEB Plan Board of Managers has the authority to establish and amend the benefits that will be covered under the OPEB Plan, except to the extent that they have been established by collective bargaining agreement.

Employees Covered by Benefit Terms — As of July 1, 2021 and July 1, 2019, the date of the most recent actuarial valuation, the following classes of employees were covered by the benefit terms:

	<u>Number of Participants</u>	
	<u>July 1, 2021</u>	<u>July 1, 2019</u>
Active plan members	68,672	73,588
Inactive plan members currently receiving benefit payments	48,888	46,994
Inactive plan members entitled to but not yet receiving benefit payments	131	186
Total	<u>117,691</u>	<u>120,768</u>

Contributions — The MTA is not required by law or contractual agreement to provide funding for the OPEB Plan, other than the “pay-as-you-go” (“PAYGO”) amounts. PAYGO is the cost of benefits necessary to provide the current benefits to retirees and eligible beneficiaries and dependents. Employees are not required to contribute to the OPEB Plan. The OPEB Plan Board has the authority for establishing and amending the funding policy. For the years ended December 31, 2022 and 2021, the MTA paid \$846.3 and \$813.2 of PAYGO to the OPEB Plan, respectively. The PAYGO amounts include an implicit rate subsidy adjustment of \$58 and \$53 for the years ended December 31, 2022 and 2021, respectively. For the 2021 plan year, the OPEB Plan paid \$337.6 in OPEB benefits, reducing the employer contributions to \$387.3.

The discount rate estimates investment earnings for assets earmarked to cover retiree health benefits. Under GASB Statement No. 75, the discount rate depends on the nature of underlying assets for funded plans. Since the amount of benefits paid in 2020 exceeded the current fair value of the assets, a depletion date is assumed to occur immediately. Therefore, the discount rate is set equal to the municipal bond index. The MTA elected the Bond Buyer General Obligation 20-Bond Municipal Bond Index. As a result, the discount rates as of December 31, 2021 and December 31, 2020, the measurement dates, are 2.06% and 2.12%, respectively.

Employer contributions include the implicit subsidy, or age-related subsidy inherent in the healthcare premiums structure. The implicit subsidy arises when an employer allows a retiree and their dependents to continue on the active plans and pay the active premiums. Retirees are not paying the true cost of their benefits because they have higher utilization rates than actives and therefore, are partially subsidized by the active employees. As shown in the following table, for the years ended December 31, 2021 and 2020, the employer made a cash payment for retiree healthcare of \$52,933 and \$69,472, respectively, as part of the employer’s payment for active-employee healthcare benefits. For purposes of GASB Statement No. 75, this payment made on behalf of the active employees should be reclassified as benefit payments for retiree health care to reflect the retirees’ underlying age-adjusted, retiree benefit costs.

Blended and Age-adjusted Premium (in thousands)	<u>2021 Retirees</u>	<u>2020 Retirees</u>
Total blended premiums	\$740,051	\$655,269
Employment payment for retiree healthcare	52,933	69,472
Net Payments	<u>\$792,984</u>	<u>\$724,741</u>

(2) Actuarial Assumptions

Actuarial valuation involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future, such as future employment, mortality and health care cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan, which refers to the plan terms as understood by the employer and the plan members at the time of the valuation, including only changes to plan terms that have been made and communicated to employees. The projections include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefit costs between the employer and plan members at that time. The MTA may not be obligated to provide the same types or levels of benefits to retirees in the future.

The total OPEB liability was determined by an actuarial valuation performed on July 1, 2021 and July 1, 2019. Update procedures were used to roll forward the total OPEB liability to the measurement dates of December 31, 2021, and December 31, 2020, respectively. The actuarial valuations were performed using the following actuarial assumptions, applied to all periods included in the measurement, unless specified:

Valuation date	July 1, 2021	July 1, 2019
Measurement date	December 31, 2021	December 31, 2020
Discount rate	2.06%, net of expenses	2.12%, net of expenses
Inflation	2.30%	2.25%
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level percentage of payroll	Level percentage of payroll
Normal cost increase factor	4.25%	4.25%
Salary increases	Varies by years of service and differs for members of the various pension plans	Varies by years of service and differs for members of the various pension plans
Investment rate of return	2.06%	2.12%

Healthcare Cost Trend — The healthcare trend assumption is based on the Society of Actuaries-Getzen Model version 2021 utilizing the baseline assumptions included in the model, except inflation of 2.25% for medical and pharmacy benefits. Further adjustments apply based on percentage of costs associated with administrative expenses, inflation on administrative costs, and aging factors. For NYSHIP benefits, trends are multiplied by 90% to reflect that NYSHIP trends have been generally lower than trends projected by the Getzen model over the past 10 years. Separate long-term trends are used for Medicare Part B reimbursements and for dental and vision benefits (3.5% per year). The self-insured trend is applied directly for represented employees of NYC Transit, SIRTOA and MTA Bus Company. No self-insured post-65 trend is assumed during 2021 to reflect the approximately 90% reduction in the contracted Medicare Advantage plan premiums for 2022.

Healthcare Cost Trend Rates — The following lists illustrative rates for the NYSHIP and self-insured trend assumptions (all amounts are in percentages).

Fiscal Year	NYSHIP		TBTA		Self-Insured		Medicare Part B Trend
	< 65	> = 65	< 65	> = 65	< 65	> = 65	
2021	5.30%	4.60%	5.20%	3.60%	5.90%	0.00%	14.50%
2022	5.10%	4.60%	5.00%	3.90%	5.60%	5.10%	5.40%
2023	4.80%	4.60%	4.80%	4.30%	5.40%	5.10%	5.40%
2024	4.60%	4.60%	4.60%	4.60%	5.10%	5.10%	5.40%
2025	4.50%	4.50%	4.50%	4.50%	5.00%	5.00%	5.40%
2026	4.40%	4.40%	4.40%	4.40%	4.90%	4.80%	5.40%
2027	4.30%	4.30%	4.30%	4.30%	4.70%	4.70%	5.40%
2028	4.20%	4.20%	4.20%	4.20%	4.60%	4.60%	5.40%
2029	4.00%	4.00%	4.00%	4.00%	4.50%	4.50%	5.40%
2039	3.90%	3.90%	3.90%	3.90%	4.40%	4.40%	5.40%
2049	3.90%	3.90%	3.90%	3.90%	4.30%	4.30%	4.00%
2059	3.80%	3.80%	3.80%	3.80%	4.20%	4.20%	3.80%
2069	3.80%	3.80%	3.80%	3.80%	4.20%	4.20%	3.70%
2079	3.50%	3.50%	3.50%	3.50%	3.90%	3.90%	3.70%
2089	3.30%	3.30%	3.30%	3.30%	3.70%	3.70%	3.70%
2099	3.30%	3.30%	3.30%	3.30%	3.70%	3.70%	3.60%
2100	3.30%	3.30%	3.30%	3.30%	3.70%	3.70%	3.60%

For purposes of applying the Entry Age Normal cost method, the healthcare trend prior to the valuation date is based on the ultimate rates, which are 3.3% for NYSHIP costs, 3.7% for self-insured medical and pharmacy costs, and 3.6% for Medicare Part B costs.

Mortality — All mortality rates (except accidental death for active police members) are projected on a generational basis using the Society of Actuaries Mortality Improvement Scale MP-2021. As generational tables, they reflect mortality improvement both before and after the measurement date. The post-retirement mortality assumption is based on an experience analysis covering the period from January 1, 2015 to December 31, 2020 for the MTA-sponsored pension plans. The mortality rates vary by employee type:

- Headquarters Non-Police Members: PubG.H-2010 Mortality Table, headcount weighted for general employees for males and females with separate rates for employees, healthy annuitants and disabled annuitants.
- Headquarters Police Members: Rates from the June 30, 2019 (Lag) Actuarial Valuation for NYCERS dated December 29, 2021 as follows: Service Retirees for Housing Police and Transit Police (Table XII-5), Disabled Retirees for Housing Police and Transit Police (Table XII-6) and Active Members for Transit and TBTA Ordinary Death and Accidental Death (Table XII-4). No adjustments were made to convert from lives-weighted to amounts-weighted. Base year is 2012 for mortality improvement purposes.
- Rail Members (LI Bus, LIRR, Metro-North, and SIRTOA): Pri.H-2012(BC) Mortality Table, headcount weighted with blue collar adjustments for males and females with separate rates for employees, healthy annuitants and disabled annuitants. Employee and healthy annuitant male rates are multiplied by 97%.
- Transit Members (Bridges and Tunnels, MTA Bus, and Transit): Pri.H-2012(BC) Mortality Table, headcount weighted with blue collar adjustments for males and females with separate rates for employees, healthy annuitants and disabled annuitants. Employee and healthy annuitant male rates are multiplied by 92%.

(3) Net OPEB Liability

At December 31, 2022 and 2021, the MTA reported a net OPEB liability of \$24,956 and \$24,409, respectively. The MTA's net OPEB liability was measured as of December 31, 2021 and December 31, 2020, respectively. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation date of July 1, 2021 and July 1, 2019 and rolled forward to December 31, 2021 and December 31, 2020, respectively.

OPEB Plan Fiduciary Net Position — The fiduciary net position has been determined on the same basis used by the OPEB plan. The OPEB plan uses the accrual basis of accounting under which contributions from the employer are recognized when paid. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Investments are reported at fair value based on quoted market prices or Net Asset Value. Detailed information about the OPEB plan's fiduciary net position is available in the separately issued financial report or at www.mta.info.

Expected Rate of Return on Investments — The best-estimate range for the long-term expected rate of return was determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are as of December 31, 2021.

Asset Class	Index	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
U.S. cash	BAML 3-Month T-Bill	100.00%	-0.26%
Assumed Inflation - Mean			2.30%
Assumed Inflation - Standard Deviation			1.23%
Portfolio Nominal Mean return			2.03%
Portfolio Standard Deviation			1.11%
Long Term Expected Rate of Return selected by MTA			2.06%

Discount Rate — The discount rate used in this valuation to measure the total OPEB liability was updated to incorporate GASB Statement No. 75 guidance.

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. Therefore, the discount rate is set equal to the Bond Buyer General Obligation 20-Bond Municipal Bond Index as of December 31, 2021 of 2.06% and as of December 31, 2020 of 2.12%.

Changes in Net OPEB Liability — Changes in the MTA's net OPEB liability for the year ended December 31, 2022 based on the December 31, 2021 measurement date, and for the year ended December 31, 2021, based on the December 31, 2020 measurement date, were as follows:

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(in thousands)		
Balance as of December 31, 2020	\$ 24,409,581	\$ 130	\$ 24,409,451
Changes for the year:			
Service Cost	1,250,950	-	1,250,950
Interest on total OPEB liability	535,642	-	535,642
Effect of plan changes	-	-	-
Effect of economic/demographic gains or losses	292,154	-	292,154
Effect of assumptions changes or inputs	(738,829)	-	(738,829)
Benefit payments	(792,984)	(792,984)	-
Employer contributions	-	792,984	(792,984)
Net investment income	-	0	0
Administrative expenses	-	(46)	46
Net changes	546,933	(46)	546,979
Balance as of December 31, 2021	\$ 24,956,514	\$ 84	\$ 24,956,430
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(in thousands)		
Balance as of December 31, 2019	\$ 21,531,473	\$ 414,827	\$ 21,116,646
Changes for the year:			
Service Cost	1,097,051	-	1,097,051
Interest on total OPEB liability	610,160	-	610,160
Effect of plan changes	-	-	-
Effect of economic/demographic gains or losses	(43,890)	-	(43,890)
Effect of assumptions changes or inputs	1,939,528	-	1,939,528
Benefit payments	(724,741)	(724,741)	-
Employer contributions	-	387,371	(387,371)
Net investment income	-	(77,118)	77,118
Administrative expenses	-	(209)	209
Net changes	2,878,108	(414,697)	3,292,805
Balance as of December 31, 2020	\$ 24,409,581	\$ 130	\$ 24,409,451

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate — The following presents the net OPEB liability of the MTA, calculated using the discount rate as of each measurement date, as well as what the MTA's net OPEB 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 the measurement date:

Measurement Date:	December 31, 2021		
	1% Decrease	Discount Rate	1% Increase
	(1.06%)	(2.06%)	(3.06%)
Net OPEB liability	\$28,857,427	\$24,956,431	\$21,790,175

Measurement Date:	December 31, 2020		
	1% Decrease	Discount Rate	1% Increase
	(1.12%)	(2.12%)	(3.12%)
Net OPEB liability	\$28,098,117	\$24,409,451	\$21,392,425

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates — The following presents the net OPEB liability of the MTA, calculated using the healthcare cost trend rates as of each measurement date, as well as what the MTA'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 actual healthcare trend rate used for the measurement date:

Measurement Date:	December 31, 2021		
	1% Decrease	Healthcare Cost Current Trend Rate*	1% Increase
	\$21,198,435	\$24,956,431	\$29,769,162
Net OPEB liability	\$21,198,435	\$24,956,431	\$29,769,162

Measurement Date:	December 31, 2020		
	1% Decrease	Healthcare Cost Current Trend Rate*	1% Increase
	\$20,595,637	\$24,409,451	\$29,295,102
Net OPEB liability	\$20,595,637	\$24,409,451	\$29,295,102

*For further details, refer to the Health Care Cost Trend Rates tables in the Actuarial Assumptions section of this Note Disclosure

(4) OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the years ended December 31, 2022 and 2021, the MTA recognized OPEB expense of \$1.89 billion and \$1.87 billion, respectively.

At December 31, 2022 and 2021, the MTA reported deferred outflows of resources and deferred inflows of resources related to OPEB as follows (\$ in thousands) :

	March 31, 2023		December 31, 2022	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 414,192	\$ 41,967	\$ 414,192	\$ 41,967
Changes of assumptions	1,952,237	1,468,704	1,952,237	1,468,704
Net difference between projected and actual earnings on OPEB plan investments	47,114	-	47,114	-
Changes in proportion and differences between contributions and proportionate share of contributions	1,184,355	1,184,355	1,184,355	1,184,355
Employer contributions to the plan subsequent to the measurement of net OPEB liability	846,299	-	846,299	-
Total	\$ 4,444,197	\$ 2,695,026	\$ 4,444,197	\$ 2,695,026

The annual differences between the projected and actual earnings on investments are amortized over a 5-year closed period beginning the year in which the difference occurs. The annual differences between expected and actual experience and changes in assumptions are amortized over a 7.6-year closed period, beginning the year in which the deferred amount occurs.

For the years ended December 31, 2022 and 2021, \$846.3 and \$813.2 were reported as employer contributions subsequent to measurement date. This amount includes both MTA's contributions subsequent to the measurement date and an implicit rate subsidy adjustment that will be recognized as a reduction of the net OPEB liability in the year ending December 31, 2023 and December 31, 2022, respectively. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB at December 31, 2022 will be recognized in OPEB expense as follows:

2023	\$ 142,130
2024	133,532
2025	66,689
2026	145,935
2027	244,288
Thereafter	170,298
	<u>\$ 902,872</u>

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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. GASB 87 leases are classified as right-of-use assets and measured at the present value of the initial measurement of the lease liability, plus any payments made to the lessor at or before the commencement of the lease term and certain direct costs. Accumulated depreciation and amortization are reported as reductions of fixed assets and right-of-use 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. Right-of-use assets and leasehold improvements are amortized over the term of the lease or the life of the asset whichever is less. Capital and right-of-use assets consist of the following at December 31, 2022 and March 31, 2023 (in millions):

	Balance December 31, 2021 (Restated)*	Additions / Reclassifications	Deletions / Reclassifications	Balance December 31, 2022	Additions / Reclassifications	Deletions / Reclassifications	Balance March 31, 2023
Capital assets not being depreciated:							
Land	\$ 249	\$ 82	-	\$ 331	-	-	\$ 331
Construction work-in-progress	23,377	6,415	7,195	22,597	835	10,340	13,092
Total capital assets not being depreciated	23,626	6,497	7,195	22,928	835	10,340	13,423
Capital assets being depreciated:							
Buildings and structures	22,485	2,794	5	25,274	8,192		33,466
Bridges and tunnels	4,168	253	-	4,421			4,421
Equipment:							
Passenger cars and locomotives	14,324	197	42	14,479			14,479
Buses	3,869	456	336	3,989	58	78	3,969
Infrastructure	30,520	2,134	14	32,640	2,055	-	34,695
Other	29,060	1,332	6	30,386	32		30,418
Total capital assets being depreciated	104,426	7,166	403	111,189	10,337	78	121,448
Less accumulated depreciation:							
Buildings and structures	9,259	632	2	9,889	171		10,060
Bridges and tunnels	740	43	-	783	11		794
Equipment:							
Passenger cars and locomotives	8,144	403	42	8,505	96	-	8,601
Buses	2,316	257	336	2,237	69	78	2,228
Infrastructure	12,598	981	12	13,567	240	-	13,807
Other	11,316	977	5	12,288	253	-	12,541
Total accumulated depreciation	44,373	3,293	397	47,269	840	78	48,031
Total capital assets being depreciated - net	60,053	3,873	6	63,920	9,497	-	73,417
Capital assets - net	\$ 83,679	\$ 10,370	\$ 7,201	\$ 86,848	\$ 10,332	\$ 10,340	\$ 86,840

	Balance December 31, 2021	Additions / Reclassifications	Deletions / Reclassifications	Balance December 31, 2022	Additions / Reclassifications	Deletions / Reclassifications	Balance March 31, 2023
(Restated)*							
Right of Use Assets being amortized:							
Leased buildings and structures	\$ 745	\$ -	\$ -	\$ 745	\$ 1		\$ 746
Leased equipment and vehicles	36	5	-	41			41
Leased other	4	-	-	4			4
Total Right of Use Assets being amortized	785	5	-	790	1	-	791
Less accumulated amortization:							
Leased buildings and structures	52	53	-	105	13	-	118
Leased equipment and vehicles	12	14	-	26	3	-	29
Leased other	-	1	-	1	-	-	1
Total accumulated amortization	64	68	-	132	16	-	148
Right of Use Assets being amortized – net	721	(63)	-	658	(15)	-	643
Total Capital Assets, including Right of Use Assets, net of depreciation and amortization	\$ 84,400	\$ 10,307	\$ 7,201	\$ 87,506	\$ 10,317	\$ 10,340	\$ 87,483

*Restated due to the adoption of GASB 87, Leases. Refer to 2022 MTA Consolidated Financial Statements.

In 2021, MTA Long Island Rail Road obtained legal title to a newly constructed rail yard on its property in accordance to an agreement with the developer. The agreement provides for the developer to construct a rail yard for MTA Long Island Rail Road to store and service trains in a new location in exchange for development rights. A gain of \$266.6 for the fair market value of the assets were recognized at the date of conveyance.

In December 2021, MTA obtained legal title to the wireless telecommunications equipment installed on its property according to the network license agreement entered into with the licensee. The license agreement provides for the licensee to construct, operate, and maintain the wireless network. This asset was transferred by MTA to MTA Long Island Rail Road as a non-cash capital contribution recorded at \$27.3 representing the fair market value at the date of conveyance. In addition, in December 2021, MTA obtained legal title to work in process wireless telecommunications equipment to be installed on its property according to the network license agreement entered into with the licensee. The work in process assets were transferred by MTA to MTA Long Island Rail Road as a non-cash capital contribution recorded at \$33.2 representing the fair market value at the date of conveyance.

In December 2021, MTA obtained legal title to the wireless telecommunications equipment installed on the MTA New York City Transit Authority's property according to the network license agreement that MTA entered into with the licensee. The license agreement provides for the licensee to construct, operate, and maintain the wireless network. This asset was transferred by MTA to the MTA New York City Transit Authority as a non-cash capital contribution recorded at \$73.3 representing the fair market value at the date of conveyance.

Capital assets acquired prior to April 1982 for MTA New York City Transit were funded primarily by New York City with capital grants made available to MTA New York City Transit. New York City 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 New York City in the event the MTA determines such property is unnecessary for its corporate purpose. With respect to MTA Metro-North Rail Road, 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 various trust accounts marketable securities and cash pledged by third-party contractors. At March 31, 2023 and December 31, 2022, these retainage accounts, which are not included in these financial statements, totaled \$139.2 and \$155.0, respectively, including securities with a fair value of \$124.8 and \$131.1, respectively.

As of March 31, 2023, \$65.1 billion is unexpended from the MTA's Capital Program (2005-2024) and \$23.0 billion has been committed.

As of December 31, 2022, \$66.6 billion is unexpended from the MTA's Capital Program (2005-2024) and \$22.9 billion has been committed.

7. LONG-TERM DEBT

(In millions)	Original Issuance	December 31, 2022	Issued	Retired	March 31, 2023
MTA:					
Transportation Revenue Bonds					
1.43%–5.15% due through 2057	\$ 44,080	\$ 21,283	\$ -	\$ 533	\$ 20,750
Bond Anticipation Notes					
1.33% due through 2023	23,635	3,707	-	800	2,907
Dedicated Tax Fund Bonds					
1.86%–5.00% due through 2057	11,527	4,788	-	496	4,292
	<u>79,242</u>	<u>29,778</u>	<u>-</u>	<u>1,829</u>	<u>27,949</u>
Net unamortized bond premium	-	845	-	119	726
	<u>79,242</u>	<u>30,623</u>	<u>-</u>	<u>1,948</u>	<u>28,675</u>
TBTA:					
General Revenue Bonds					
1.00%–5.5% due through 2057	11,142	8,320	828	743	8,405
Payroll Mobility Tax Senior Lien Obligations					
2%-5.5% due through 2057	3,229	8,159	765	-	8,924
Subordinate Revenue Bonds					
1.00%–5.5% due through 2032	1,832	719	-	368	351
Sales Tax Revenue Bonds					
3.73%-5.5% due through 2057	1,954	700	1,254	-	1,954
Bond Anticipation Notes					
5.0% due through 2025	193	193	-	-	193
	<u>18,350</u>	<u>18,091</u>	<u>2,847</u>	<u>1,111</u>	<u>19,827</u>
Net unamortized bond premium	-	1,689	162	109	1,742
	<u>18,350</u>	<u>19,780</u>	<u>3,009</u>	<u>1,220</u>	<u>21,569</u>
MTA Hudson Rail Yards Trust:					
MTA Hudson Rail Yards Trust Obligations					
1.88%–2.65% due through 2056	1,220	804	-	-	804
Net unamortized bond premium	-	86	-	1	85
	<u>1,220</u>	<u>890</u>	<u>-</u>	<u>1</u>	<u>889</u>
Total	<u>\$ 98,812</u>	<u>\$ 51,293</u>	<u>\$ 3,009</u>	<u>\$ 3,169</u>	<u>\$ 51,133</u>
Current portion		<u>\$ 4,800</u>			<u>\$ 3,980</u>
Long-term portion		<u>\$ 46,493</u>			<u>\$ 47,153</u>

(In millions)	Original Issuance	December 31, 2021	Issued	Retired	December 31, 2022
MTA:					
Transportation Revenue Bonds					
1.43%-5.15% due through 2057	\$ 44,080	\$ 23,950	\$ 311	\$ 2,978	\$ 21,283
Bond Anticipation Notes					
1.33% due through 2023	23,635	13,004	-	9,297	3,707
Dedicated Tax Fund Bonds					
1.86%-5.00% due through 2057	11,527	4,681	436	329	4,788
	<u>79,242</u>	<u>41,635</u>	<u>747</u>	<u>12,604</u>	<u>29,778</u>
Net unamortized bond premium	-	1,158	74	387	845
	<u>79,242</u>	<u>42,793</u>	<u>821</u>	<u>12,991</u>	<u>30,623</u>
TBTA:					
General Revenue Bonds					
1%-5.5% due through 2057	10,314	8,165	400	245	8,320
Payroll Mobility Tax Senior Lien Obligations					
2%-5.5% due through 2057	2,464	2,464	5,704	9	8,159
Subordinate Revenue Bonds					
1%-5.5% due through 2032	1,832	795	-	76	719
Sales Tax Revenue Bonds					
3.73%-5.5% due through 2057	700	-	700	-	700
Bond Anticipation Notes					
5.0% due through 2025	193	193	-	-	193
	<u>15,503</u>	<u>11,617</u>	<u>6,804</u>	<u>330</u>	<u>18,091</u>
Net unamortized bond premium	-	1,173	673	157	1,689
	<u>15,503</u>	<u>12,790</u>	<u>7,477</u>	<u>487</u>	<u>19,780</u>
MTA Hudson Rail Yards Trust:					
MTA Hudson Rail Yards Trust Obligations					
1.88%-2.65% due through 2056	1,220	830	-	26	804
Net unamortized bond premium	-	87	-	1	86
	<u>1,220</u>	<u>917</u>	<u>-</u>	<u>27</u>	<u>890</u>
Total	<u>\$ 95,965</u>	<u>\$ 56,500</u>	<u>\$ 8,298</u>	<u>\$ 13,505</u>	<u>\$ 51,293</u>
Current portion		<u>\$ 8,069</u>			<u>\$ 4,800</u>
Long-term portion		<u>\$ 48,431</u>			<u>\$ 46,493</u>

MTA Transportation Revenue Bonds — Prior to 2023, MTA issued sixty-nine 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 \$36,956. 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 March 16, 2023, MTA purchased \$1,032.146 for three portfolios of State and Local Governments Securities (SLGS) sufficient to pre-pay all or a portion of interest due on certain MTA Dedicated Tax Bond Funds, MTA Transportation Revenue Bonds, and TBTA Payroll Mobility Tax Senior Lien Bonds through November 15, 2026. The funds were deposited in three escrow accounts. The establishment of the Escrow Fund is not intended to constitute an economic or legal defeasance of the Bonds and the MTA and TBTA retains the ability, in its sole discretion, to withdraw in whole or in part the amounts deposited in the Escrow Fund at any time should such amounts be needed for any other authorized purpose.

The breakdown of the portfolios were allocated as follows: Dedicated Tax Bond funds, Series 2010A-2, together with the Series 2009C Bonds, \$181.749; MTA Transportation Revenue Bonds, Series 2020E Bonds, together with the Series 2006B, the Series 2010A, Series 2010B-1, Series 2010C-1, Series 2010E and the Series 2020D Bonds, \$582.681; TBTA Payroll Mobility Tax Senior Lien Bonds Subseries 2022D-2 Bonds and, together with the Series 2022C and the Series 2022D-1a Bonds, \$267.716.

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.

MTA Revenue Anticipation Notes — From time to time, MTA issues Revenue Anticipation Notes under its Revolving Credit Agreements with JPMorgan Chase Bank National Association and Bank of America National Association.

MTA State Service Contract Bonds — Prior to 2023, 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 2023, MTA issued twenty-three 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 \$10,147. 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 MTTF 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.

On March 16, 2023, MTA purchased \$1,032.146 for three portfolios of State and Local Governments Securities (SLGS) sufficient to pre-pay all or a portion of interest due on certain MTA Dedicated Tax Bond Funds, MTA Transportation Revenue Bonds, and TBTA Payroll Mobility Tax Senior Lien Bonds through November 15, 2026. The funds were deposited in three escrow accounts. The establishment of the Escrow Fund is not intended to constitute an economic or legal defeasance of the Bonds and the MTA and TBTA retains the ability, in its sole discretion, to withdraw in whole or in part the amounts deposited in the Escrow Fund at any time should such amounts be needed for any other authorized purpose.

The breakdown of the portfolios were allocated as follows: Dedicated Tax Bond funds, Series 2010A-2, together with the Series 2009C Bonds, \$181.749; MTA Transportation Revenue Bonds, Series 2020E Bonds, together with the Series 2006B, the Series 2010A, Series 2010B-1, Series 2010C-1, Series 2010E and the Series 2020D Bonds, \$582.681; TBTA Payroll Mobility Tax Senior Lien Bonds Subseries 2022D-2 Bonds and, together with the Series 2022C and the Series 2022D-1a Bonds, \$267.716.

MTA Certificates of Participation — Prior to 2023, 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 Construction and Development, 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 2023, MTA Bridges and Tunnels issued thirty-six 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 \$14,574. 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 February 14, 2023, MTA issued \$828.225 TBTA General Revenue Refunding Bonds, Series 2023A. Proceeds from the transaction were used to refund \$930.530 of existing bonds as follows:

- \$60.715 TBTA General Revenue Bonds, Subseries 2009A-1;
- \$270.025 TBTA General Revenue Refunding Bonds, Series 2012B;
- \$113.340 TBTA General Revenue Refunding Bonds, Series 2012A;
- \$118.035 TBTA General Revenue Bonds, Series 2013C; and
- \$368.415 TBTA Subordinate Revenue Refunding Bonds, Series 2013A.

The refunding resulted in net present value savings of \$104.994 or 11.28% of the par amount of the refunded bonds. The Series 2023A bonds were priced as fixed rate tax-exempt bonds with a final maturity of November 15, 2039.

MTA Bridges and Tunnels Subordinate Revenue Bonds — Prior to 2023, 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 \$4,066. 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 Bridges and Tunnels Second Subordinate Bond Anticipation Notes — On June 10, 2021, MTA issued \$192.835 of Triborough Bridge and Tunnel Authority Second Subordinate Bond Anticipation Notes, Series 2021A. Proceeds from the transaction will be used to finance costs related to the design, build, and installation of infrastructure, tolling systems and allowable implementation expenses necessary for the operation of the Central Business District Tolling Program. The Series 2021A notes were issued as fixed rate tax-exempt notes with a final maturity of November 1, 2025.

MTA Bridges and Tunnels Payroll Mobility Tax Senior Lien Bonds — Prior to 2023, MTA issued seven Series of Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Bonds secured under its 2021 TBTA PMT Resolution adopted on March 17, 2021 in the aggregate principal amount of \$3,886. Each of the TBTA PMT Senior Lien Obligations and any MTA PMT Senior Lien Obligations issued pursuant to the MTA PMT Resolution, adopted by the Board on November 18, 2020, are secured by a first lien on, and parity pledge of, the PMT Receipts, consisting of two distinct revenue streams: Mobility Tax Receipts and MTA Aid Trust Account Receipts (also referred to as "ATA Receipts"). MTA and MTA Bridges and Tunnels have entered into the Financing Agreement, dated as of April 9, 2021, to provide the mechanism by which MTA and MTA Bridges and Tunnels share PMT Receipts on a parity basis (i) first with respect to the PMT Senior Lien and then (ii) with respect to PMT Second Lien. Under State law, the MTA PMT Senior Lien Indebtedness and the MTA Bridges and Tunnels PMT Senior Lien Indebtedness are special obligations of MTA and MTA Bridges and Tunnels, respectively, which means that they are payable solely from a gross lien on the money pledged for payment under the MTA Payroll Mobility Tax Obligation Resolution and the MTA Bridges and Tunnels Payroll Mobility Tax Obligation Resolution. Such bonds are not general obligations of MTA or MTA Bridges and Tunnels.

On January 12, 2023, MTA issued \$764.950 Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Refunding Green Bonds, Series 2023A. Proceeds from the transaction were used to refund the following:

- \$33.710 MTA Transportation Revenue Variable Rate Refunding Bonds, Subseries 2002D-1
- \$47.350 MTA Transportation Revenue Bonds, Series 2012B;
- \$18.415 MTA Transportation Revenue Bonds, Series 2012C;
- \$9.660 MTA Transportation Revenue Refunding Bonds, Series 2012D;
- \$74.010 MTA Transportation Revenue Bonds, Series 2012E;
- \$118.940 MTA Transportation Revenue Refunding Bonds, Series 2012F;
- \$9.920 MTA Transportation Revenue Bonds, Series 2012H; and
- \$452.945 Dedicated Tax Fund Refunding Bonds, Series 2012A.

The refunding resulted in net present value savings of \$61.083 or 7.37% of the par amount of the refunded bonds. The Series 2023A bonds were priced as fixed rate tax-exempt bonds with a final maturity of November 15, 2037.

On March 16, 2023, MTA purchased \$1,032.146 for three portfolios of State and Local Governments Securities (SLGS) sufficient to pre-pay all or a portion of interest due on certain MTA Dedicated Tax Bond Funds, MTA Transportation Revenue Bonds, and TBTA Payroll Mobility Tax Senior Lien Bonds through November 15, 2026. The funds were deposited in three escrow accounts. The establishment of the Escrow Fund is not intended to constitute an economic or legal defeasance of the Bonds and the MTA and TBTA retains the ability, in its sole discretion, to withdraw in whole or in part the amounts deposited in the Escrow Fund at any time should such amounts be needed for any other authorized purpose.

The breakdown of the portfolios were allocated as follows: Dedicated Tax Bond funds, Series 2010A-2, together with the Series 2009C Bonds, \$181.749; MTA Transportation Revenue Bonds, Series 2020E Bonds, together with the Series 2006B, the Series 2010A, Series 2010B-1, Series 2010C-1, Series 2010E and the Series 2020D Bonds, \$582.681; TBTA Payroll Mobility Tax Senior Lien Bonds Subseries 2022D-2 Bonds and, together with the Series 2022C and the Series 2022D-1a Bonds, \$267.716.

MTA Bridges and Tunnels Sales Tax Revenue Bonds — Prior to 2023, MTA issued one Series of Triborough Bridge and Tunnel Authority Sales Tax Revenue Bonds (TBTA Capital Lockbox – City Sales Tax) secured under its 2021 TBTA Special Obligation Resolution Authorizing Sales Tax Revenue Obligation (TBTA Capital Lockbox-City Sales Tax) adopted on September 15, 2021 in the aggregate principal amount of \$700. The Sales Tax Revenue Bonds are MTA Bridges and Tunnels' special, not general, obligations, payable solely from monies in the Obligations Trust Estate pledged by the TBTA

Sales Tax Resolution derived primarily from the Sales Tax Receipts paid from the Central Business District Tolling Capital Lockbox Fund and deposited into the Revenue Fund.

On March 14, 2023, MTA issued \$1,254 billion Triborough Bridge and Tunnel Authority Sales Tax Revenue Bonds, Series 2023A (“the Series 2023A Bonds”). Proceeds from the transaction were used (i) finance approved transit and commuter projects included in the 2020-2024 Capital Program, (ii) finance a portion of the capital costs of the Central Business District Tolling Program, and (iii) pay certain financing, legal and miscellaneous expenses.

MTA Payroll Mobility Tax Bond Anticipation Notes - On December 17, 2020, MTA issued \$2,907.280 of MTA Payroll Mobility Tax Bond Anticipation Notes, Series 2020A pursuant to a Note Purchase Agreement, between MTA and Municipal Liquidity Facility LLC. Proceeds from the transaction were used to finance COVID-19 Lost Revenues and Increased Costs of the MTA agencies and TBTA. The Series 2020A notes were issued as fixed-rate tax-exempt notes with a final maturity of December 15, 2023.

On September 1, 2022, MTA issued \$951.370 Triborough Bridge and Tunnel Authority Payroll Mobility Tax Bond Anticipation Notes, Series 2022A. Proceeds from the transaction were used to refinance outstanding MTA Transportation Revenue Bond Anticipation Notes, Series 2019D-1 as they were set to mature on September 1, 2022. The Series 2022A Notes were issued as fixed-rate tax-exempt notes with a final maturity of August 15, 2024.

On December 15, 2022, MTA issued \$766.540 Triborough Bridge and Tunnel Authority Payroll Mobility Tax Bond Anticipation Notes, Series 2022B. Proceeds from the transaction were used to refinance outstanding MTA Transportation Revenue Bond Anticipation Notes, Series 2020A-1 which were maturing on February 1, 2023. The Series 2022B Notes were issued as fixed-rate tax-exempt notes with a final maturity of December 16, 2024.

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 the regularly scheduled rent, options to purchase the fee interest and other related payments to be paid by the tenants of certain parcels being developed on and above the Eastern Rail Yard and Western Rail Yard portions of the West Side Yards (“Hudson Rail Yards”) currently operated by The Long Island Rail Road Company (“LIRR”).

Refer to Note 9 for further information on Financed Purchases.

MTA Grant Anticipation Notes - On December 9, 2021, MTA issued \$4,000.000 of Grant Anticipation Notes, Series 2021A. Proceeds from the transaction were used to reimburse MTA for certain operating expenses and lost revenues since January 20, 2020, due to the COVID-19 public health emergency. The Series 2021A Notes were priced as fixed rate federally taxable notes with a final maturity of November 15, 2022.

On February 10, 2022, the Grant Anticipation Notes, Series 2021A were called for redemption prior to maturity.

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 \$90,100 compared with issuances totaling approximately \$44,825. 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 March 31, 2023 and December 31, 2022, 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)	March 31, 2023	December 31, 2022
MTA Transit and Commuter Facilities:		
Transit Facilities Revenue Bonds	\$ 79	\$ 79
Commuter Facilities Revenue Bonds	76	76
MTA Bridges and Tunnels:		
General Purpose Revenue Bonds	122	160
Special Obligation Subordinate Bonds	26	43
Total	\$ 303	\$ 358

For the three months ended March 31, 2023, MTA refunding transactions decreased aggregate debt service payments by \$201 and provided an economic gain of \$166. For the three months ended March 31, 2022, MTA refunding transactions increased aggregate debt service payments by \$0 and provided an economic loss of \$0. Details of bond refunding savings for the period ended March 31, 2023 and for the year ended December 31, 2022 are as follows (in millions):

Refunding Bonds Issued in 2023	Series	Date issued	Par value Refunded	Debt Service Savings (Increase)	Net Present Value of Savings
Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Refunding Green Bonds	2023A	1/12/2023	\$ 1,029	\$ 75	\$ 61
Triborough Bridge and Tunnel Authority General Revenue Refunding Bonds	2023A	2/14/2023	924	126	105
Total Bond Refunding Savings			\$ 1,953	\$ 201	\$ 166

Refunding Bonds Issued in 2022	Series	Date issued	Par value Refunded	Debt Service Savings (Increase)
Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Refunding Bonds	2022B	8/18/2022	\$ 1,119	\$ 174
Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Green Bonds	2022D	9/15/2022	273	27
Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Green Bonds	2022E	11/1/2022	742	391
Total Bond Refunding Savings			\$ 2,134	\$ 592

Unamortized losses related to bond refundings were as follows:

	December 31, 2021	(Gain)/loss on refunding	2022 amortization	December 31, 2022	(Gain)/loss on refunding	Current year amortization	March 31, 2023
MTA:							
Transportation Revenue Bonds	\$ 387	\$ (109)	\$ (55)	\$ 223	\$ (37)	\$ (5)	\$ 181
State Service Contract Bonds	(12)	-	-	(12)	-	-	(12)
Dedicated Tax Fund Bonds	189	(2)	(16)	171	(35)	(3)	133
	564	(111)	(71)	382	(72)	(8)	302
TBTA:							
General Revenue Bonds	154	-	(16)	138	-	(46)	92
Subordinate Revenue Bonds	22	-	(2)	20	-	(25)	(5)
	176	-	(18)	158	-	(71)	87
Total	\$ 740	\$ (111)	\$ (89)	\$ 540	\$ (72)	\$ (79)	\$ 389

Debt Service Payments — Future principal and interest debt service payments at March 31, 2023 are as follows:

	MTA		MTA BRIDGES AND TUNNELS		Debt Service	
	Principal	Interest	Principal	Interest	Principal	Interest
2023	\$ 3,620	\$ 1,287	\$ 360	\$ 837	\$ 3,980	\$ 2,124
2024	\$ 728	\$ 1,077	\$ 2,226	\$ 831	\$ 2,954	\$ 1,908
2025	\$ 675	\$ 991	\$ 511	\$ 738	\$ 1,186	\$ 1,729
2026	\$ 782	\$ 935	\$ 736	\$ 708	\$ 1,518	\$ 1,643
2027	\$ 773	\$ 932	\$ 930	\$ 684	\$ 1,703	\$ 1,616
2028-2032	\$ 5,196	\$ 3,928	\$ 3,838	\$ 3,014	\$ 9,034	\$ 6,942
2033-2037	\$ 4,843	\$ 3,121	\$ 1,839	\$ 2,550	\$ 6,682	\$ 5,671
2038-2042	\$ 4,478	\$ 2,163	\$ 2,065	\$ 2,059	\$ 6,543	\$ 4,222
2043-2047	\$ 3,628	\$ 1,212	\$ 2,629	\$ 1,487	\$ 6,257	\$ 2,699
2048-2052	\$ 2,967	\$ 470	\$ 2,913	\$ 808	\$ 5,880	\$ 1,278
2053-2057	\$ 1,062	\$ 79	\$ 1,264	\$ 302	\$ 2,326	\$ 381
Thereafter	-	-	517	71	517	71
Total	\$ 28,752	\$ 16,195	\$ 19,828	\$ 14,089	\$ 48,580	\$ 30,284

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 General Revenue Refunding Bonds, Series 2001C* — 4.00% per annum.
- *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 2018E — 4.00% per annum.

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 Loans Payable debt service requirements at March 31, 2023 are as follows (in millions):

Year	Principal	Interest	Total
2023	\$ 11	\$ 3	\$ 14
2024	10	2	12
2025	10	2	12
2026	8	2	10
2027	9	1	10
2028-2032	27	3	30
2033-2037	4	1	5
2038-2042	1	0	1
Total	<u>\$ 80</u>	<u>\$ 14</u>	<u>\$ 94</u>
Current portion	\$ 11		
Long-term portion	69		
Total NYPA Loans Payable	<u>\$ 80</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 March 31, 2023 and December 31, 2022.

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	11/1/2024
Transportation Revenue	2005D-2	Y	BMO Harris Bank, N.A.	LOC	10/31/2025
Transportation Revenue	2005E-1	Y	Barclays Bank	LOC	8/18/2025
Transportation Revenue	2005E-2	Y	Bank of America, N.A.	LOC	12/8/2023
Transportation Revenue	2012A-2	N	Bank of Montreal	LOC	6/2/2025
Transportation Revenue	2012G-1	Y	Barclays Bank	LOC	10/31/2023
Transportation Revenue	2012G-2	Y	TD Bank, N.A.	LOC	11/1/2024
Transportation Revenue	2012G-4	Y	BMO Harris Bank, N.A.	LOC	10/31/2025
Transportation Revenue	2015E-1	N	Barclays Bank	LOC	8/18/2025
Transportation Revenue	2015E-3	N	Bank of America, N.A.	LOC	9/2/2025
Transportation Revenue	2020B-1	N	PNC Bank	LOC	3/22/2024
Transportation Revenue	2020B-2	N	PNC Bank	LOC	3/22/2024
Dedicated Tax Fund	2008A-1	Y	TD Bank, N.A.	LOC	6/13/2025
Dedicated Tax Fund	2008A-2a	Y	TD Bank, N.A.	LOC	11/1/2026
Dedicated Tax Fund	2008A-2b	Y	PNC Bank	LOC	10/24/2025
Dedicated Tax Fund	2008B-3c	N	PNC Bank	LOC	10/24/2025
MTA Bridges and Tunnels General Revenue	2001C	Y	State Street	LOC	6/26/2023
MTA Bridges and Tunnels General Revenue	2003B-1	N	Bank of America, N.A.	LOC	1/17/2025
MTA Bridges and Tunnels General Revenue	2005A	Y	Barclays Bank	LOC	1/24/2024
MTA Bridges and Tunnels General Revenue	2005B-2	Y	State Street	LOC	1/21/2026
MTA Bridges and Tunnels General Revenue	2005B-3	Y	State Street	LOC	6/26/2023
MTA Bridges and Tunnels General Revenue	2005B-4c	Y	U.S. Bank National Association	LOC	5/23/2025
MTA Bridges and Tunnels General Revenue	2018E	N	Bank of America, N.A.	LOC	12/5/2025

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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 March 31, 2023 and December 31, 2022, classified by type, and the changes in fair value of such derivative instruments from the year ended December 31, 2022 are as follows (in \$ millions):

Derivative Instruments - Summary Information as of March 31, 2023

Bond Resolution Credit Cashflow Hedges	Underlying Bond Series	Type of Derivative	Cash Flow or		Effective Methodology	Trade/Hedge Association Date	Notional Amount	Fair Value
			Fair Value Hedge	Fair Value Hedge				
MTA Bridges and Tunnels Senior Revenue Bonds	2018E & 2003B (Citi 2005B)	Libor Fixed Payer	Cash Flow		Synthetic Instrument/ Dollar Offset	6/2/2005	\$ 185,000	\$ (9,227)
MTA Bridges and Tunnels Senior Revenue Bonds	2005B-2,3,4	Libor Fixed Payer	Cash Flow		Synthetic Instrument	6/2/2005	555,000	(27,682)
MTA Bridges and Tunnels Senior Revenue Bonds	2005A (COPS 2004A)	Libor Fixed Payer	Cash Flow		Synthetic Instrument	4/1/2016	15,515	(0,522)
MTA Bridges and Tunnels Senior Revenue Bonds	2001C (COPS 2004A)	Libor Fixed Payer	Cash Flow		Synthetic Instrument	12/5/2016	7,000	(0,259)
MTA Dedicated Tax Fund Bonds	2008A	Libor Fixed Payer	Cash Flow		Synthetic Instrument	3/8/2005	257,495	(11,048)
MTA Transportation Revenue Bonds	2002D-2	Libor Fixed Payer	Cash Flow		Synthetic Instrument	7/11/2002	200,000	(31,110)
MTA Transportation Revenue Bonds	2005D & 2005E	Libor Fixed Payer	Cash Flow		Synthetic Instrument	9/10/2004	300,300	(22,692)
MTA Transportation Revenue Bonds	2012G	Libor Fixed Payer	Cash Flow		Synthetic Instrument	12/12/2007	355,075	(33,440)
MTA Transportation Revenue Bonds	2002G-1 (COPS 2004A)	Libor Fixed Payer	Cash Flow		Synthetic Instrument	4/1/2016	46,805	(0,448)
MTA Transportation Revenue Bonds	2022E	Libor Fixed Payer	Cash Flow		Regression	4/1/2016	88,330	(4,096)
						Total	\$ 2,010,520	\$ (140,524)

Derivative Instruments - Summary Information as of December 31, 2022

Bond Resolution Credit Cashflow Hedges	Underlying Bond Series	Type of Derivative	Cash Flow or		Effective Methodology	Trade/Hedge Association Date	Notional Amount	Fair Value
			Fair Value Hedge	Fair Value Hedge				
MTA Bridges and Tunnels Senior Revenue Bonds	2018E & 2003B (Citi 2005B)	Libor Fixed Payer	Cash Flow		Synthetic Instrument/ Dollar Offset	6/2/2005	\$ 186,100	\$ (6,851)
MTA Bridges and Tunnels Senior Revenue Bonds	2005B-2,3,4	Libor Fixed Payer	Cash Flow		Synthetic Instrument	6/2/2005	558,300	(20,553)
MTA Bridges and Tunnels Senior Revenue Bonds	2005A (COPS 2004A)	Libor Fixed Payer	Cash Flow		Synthetic Instrument	4/1/2016	17,690	(0,459)
MTA Bridges and Tunnels Senior Revenue Bonds	2001C (COPS 2004A)	Libor Fixed Payer	Cash Flow		Synthetic Instrument	12/5/2016	8,000	(0,226)
MTA Dedicated Tax Fund Bonds	2008A	Libor Fixed Payer	Cash Flow		Synthetic Instrument	3/8/2005	257,495	(8,948)
MTA Transportation Revenue Bonds	2002D-2	Libor Fixed Payer	Cash Flow		Synthetic Instrument	7/11/2002	200,000	(26,627)
MTA Transportation Revenue Bonds	2005D & 2005E	Libor Fixed Payer	Cash Flow		Synthetic Instrument	9/10/2004	300,300	(18,473)
MTA Transportation Revenue Bonds	2012G	Libor Fixed Payer	Cash Flow		Synthetic Instrument	12/12/2007	355,075	(26,709)
MTA Transportation Revenue Bonds	2002G-1 (COPS 2004A)	Libor Fixed Payer	Cash Flow		Synthetic Instrument	4/1/2016	64,270	(0,448)
MTA Transportation Revenue Bonds	2022E	Libor Fixed Payer	Cash Flow		Synthetic Instrument	4/1/2016	89,765	(3,551)
						Total	\$ 2,036,995	\$ (112,845)

	Changes In Fair Value		Fair Value at March 31, 2023		Notional (in millions)
	Classification	Amount (in millions)	Classification	Amount (in millions)	
Government activities					
Cash Flow hedges:					
Pay-fixed interest rate swaps	Deferred outflow of resources	\$(27.679)	Debt	\$(140.524)	\$2,010.520

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 March 31, 2023).

Metropolitan Transportation Authority						
Related Bonds	Notional Amount as of 3/31/23	Effective Date	Maturity Date	Terms	Counterparty and Ratings(S&P / Moody's / Fitch)	Fair Value as of 3/31/23
TRB 2002D-2	\$ 200.000	01/01/07	11/01/32	Pay 4.45%; receive 69% 1M LIBOR	JPMorgan Chase Bank, NA (A+ / Aa2 / AA)	\$ (31.110)
TRB 2005D & 2005E	225.225	11/02/05	11/01/35	Pay 3.561%; receive 67% 1M LIBOR	UBS AG (A+ / Aa3 / AA-)	(17.018)
TRB 2005E	75.075	11/02/05	11/01/35	Pay 3.561%; receive 67% 1M LIBOR	AIG Financial Products ⁽¹⁾ (BBB+ / Baa2 / BBB+)	(5.672)
TRB 2012G	355.075	11/15/12	11/01/32	Pay 3.563%; receive 67% 1M LIBOR	JPMorgan Chase Bank, NA (A+ / Aa2 / AA)	(33.440)
DTF 2008A	257.495	03/24/05	11/01/31	Pay 3.3156%; receive 67% 1M LIBOR	Bank of New York Mellon (AA- / Aa2 / AA)	(11.047)
Total	\$ 1,112.870					\$ (98.287)

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

MTA Bridges and Tunnels						
Related Bonds	Notional Amount as of 3/31/23	Effective Date	Maturity Date	Terms	Counterparty and Ratings (S&P / Moody's / Fitch)	Fair Value as of 3/31/23
TBTA 2018E & 2003B ⁴	\$ 185,000.000	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	Citibank, N.A. (A+ / Aa3 / A+)	\$ (9.228)
TBTA 2005B-2	185,000.000	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	JPMorgan Chase Bank, NA (A+ / Aa2 / AA)	(9.227)
TBTA 2005B-3	185,000.000	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	BNP Paribas North America (A+ / Aa3 / AA-)	(9.227)
TBTA 2005B-4	185,000.000	07/07/05	01/01/32	Pay 3.076%; receive 67% 1M LIBOR	UBS AG (A+ / Aa3 / AA-)	(9.227)
TRB 2002G-1 & 2011B TBTA 2005A & 2001C ²	78,825.000 ³	04/01/16	01/01/30	Pay 3.52%; receive 67% 1M LIBOR	U.S. Bank N.A. (AA- / A1 / AA-)	(2.661) ³
TRB 2002G-1 & 2011B TBTA 2005A & 2001C ²	78,825.000 ³	04/01/16	01/01/30	Pay 3.52%; receive 67% 1M LIBOR	Wells Fargo Bank, N.A. (A+ / Aa2 / AA-)	(2.663) ³
Total	\$ 897,650.000					\$ (42.233)

1 Guarantor: BNP Paribas.

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.

4 On October 27, 2021 the 2002F bonds were changed to fixed-rate mode and a portion of the Citi swap was reassigned to the 2018E bonds.

LIBOR: London Interbank Offered Rate

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 March 31, 2023, 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 March 31, 2023, 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)	% of Total Notional Amount
JPMorgan Chase Bank, NA	A+	Aa2	AA	\$740,075	36.81%
UBS AG	A+	Aa3	AA-	410,225	20.40
The Bank of New York Mellon	AA-	Aa2	AA	257,495	12.81
Citibank, N.A.	A+	Aa3	A+	185,000	9.20
BNP Paribas US Wholesale Holdings, Corp.	A+	Aa3	AA-	185,000	9.20
U.S. Bank National Association	AA-	A1	AA-	78,825	3.92
Wells Fargo Bank, N.A.	A+	Aa2	AA-	78,825	3.92
AIG Financial Products Corp.	BBB+	Baa2	BBB+	75,075	3.74
Total				\$2,010,520	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 US Wholesale Holdings, Corp.; 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
U.S. Bank National Association; Wells Fargo Bank, N.A.	Below Baa2 (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 2018E (swap with Citibank, N.A.)	November 15, 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, 2041	January 1, 2030 (U.S. Bank/Wells Fargo) January 1, 2032 (Citibank)
MTA Transportation Revenue Variable Rate Bonds, Series 2022E (swaps with U.S. Bank/Wells Fargo)	November 1, 2032	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 March 31, 2023, the aggregate mid-market valuation of the MTA's swaps subject to collateral posting agreements was \$81.6; as of this date, the MTA was not subject to collateral posting based on its credit ratings (see further details below).

As of March 31, 2023, the aggregate mid-market valuation of MTA Bridges and Tunnels' swaps subject to collateral posting agreements was \$32.4; 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

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 US Wholesale Holdings, Corp.; 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)
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 March 31, 2023	Variable-Rate Bonds		Net Swap Payments	Total
	Principal	Interest		
2023	65.7	40.1	(4.1)	101.7
2024	68.2	37.5	(3.8)	101.9
2025	70.8	34.8	(3.4)	102.2
2026	63.6	32.0	(3.1)	92.5
2027	55.9	29.6	(2.8)	82.7
2028-2032	827.6	454.7	(8.3)	1,274.0
2033-2037	122.7	27.5	(1.6)	148.6
2038-2041	81.2	7.7	(0.1)	88.8

MTA Bridges and Tunnels (in millions)				
Period Ended March 31, 2023	Variable-Rate Bonds		Net Swap Payments	Total
	Principal	Interest		
2023	28.6	33.8	(6.8)	55.6
2024	57.2	31.5	(6.4)	82.3
2025	30.4	30.3	(6.4)	54.3
2026	31.5	29.1	(6.3)	54.3
2027	32.9	27.8	(6.5)	54.2
2028-2032	681.8	68.5	(16.5)	733.8
2033-2037	12.4	2.5	-	14.9
2038-2041	-	0.5	-	0.5

8. LEASE TRANSACTIONS

MTA entered into various lease agreements that convey control of the right to use other entities' nonfinancial assets. Lease receivables and lease liabilities are measured at the present value of payments expected to be received during the lease term, using MTA's incremental borrowing rate at the time of valuation ranging from 0.72% to 5.64% if an applicable stated or implicit rate is not available.

The initial measurement of MTA's leased asset and lease liability for those agreements was as of January 1, 2021. The lease liability was reduced as payments were made, and an outflow of resources for interest on the liability was recognized. The lease asset is amortized on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset.

For lessor leases, a lease receivable and deferred inflow of resources were measured as of January 1, 2021. Interest revenues are recognized on the lease receivable and an inflow of resources from the deferred inflow of resources are recognized on a straight-line basis over the term of the lease.

As Lessor

MTA leases its land, buildings, station space, equipment, and right of way to other entities. These leases have terms between 1 year to 90 years, with payments required monthly, quarterly, semi-annually, or annually. In addition, MTA also receives payments for variable leases and operating expenses associated with spaces that are not included in the measurement of lease receivable.

The total amount of inflows of resources recognized for the years ended March 31, 2023 and December 31, 2022 is presented below (in thousands):

	<u>March 31, 2023</u>	<u>December 31, 2022</u>
Lease Revenue	\$9,122	\$47,079
Interest Revenue	\$1,877	8,652
Other Variable Revenue	\$4,067	7,351

The balance of lease receivable as of March 31, 2023 and December 31, 2022 are as follows (in thousands):

	<u>March 31, 2023</u>	<u>December 31, 2022</u>
Lease Receivable – current	\$34,327	\$41,470
Lease Receivable – noncurrent	260,163	284,778
Total Lease Receivable	<u>\$294,490</u>	<u>\$326,248</u>

MTA recognized \$8,900 and \$43 revenue associated with residual value guarantees and termination penalties for each of March 31, 2023 and December 31, 2022.

The principal and interest requirements to maturity for the lease receivable subsequent to March 31, 2023, are as follows (in thousands):

<u>March 31, 2023</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2023	\$24,958	\$5,651	\$30,609
2024	37,858	6,795	44,653
2025	35,930	5,975	41,905
2026	34,175	5,167	39,341
2027	30,805	4,397	35,202
2028-2032	61,016	15,187	76,203
2033-2037	9,142	12,018	21,160
2038-2042	2,736	11,137	13,873
Thereafter	57,870	64,956	122,825
Total	<u>\$294,490</u>	<u>\$131,283</u>	<u>\$425,771</u>

As Lessee

MTA leases buildings, office space, storage space, equipment, vehicles, and cell tower space from other entities. These leases have terms between 1 year to 67 years, with payments required monthly, quarterly, or annually.

The amount of lease expense recognized for variable payments not included in the measurement of lease liability were \$1,817 and \$3,864 for March 31, 2023 and December 31, 2022. MTA recognized \$1,855 expense attributable to residual value guarantees and termination penalties as of March 31, 2023 and December 31, 2022.

The balance of lease payable as of March 31, 2023 and December 31, 2022 are as follows (in thousands):

	<u>March 31, 2023</u>	<u>December 31, 2022</u>
Lease Payable – current	\$39,844	\$44,607
Lease Payable– noncurrent	824,241	833,357
Total Lease Payable	<u><u>\$864,085</u></u>	<u><u>\$877,964</u></u>

The principal and interest requirements to maturity for the lease liability subsequent to March 31, 2023, are as follows (in thousands):

<u>March 31, 2023</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2023	\$32,476	\$35,979	\$68,455
2024	36,914	46,427	83,341
2025	33,513	45,652	79,165
2026	34,309	44,889	79,198
2027	28,172	44,163	72,335
2028-2032	157,546	207,409	364,955
2033-2037	138,951	174,185	313,136
2038-2042	117,691	134,814	252,505
Thereafter	284,513	123,339	407,852
Total	<u><u>\$864,085</u></u>	<u><u>\$856,857</u></u>	<u><u>\$1,720,942</u></u>

Significant 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 \$996 million. 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-lease 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 December 31, 2022, for the MTA New York City Transit, MTA Bridges and Tunnels and MTA (including MTA Bus, MTA Construction and Development and MTA Business Service Center) were 48.7%, 7.4% and 43.9%, respectively. MTAs' sublease is for a year-to-year term, automatically extended, except upon the giving of a non-extension notice by MTA. 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 Construction and Development, MTAHQ and MTA Bus.

MTA makes the lease payments on behalf of MTA New York City Transit and MTA Bridges and Tunnels and makes monthly rent chargebacks to the other MTA agencies treated as management fees.

9. FINANCED PURCHASES

MTA made an assessment of its existing sale/leaseback transactions and determined that these transactions are not eligible to be treated as leases but as financed purchases under GASB Statement No. 87, *Leases*. Accordingly, under GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, a sale-leaseback is required to include a transaction that qualifies as a sale under the guidance for sales of real estate. The sales-of-real estate criteria include the provision that an option or requirement for a seller to repurchase the asset would preclude a sale treatment. Furthermore, a qualifying sale should occur for a transaction to be accounted for as a sale-leaseback and that the sales-of-real-estate criteria should be used to determine whether a sale has occurred, regardless of whether a leaseback is involved. The transaction should be accounted for as financing, leasing or profit-sharing arrangement rather than a sale when the seller has an obligation to repurchase the property, or the terms of the transaction allow the buyer to compel the seller or give an option to the seller to repurchase the property.

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.

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 US 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 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 March 31, 2023, the market value of total collateral funds was \$39.2.

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. As of March 31, 2023, the market value of total collateral funds was \$55.2.

As a result of the implementation of GASB Statement No. 87, *Leases*, the Two Broadway office building lease in lower Manhattan has been reclassified as a right-of-use asset with its corresponding lease liability and excluded from the schedule below. See footnote 8 for additional information.

Financed Purchases Schedule

Description	For the period ended March 31, 2023			
	December 31, 2022	Increase	Decrease	March 31, 2023
Met Life	7	-	-	7
Met Life Equity	19	-	-	19
Bank of New York	22	-	-	22
Bank of America	38	-	-	38
Bank of America Equity	16	-	-	16
Met Life Equity	68	-	-	68
Total MTA Financed Purchase	\$ 170	\$ -	\$ -	\$ 170
Current Portion Financed Purchase	-	-	-	-
Long Term Portion Financed Purchase	\$ 170	-	-	\$ 170

Financed Purchases Schedule
For the Year Ended December 31, 2022

Description	December 31, 2021	Increase	Decrease	December 31, 2022
Sumitomo	\$ 15	\$ -	\$ 15	-
Met Life	7	-	-	7
Met Life Equity	19	-	-	19
Bank of New York	22	-	-	22
Bank of America	35	3	-	38
Bank of America Equity	16	-	-	16
Sumitomo	14	-	14	-
Met Life Equity	64	4	-	68
Total MTA Financed Purchase	\$ 192	\$ 7	\$ 29	\$ 170
Current Portion Financed Purchase	14			-
Long Term Portion Financed Purchase	\$ 178			\$ 170

MTA Hudson Rail Yards Air Rights Leases – MTA assessed the MTA Hudson Rail Yards Leases and associated air rights and determined that these are intangible assets and excluded as leases under GASB Statement No. 87, *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.

To undertake the development of the Hudson Rail Yards, the MTA entered into two 99-year leases for the airspace within the boundary of the Hudson Rail Yards, one for the Eastern Rail Yards ("ERY") beginning December 3, 2012, and the other for the Western Rail Yards ("WRY") beginning December 3, 2013.

As of April 10, 2013, the ERY Lease was terminated and substituted with separate Severed Parcel Leases. Several Tenants under the Severed Parcel Leases have exercised their options to purchase fee title, as well as numerous condominium owners in residential buildings. The WRY Lease is also expected to be severed into separate parcels as development progresses.

The Severed Parcel Leases in the ERY, fee title for which has not been purchased, and the WRY Lease (until any severed parcel leases are purchased) are pledged as security for the Series 2016A Hudson Yards Trust Obligations.

Minimum rent receipts for ERY and WRY Ground Leases are as follows as of March 31, 2023:

Year	ERY	WRY	Total
2023	\$ 9	\$ 33	\$ 42
2024	9	36	45
2025	9	36	45
2026	9	36	45
2027	9	36	45
Thereafter	3,307	14,207	17,514
Total	\$ 3,352	\$ 14,384	\$ 17,736

10. 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 were paid 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.

11. 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 March 31, 2023 and year ended December 31, 2022 is presented below (in millions):

	March 31, 2023	December 31, 2022
Balance - beginning of year	\$ 5,435	\$ 5,100
Activity during the year:		
Current year claims and changes in estimates	215	867
Claims paid	(137)	(532)
Balance - end of year	5,513	5,435
Less current portion	(564)	(567)
Long-term liability	\$ 4,949	\$ 4,868

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

12. 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 entailed 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 (“LIRR”) and Metro-North Commuter Railroad (the “Train Hall”), as well as retail and commercial space (the “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 “2017 TIFIA Loan”), to pay for costs of the construction of the Train Hall. The 2017 TIFIA Loan was amended and restated on November 18, 2021 in an amount up to \$607 (the “2021 TIFIA Loan”), to lower the interest rate to 1.99%

per annum and to provide additional capital financing for the Train Hall. The 2021 TIFIA Loan has 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 2021 TIFIA Loan are being used to reimburse or pay for costs of the construction of the Train Hall. The 2021 TIFIA Loan is secured by mortgages on the Train Hall property. The principal and interest on the 2021 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 June, 2030 and is thereafter calculated based upon the assessed value of the properties as determined by New York City. The 2021 TIFIA Loan is further supported by a debt service reserve account, which is funded in an amount equal to the sum of the highest aggregate TIFIA Loan debt service amounts that will become due and payable on any two consecutive semi-annual payment dates in a five-year prospective period (the “TIFIA Debt Service Reserve Account”).

Simultaneously with the execution of the 2017 TIFIA Loan, the JSA was entered into by and among the MTA, the TIFIA Lender, ESD, and Manufacturers and Traders Trust Company (as PILOT trustee). MTA ratified and confirmed its obligations under the JSA in connection with the closing of 2021 TIFIA Loan.

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 monies 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 2021 TIFIA Loan has been paid in full and (c) foreclosure by the TIFIA Lender under the Mortgage (as defined in the 2021 TIFIA Loan).

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 2021 TIFIA Loan 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 2021 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 2021 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”). Under the Memorandum of Understanding, which was updated in November 2020 to reflect the 2021 TIFIA Loan, 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.

13. 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 \$5 and \$1 for the periods ended March 31, 2023 and 2022, respectively. A summary of the activity in pollution remediation liability at March 31, 2023 and December 31, 2022 were as follows:

	March 31, 2023	December 31, 2022
Balance at beginning of year	\$ 156	\$ 145
Current year expenses/changes in estimates	5	26
Current year payments	-	(15)
Balance at end of year	161	156
Less current portion	40	40
Long-term liability	<u>\$ 121</u>	<u>\$ 116</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.

14. NON-CURRENT LIABILITIES

Changes in the activity of non-current liabilities for the periods ended March 31, 2023 and December 31, 2022 are presented below:

	Balance December 31,			Balance December 31,			Balance March 31,		
	2021	Additions	Reductions	2022	Additions	Reductions	2023		
Non-current liabilities:	(Restated) *								
Contract retainage payable	\$ 416	\$ 19	\$ -	435	-	\$ (11)	\$ 424		
Other long-term liabilities	414	-	(48)	366	-	(1)	365		
Total non-current liabilities	<u>\$ 830</u>	<u>\$ 19</u>	<u>\$ (48)</u>	<u>\$ 801</u>	<u>\$ -</u>	<u>\$ (12)</u>	<u>\$ 789</u>		

* Restated due to the adoption of GASB 87, Leases. Refer to 2022 MTA Consolidated Financial Statements.

15. NOVEL CORONAVIRUS (COVID-19)

On March 12, 2020, the World Health Organization declared the COVID-19 outbreak to be a pandemic in the face of the global spread of the virus. The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, was first detected in China, and has since spread globally, including to the United States and to New York State. On March 7, 2020, Governor Cuomo declared a Disaster Emergency in the State of New York. On March 13, 2020, President Trump declared a national state of emergency as a result of the COVID-19 pandemic. By order of Governor Cuomo ("New York State on PAUSE"), effective March 22, 2020, all non-essential businesses Statewide were required to be closed, among other restrictive social distancing and related measures. The PAUSE order was lifted on May 15, 2020 for five New York regions that met the requirements to start opening. However, a new order was signed by Governor Cuomo on May 15, 2020 extending the PAUSE to June 13, 2020 for New York City, Long Island, and the Hudson Valley. The impact of social distancing and subsequent State governmental orders limiting non-essential activities caused by the COVID-19 pandemic resulted in a sharp decline in the utilization of MTA services, dramatic declines in MTA public transportation system ridership and fare revenues, and MTA Bridge and Tunnel crossing traffic and toll revenues. A significant development was the impact of COVID-19 vaccinations on the MTA region. Capacity restrictions on restaurants, bars, event venues and businesses put in place due to COVID-19 were mostly removed on May 19, 2021, and all remaining restrictions were eliminated on June 15, 2021 after the State reached its goal of 70% of adults receiving at least a first dose of the vaccine. MTA has seen ridership steadily improve since the low point of ridership during the pandemic in 2020; but continues to be well-below 2019 levels.

Coronavirus Aid, Relief and Economic Security Act ("CARES Act"). The CARES Act is a \$2.2 trillion economic stimulus bill passed by Congress and signed into law by the President on March 27, 2020 in response to the economic fallout of the COVID-19 pandemic in the United States. The CARES Act through the Federal Transit Administration's ("FTA") formula funding provisions provided approximately \$4 billion to MTA. Funding was provided at a 100 percent Federal share, with no local match required, and is available to support operating, and other expenses generally eligible under those programs and incurred beginning on January 20, 2020, to prevent, prepare for, and respond to the COVID-19 pandemic, including operating service for essential workers, such as medical personnel and first responders. On May 8, 2020, the FTA approved MTA's initial grant application of \$3.9 billion. On June 25, 2020, FTA approved an amendment to the initial CARES Act grant adding approximately \$98 million in additional formula grant allocations to MTA for a CARES Act grant total of \$4.0 billion. As of December 31, 2020, a total of \$4.0 billion was released to MTA for operating assistance that occurred

from January 20, 2020, through July 31, 2020. The MTA has received all CARES Act funding as provided in the first congressional relief package.

Federal Reserve Bank of New York's Municipal Liquidity Facility LLC ("MLF"). Due to the COVID-19 pandemic, the Federal Reserve established the MLF in April 2020 as a source of emergency financing by being available to purchase up to \$500 billion of short-term notes from state and local governments and certain public entities to ensure they had access to credit during the COVID-19 pandemic. MTA was able to utilize the MLF twice before the MLF window closed at the end of December 2020. On August 26, 2020, MTA directly placed with the MLF \$450.72 million Transportation Revenue BANs, Series 2020B, which were issued to retire existing Transportation Revenue BANs maturing on September 1, 2020. The MTA subsequently retired the MLF \$450.72 million Transportation Revenue BANs, Series 2020B, with an issuance of Dedicated Tax Funds bonds on March 1, 2022. MTA issued into the MLF a second time by directly placing \$2.907 billion Payroll Mobility Tax BANs issued for working capital on December 17, 2020. The \$2.907 billion MLF loan matures in December, 2023. In December 2022, the MTA Board authorized the MTA to place MTA funds and unspent proceeds in an Interim Redemption Subaccount, for the purpose of redeeming the BANs at or before maturity. Subsequently, MTA transferred \$2.907 billion into the Interim Redemption Subaccount pursuant to such Board approval.

Coronavirus Response and Relief Supplemental Appropriation Act of 2021 ("CRRSAA"). On December 27, 2020, the President signed into law the Coronavirus Response and Relief Supplemental Appropriation Act of 2021 ("CRRSAA") that includes \$900 billion for various COVID-19 economic relief programs to address hardships caused by the coronavirus pandemic and a \$1.4 trillion government funding package to fund the government through September 30, 2021. Included in the legislation's \$45 billion in financial assistance to the transportation industry, including \$16 billion for another round of airline employee and contractor payroll support: \$14 billion for transit; \$10 billion for highways; \$2 billion for intercity buses; \$2 billion for airports; and \$1 billion for Amtrak. The MTA received \$4.1 billion in aid from the CRRSAA between December 2021 (\$0.6 billion) and January 2022 (\$3.5 billion).

American Rescue Plan Act ("ARPA"). On March 11, 2021, President Biden signed into law the American Rescue Plan Act of 2021 ("ARPA"). The \$1.9 trillion package is intended to combat the COVID-19 pandemic, including the public health and economic impacts. The package includes \$30 billion of direct federal aid to transportation agencies. The MTA received \$6.1 billion in aid from ARPA in 2022. In September of 2022, Additional Assistance Funding was made available to transit systems demonstrating additional pandemic associated needs. MTA received \$769 million in additional aid in the fourth quarter of 2022.

Federal Emergency Management Agency ("FEMA") Reimbursement. The MTA is eligible for FEMA payments which are expected to cover expenses related to the COVID-19 pandemic, over and above normal emergency costs that are not covered by other federal funding. An estimated \$873 million of direct COVID-19-related expenses incurred from the start of the pandemic through December 31, 2022 was submitted by MTA to the New York State Department of Budget (DOB), which is the agency managing COVID-19-related expense reimbursement from FEMA.

16. 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	Goldman Sachs	BOA Merrill	Goldman Sachs	JPMorgan	BOA Merrill	BOA Merrill	BOA Merrill	Cargill
Trade Date	4/29/2021	6/2/2021	6/29/2021	7/27/2021	8/31/2021	9/29/2021	10/25/2021	11/30/2021
Effective Date	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	11/1/2022
Termination Date	3/31/2023	4/30/2023	5/31/2023	6/30/2023	7/31/2023	8/31/2023	9/30/2023	10/31/2023
Price/Gal	\$1.9360	\$2.0495	\$2.0610	\$2.0505	\$2.0345	\$2.1459	\$2.2879	\$2.0100
Original Notional Quantity	2,826,752	2,826,757	2,826,738	2,826,751	2,826,725	2,826,740	2,826,749	2,826,751

Counterparty	Goldman Sachs	Goldman Sachs	Cargill	Cargill	Cargill	Goldman Sachs	Goldman Sachs	BOA Merrill
Trade Date	12/28/2021	1/25/2022	2/28/2022	3/31/2022	4/28/2022	5/31/2022	6/27/2022	7/25/2022
Effective Date	12/1/2022	1/1/2023	2/1/2023	3/1/2023	4/1/2023	5/1/2023	6/1/2023	7/1/2023
Termination Date	11/30/2023	12/31/2023	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
Price/Gal	\$2.2227	\$2.3615	\$2.5015	\$2.7469	\$2.8675	\$2.9450	\$3.0195	\$2.8739
Original Notional Quantity	2,826,765	2,826,779	2,826,759	2,826,761	2,826,752	2,826,757	2,826,738	2,826,751

Counterparty	BOA Merrill	Cargill	BOA Merrill	BOA Merrill	Goldman Sachs	Cargill	Cargill	Cargill
Trade Date	8/29/2022	9/29/2022	10/25/2022	11/30/2022	12/28/2022	1/31/2023	2/28/2023	3/29/2023
Effective Date	8/1/2023	9/1/2023	10/1/2023	11/1/2023	12/1/2023	1/1/2024	2/1/2024	3/1/2024
Termination Date	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/1/2024	12/31/2024	1/31/2025	2/28/2025
Price/Gal	\$2.9620	\$2.6846	\$2.7422	\$2.7624	\$2.7030	\$2.6867	\$2.5711	\$2.4373
Original Notional Quantity	2,826,725	2,826,740	2,826,749	2,826,751	2,826,765	2,826,779	2,826,759	1,633,857

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 March 31, 2023, the total outstanding notional value of the ULSD contracts was 51.4 million gallons with a negative fair value of \$3.9. 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).

17. CONDENSED COMPONENT UNIT INFORMATION

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

	Metro - North MTA	Long Island Railroad	New York City Transit Authority	Triborough Bridge and Tunnel Authority	Eliminations	Consolidated Total	
March 31, 2023							
Current assets	\$ 14,142	\$ 483	\$ 668	\$ 845	\$ 1,835	\$ (852)	\$ 17,121
Capital assets	14,148	6,908	10,563	48,058	7,806	-	87,483
Other Assets	28,952	92	74	47	1,723	(27,002)	3,886
Intercompany receivables	253	497	490	4,392	9,717	(15,349)	-
Deferred outflows of resources	1,330	740	919	4,840	396	(82)	8,143
Total assets and deferred outflows of resources	\$ 58,825	\$ 8,720	\$ 12,714	\$ 58,182	\$ 21,477	\$ (43,285)	\$ 116,633
Current liabilities	\$ 7,155	\$ 358	\$ 313	\$ 2,000	\$ 1,076	\$ (120)	\$ 10,782
Non-current liabilities	30,677	2,698	3,993	26,320	22,484	(42)	86,130
Intercompany payables	15,236	144	41	223	510	(16,154)	-
Deferred inflows of resources	582	477	821	1,937	235	(1)	4,051
Total liabilities and deferred inflows of resources	\$ 53,650	\$ 3,677	\$ 5,168	\$ 30,480	\$ 24,305	\$ (16,317)	\$ 100,963
Net investment in capital assets	\$ (19,579)	\$ 6,679	\$ 10,503	\$ 47,619	\$ (6,817)	\$ (419)	\$ 37,986
Restricted	4,106	-	-	-	923	(422)	4,607
Unrestricted	20,648	(1,636)	(2,957)	(19,917)	3,066	(26,127)	(26,923)
Total net position	\$ 5,175	\$ 5,043	\$ 7,546	\$ 27,702	\$ (2,828)	\$ (26,968)	\$ 15,670
For the period ended March 31, 2023							
Fare revenue	\$ 43	\$ 121	\$ 122	\$ 775	\$ -	\$ 1	\$ 1,062
Vehicle toll revenue	-	-	-	-	552	1	553
Rents, freight and other revenue	12	6	1	134	6	(10)	149
Total operating revenue	55	127	123	909	558	(8)	1,764
Total labor expenses	328	260	336	1,748	58	1	2,731
Total non-labor expenses	173	115	112	564	53	(15)	1,002
Depreciation and amortization	58	79	120	545	54	-	856
Total operating expenses	559	454	568	2,857	165	(14)	4,589
Operating (deficit) surplus	(504)	(327)	(445)	(1,948)	393	6	(2,825)
Subsidies and grants	93	-	-	87	2	(87)	95
Tax revenue	939	-	-	367	-	(254)	1,052
Interagency subsidy	275	263	218	65	-	(821)	-
Interest expense	(375)	(2)	-	(22)	(102)	(6)	(507)
Other	379	78	(1)	6	(225)	172	409
Total non-operating revenues (expenses)	1,311	339	217	503	(325)	(996)	1,049
Gain (Loss) before appropriations	807	12	(228)	(1,445)	68	(990)	(1,776)
Appropriations, grants and other receipts externally restricted for capital projects	(708)	69	207	32	(124)	1,053	529
Change in net position	99	81	(21)	(1,413)	(56)	63	(1,247)
Net position, beginning of period	5,076	4,962	7,567	29,115	(2,772)	(27,031)	16,917
Net position, end of period	\$ 5,175	\$ 5,043	\$ 7,546	\$ 27,702	\$ (2,828)	\$ (26,968)	\$ 15,670
For the period ended March 31, 2023							
Net cash (used by) / provided by operating activities	\$ (328)	\$ (345)	\$ (1,318)	\$ (1,671)	\$ 436	\$ 1	\$ (3,225)
Net cash provided by / (used by) non-capital financing activities	1,165	336	1,250	967	1,092	(3,766)	1,044
Net cash (used by) / provided by capital and related financing activities	(676)	8	72	(311)	(341)	2,024	776
Net cash provided by / (used by) investing activities	826	-	-	1,013	(1,186)	1,741	2,394
Cash at beginning of period	882	19	5	25	9	-	940
Cash at end of period	\$ 1,869	\$ 18	\$ 9	\$ 23	\$ 10	\$ -	\$ 1,929

	MTA	Metro- North Railroad	Long Island Railroad	New York City Transit Authority	Triborough Bridge and Tunnel Authority	Eliminations	Consolidated Total
December 31, 2022							
Current assets	\$ 12,148	\$ 251	\$ 281	\$ 608	\$ 2,446	\$ (1,438)	\$ 14,296
Capital assets	14,014	6,915	10,557	48,226	7,794	-	87,506
Other Assets	32,131	111	76	49	16	(25,541)	6,842
Intercompany receivables	522	736	1,126	5,678	8,682	(16,744)	-
Deferred outflows of resources	1,382	740	919	4,840	464	(71)	8,274
Total assets and deferred outflows of resources	\$ 60,197	\$ 8,753	\$ 12,959	\$ 59,401	\$ 19,402	\$ (43,794)	\$ 116,918
Current liabilities	\$ 6,843	\$ 399	\$ 331	\$ 2,084	\$ 1,023	\$ (128)	\$ 10,552
Non-current liabilities	31,794	2,698	3,993	26,264	20,647	(21)	85,375
Intercompany payables	15,900	202	244	-	269	(16,615)	-
Deferred inflows of resources	584	492	824	1,939	235	-	4,074
Total liabilities and deferred inflows of resources	\$ 55,121	\$ 3,791	\$ 5,392	\$ 30,287	\$ 22,174	\$ (16,764)	\$ 100,001
Net investment in capital assets	\$ (24,729)	\$ 6,678	\$ 10,536	\$ 47,783	\$ 2,105	\$ (7,487)	\$ 34,886
Restricted	4,788	-	-	-	2,410	(2,134)	5,064
Unrestricted	25,017	(1,716)	(2,969)	(18,669)	(7,287)	(17,409)	(23,033)
Total net position	\$ 5,076	\$ 4,962	\$ 7,567	\$ 29,114	\$ (2,772)	\$ (27,030)	\$ 16,917
For the period ended March 31, 2022							
Fare revenue	\$ 37	\$ 80	\$ 87	\$ 641	\$ -	\$ -	\$ 845
Vehicle toll revenue	-	-	-	-	525	-	525
Rents, freight and other revenue	15	7	7	118	5	(8)	144
Total operating revenue	52	87	94	759	530	(8)	1,514
Total labor expenses	303	241	301	1,676	57	-	2,578
Total non-labor expenses	120	103	85	466	48	(9)	813
Depreciation and amortization	23	82	112	530	49	-	796
Total operating expenses	446	426	498	2,672	154	(9)	4,187
Operating (deficit) surplus	(394)	(339)	(404)	(1,913)	376	1	(2,673)
Subsidies and grants	305	61	-	76	2	(77)	367
Tax revenue	1,745	-	-	754	147	(534)	2,112
Interagency subsidy	280	25	(46)	62	-	(321)	-
Interest expense	(403)	-	-	(1)	(84)	-	(488)
Other	3,324	-	-	1	-	528	3,853
Total non-operating revenues (expenses)	5,251	86	(46)	892	65	(404)	5,844
Gain (Loss) before appropriations	4,857	(253)	(450)	(1,021)	441	(403)	3,171
Appropriations, grants and other receipts externally restricted for capital projects	137	247	239	169	(476)	737	1,053
Change in net position	4,994	(6)	(211)	(852)	(35)	334	4,224
Net position, beginning of the period	(8,774)	4,102	6,440	24,650	(2,638)	(14,637)	9,143
Net position, end of period	\$ (3,780)	\$ 4,096	\$ 6,229	\$ 23,798	\$ (2,673)	\$ (14,303)	\$ 13,367
For the period ended March 31, 2022							
Net cash (used in) / provided by operating activities	\$ (213)	\$ (128)	\$ (163)	\$ (1,306)	\$ 415	\$ (179)	\$ (1,574)
Net cash provided by / (used in) non-capital financing activities	9,474	142	150	1,501	423	(2,688)	9,002
Net cash (used in) / provided by capital and related financing activities	(5,857)	(13)	14	(277)	(221)	1,708	(4,646)
Net cash provided by / (used in) investing activities	(2,370)	-	-	90	(690)	1,159	(1,811)
Cash at beginning of period	515	17	5	28	217	-	782
Cash at end of period	\$ 1,549	\$ 18	\$ 6	\$ 36	\$ 144	\$ -	\$ 1,753

18. SUBSEQUENT EVENTS

On April 11, 2023 and May 2, 2023, \$1,000.347 and \$314.981, respectively, were transferred from available funds to the MTA Other Postemployment Benefits Plan (“OPEB” Plan) and the related Trust Fund to set aside funds to assist in providing health and other welfare benefits to eligible retirees and their beneficiaries. The investments will be managed with the aim to allocate within the maturity range from December 2025 through June 2028.

On April 24, 2023, MTA executed a 2,462,350 gallon ultra-low sulfur diesel fuel hedge at an all-in price of \$2.4357 (whole dollars) per gallon. The hedge covers the period from April 2024 through March 2025.

On April 27, 2023, the New York State fiscal year 2023-2024 budget was enacted which includes critical investments to the MTA. The budget supports the financial stability of the MTA by adjusting the Payroll Mobility Tax for the largest businesses within New York City to 0.6%, which will generate approximately \$1.1 billion; \$300 million in one-time State aid; requiring New York City to contribute \$165 million for paratransit services funding; \$65 million to reduce the proposed fare increase on the MTA; expanding service frequencies on the subway and launching a pilot program providing five free bus routes in New York City.

On May 30, 2023, MTA executed a 2,636,717 gallon ultra-low sulfur diesel fuel hedge at an all-in price of \$2.2550 (whole dollars) per gallon. The hedge covers the period from May 2024 through April 2025.

On June 22, 2023, MTA effectuated a Mandatory Tender for the purchase and remarketing of \$ 75,560 currently outstanding General Revenue Variable Rate Bonds, Series 2001C and \$185,000 General Revenue Variable Rate Refunding Bonds, Subseries 2005B-3. The remarketed bonds will remain as Variable Interest Rate Obligations bearing interest at a daily rate. The irrevocable direct-pay letter of credit issued by State Street Bank and Trust Company for both Series 2001C and Subseries 2005B-3 will be replaced by Barclays Bank, PLC and Bank of America, N.A., respectively.

To implement the CBD Tolling Program on federal-aid roadways within the CBD, authorization is required from the Federal Highway Association (FHWA) under its Value Pricing Pilot Program (VPPP). In accordance with the National Environmental Policy Act, MTA Bridges and Tunnels, New York State Department of Transportation, and New York City Department of Transportation (collectively, the Project Sponsors), in cooperation with FHWA, were required to prepare an Environmental Assessment (EA) with robust public outreach. This process concluded in late June 2023, when the FHWA issued a Finding of No Significant Impact (FONSI). Contractors have up to 310 days from this approval to complete the design, development, testing and installation of the tolling system, and the TBTA Board must adopt a toll structure, before toll collection can begin.

On June 27, 2023, MTA executed a 2,636,709 gallon ultra-low sulfur diesel fuel hedge at an all-in price of \$2.29 (whole dollars) per gallon. The hedge covers the period from June 2024 through May 2025.

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

	Additional Plan									
	2021	2020	2019	2018	2017	2016	2015	2014		
Plan Measurement Date (December 31):										
Total pension liability:										
Service cost	\$ 260	\$ 453	\$ 621	\$ 1,057	\$ 1,874	\$ 2,752	\$ 3,441	\$ 3,813		
Interest	83,489	86,918	93,413	97,611	101,477	104,093	106,987	110,036		
Effect of economic / demographic (gains) or losses /	3,729	10,428	13,455	213	1,890	15,801	6,735	-		
Effect of assumption changes or inputs	26,300	-	50,191	-	-	-	-	-		
Benefit payments and withdrawals	(148,630)	(152,046)	(157,254)	(159,565)	(159,717)	(158,593)	(157,071)	(156,974)		
Net change in total pension liability	(34,852)	(54,247)	426	(60,684)	(54,476)	(35,947)	(39,908)	(43,125)		
Total pension liability—beginning	1,357,323	1,411,570	1,411,144	1,471,828	1,526,304	1,562,251	1,602,159	1,645,284		
Total pension liability—ending (a)	1,322,471	1,357,323	1,411,570	1,411,144	1,471,828	1,526,304	1,562,251	1,602,159		
Plan fiduciary net position:										
Employer contributions	70,553	68,724	62,774	59,500	76,523	81,100	100,000	407,513		
Nonemployer contributions	-	-	-	-	145,000	70,000	-	-		
Member contributions	73	140	249	333	760	884	1,108	1,304		
Net investment income	95,247	4,024	116,092	(31,098)	112,614	58,239	527	21,231		
Benefit payments and withdrawals	(148,630)	(152,046)	(157,254)	(159,565)	(159,717)	(158,593)	(157,071)	(156,974)		
Administrative expenses	(610)	(612)	(718)	(1,180)	(1,070)	(611)	(1,218)	(975)		
Net change in plan fiduciary net position	16,633	(79,770)	21,143	(132,010)	174,110	51,019	(56,654)	272,099		
Plan fiduciary net position—beginning	760,690	840,460	819,317	951,327	777,217	726,198	782,852	510,753		
Plan fiduciary net position—ending (b)	777,323	760,690	840,460	819,317	951,327	777,217	726,198	782,852		
Employer's net pension liability—ending (a)-(b)	\$ 545,148	\$ 596,633	\$ 571,110	\$ 591,827	\$ 520,501	\$ 749,087	\$ 836,053	\$ 819,307		
Plan fiduciary net position as a percentage of the total pension liability	58.78%	56.04%	59.54%	58.06%	64.64%	50.92%	46.48%	48.86%		
Covered payroll	\$ 3,230	\$ 5,174	\$ 7,236	\$ 13,076	\$ 20,500	\$ 29,312	\$ 39,697	\$ 43,267		
Employer's net pension liability as a percentage of covered payroll	16877.65%	11531.37%	7892.62%	4526.06%	2539.03%	2555.56%	2106.09%	1893.61%		

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.

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

	MaBSTOA Plan							
	2021	2020	2019	2018	2017	2016	2015	2014
Plan Measurement Date (December 31):								
Total pension liability:								
Service cost	\$ 93,934	\$ 95,514	\$ 89,814	\$ 86,979	\$ 84,394	\$ 82,075	\$ 77,045	\$ 72,091
Interest	274,270	266,588	265,454	256,084	246,284	236,722	232,405	223,887
Effect of economic / demographic (gains) or losses	(19,177)	(720)	9,011	5,412	11,826	13,784	(68,997)	-
Effect of assumption changes or inputs	72,032		168,752	-	6,347	-	-	-
Differences between expected and actual experience			-	-	-	-	-	(1,596)
Benefit payments and withdrawals	(245,427)	(237,930)	(221,221)	(213,827)	(209,122)	(187,823)	(179,928)	(175,447)
Net change in total pension liability	175,632	123,452	311,810	134,648	139,729	144,758	60,525	118,935
Total pension liability—beginning	4,246,386	4,122,934	3,811,124	3,676,476	3,536,747	3,391,989	3,331,464	3,212,529
Total pension liability—ending (a)	4,422,018	4,246,386	4,122,934	3,811,124	3,676,476	3,536,747	3,391,989	3,331,464
Plan fiduciary net position:								
Employer contributions	156,204	159,486	206,390	205,433	202,684	220,697	214,881	226,374
Member contributions	24,935	24,709	23,552	21,955	19,713	18,472	16,321	15,460
Net investment income	416,287	60,326	447,365	(87,952)	350,186	212,260	(24,163)	105,084
Benefit payments and withdrawals	(245,427)	(237,930)	(221,221)	(213,827)	(209,122)	(187,823)	(179,928)	(175,447)
Administrative expenses	(264)	(244)	(220)	(196)	(208)	(186)	(88)	(74)
Net change in plan fiduciary net position	351,735	6,347	455,866	(74,587)	363,253	263,420	27,023	171,397
Plan fiduciary net position—beginning	3,306,616	3,300,268	2,844,402	2,918,989	2,555,736	2,292,316	2,265,293	2,093,896
Plan fiduciary net position—ending (b)	3,658,351	3,306,616	3,300,268	2,844,402	2,918,989	2,555,736	2,292,316	2,265,293
Employer's net pension liability—ending (a)-(b)	\$ 763,667	\$ 939,770	\$ 822,666	\$ 966,722	\$ 757,487	\$ 981,011	\$ 1,099,673	\$ 1,066,171
Plan fiduciary net position as a percentage of the total pension liability	82.73%	77.87%	80.05%	74.63%	79.40%	72.26%	67.58%	68.00%
Covered payroll	\$768,868	\$ 802,100	\$ 786,600	\$ 776,200	\$ 749,666	\$ 716,527	\$ 686,674	\$ 653,287
Employer's net pension liability as a percentage of covered payroll	99.32%	117.16%	104.59%	124.55%	101.04%	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.

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

	MNR Cash Balance Plan									
	2021	2020	2019	2018	2017	2016	2015	2014		
Plan Measurement Date (December 31):										
Total pension liability:										
Interest	\$ 11	\$ 10	\$ 18	\$ 20	\$ 21	\$ 24	\$ 29	\$ 32		
Effect of economic / demographic (gains) or losses	(11)	(11)	4	(11)	12	(15)	(10)	-		
Effect of assumption changes or inputs	15	11	-	-	-	-	18	-		
Benefit payments and withdrawals	(38)	(105)	(53)	(58)	(71)	(77)	(113)	(88)		
Net change in total pension liability	(23)	(70)	(31)	(49)	(38)	(68)	(76)	(56)		
Total pension liability—beginning	378	448	479	528	566	634	710	766		
Total pension liability—ending (a)	355	378	448	479	528	566	634	710		
Plan fiduciary net position:										
Employer contributions		9	-	5	-	23	18	-		
Net investment income	(5)	32	40	1	20	16	6	41		
Benefit payments and withdrawals	(38)	(105)	(53)	(58)	(71)	(77)	(113)	(88)		
Administrative expenses		3	(3)	-	-	-	3	(3)		
Net change in plan fiduciary net position	(43)	(61)	(16)	(52)	(51)	(38)	(86)	(50)		
Plan fiduciary net position—beginning	394	455	471	523	574	612	698	748		
Plan fiduciary net position—ending (b)	351	394	455	471	523	574	612	698		
Employer's net pension liability—ending (a)-(b)	\$ 4	\$ (16)	\$ (7)	\$ 8	\$ 5	\$ (8)	\$ 22	\$ 12		
Plan fiduciary net position as a percentage of the total pension liability	98.87%	104.23%	101.45%	98.33%	99.05%	101.41%	96.53%	98.31%		
Covered payroll	\$ 0	\$ 277	\$ 278	\$ 268	\$ 471	\$ 846	\$ 1,474	\$ 2,274		
Employer's net pension liability as a percentage of covered payroll	0.00%	-5.78%	-2.52%	2.99%	1.06%	-0.95%	1.49%	0.53%		

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.

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REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

Schedule of Changes in the MTA's Net Pension Liability and Related Ratios for Single Employer Pension Plans (continued)

	MTA Defined Benefit Plan							
	2021	2020	2019	2018	2017	2016	2015	2014
Plan Measurement Date (December 31):								
Total pension liability:								
Service cost	\$ 213,675	\$ 213,494	\$ 173,095	\$ 162,273	\$ 148,051	\$ 138,215	\$ 124,354	\$ 121,079
Interest	455,230	427,672	387,193	358,118	335,679	308,009	288,820	274,411
Effect of economic / demographic (gains) or losses	20,656	92,019	35,935	75,744	(27,059)	86,809	121,556	2,322
Effect of assumption changes or inputs	113,662	-	690,958	-	10,731	-	(76,180)	-
Effect of plan changes				61,890	76,511	73,521	6,230	-
Benefit payments and withdrawals	(325,473)	(293,836)	(264,985)	(242,349)	(232,976)	(209,623)	(199,572)	(191,057)
Net change in total pension liability	477,750	439,349	1,022,196	415,676	310,937	396,931	265,208	206,755
Total pension liability—beginning	6,950,035	6,510,686	5,488,490	5,072,814	4,761,877	4,364,946	4,099,738	3,892,983
Total pension liability—ending (a)	7,427,785	6,950,035	6,510,686	5,488,490	5,072,814	4,761,877	4,364,946	4,099,738
Plan fiduciary net position:								
Employer contributions	396,144	394,986	344,714	338,967	321,861	280,768	221,694	331,259
Member contributions	33,832	32,006	31,504	29,902	31,027	29,392	34,519	26,006
Net investment income	639,374	99,045	651,919	(150,422)	516,153	247,708	(45,122)	102,245
Benefit payments and withdrawals	(325,473)	(293,836)	(264,985)	(242,349)	(232,976)	(209,623)	(199,572)	(191,057)
Administrative expenses	(3,513)	(3,660)	(3,408)	(3,152)	(4,502)	(3,051)	(1,962)	(9,600)
Net change in plan fiduciary net position	740,364	228,541	759,744	(27,054)	631,563	345,194	9,557	258,853
Plan fiduciary net position—beginning	5,012,765	4,784,224	4,024,480	4,051,534	3,419,971	3,074,777	3,065,220	2,806,367
Plan fiduciary net position—ending (b)	5,753,129	5,012,765	4,784,224	4,024,480	4,051,534	3,419,971	3,074,777	3,065,220
Employer's net pension liability—ending (a)-(b)	\$ 1,674,656	\$ 1,937,270	\$ 1,726,462	\$ 1,464,010	\$ 1,021,280	\$ 1,341,906	\$ 1,290,169	\$ 1,034,518
Plan fiduciary net position as a percentage of the total pension liability	77.45%	72.13%	73.48%	73.33%	79.87%	71.82%	70.44%	74.77%
Covered payroll	\$ 2,028,938	\$ 2,050,970	\$ 2,052,657	\$ 2,030,695	\$ 1,857,026	\$ 1,784,369	\$ 1,773,274	\$ 1,679,558
Employer's net pension liability as a percentage of covered payroll	82.54%	94.46%	84.11%	72.09%	55.00%	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.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
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									
	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	March 31, 2016	March 31, 2015
MTA's proportion of the net pension liability	21.900%	22.218%	24.420%	24.493%	23.682%	24.096%	23.493%	23.585%		
MTA's proportionate share of the net pension liability	\$ 3,964,996	\$ 1,424,952	\$ 5,147,445	\$ 4,536,510	\$ 4,176,941	\$ 5,003,811	\$ 5,708,052	\$ 4,773,787	\$ 48,557	\$ 9,768
MTA's actual covered payroll	\$ 3,848,798	\$ 3,618,339	\$ 3,514,665	\$ 3,385,743	\$ 3,216,837	\$ 3,154,673	\$ 3,064,007	\$ 2,989,480	\$ 87,670	\$ 87,315
MTA's proportionate share of the net pension liability as a percentage of the MTA's covered payroll	103.019%	39.000%	146.456%	113.989%	129.846%	158.616%	186.294%	159.686%		
Plan fiduciary net position as a percentage of the total pension liability	81.276%	77.000%	76.933%	78.836%	78.826%	74.805%	69.568%	73.125%		
Plan Measurement Date:	NYSLERS Plan									
	March 31, 2022	March 31, 2021	March 31, 2020	March 31, 2019	March 31, 2018	March 31, 2017	March 31, 2016	March 31, 2015	March 31, 2016	March 31, 2015
MTA's proportion of the net pension liability	0.310%	0.314%	0.346%	0.345%	0.327%	0.311%	0.303%	0.289%		
MTA's proportionate share of the net pension liability	\$ (25,856)	\$ 313	\$ 91,524	\$ 24,472	\$ 10,553	\$ 29,239	\$ 48,557	\$ 9,768	\$ 48,557	\$ 9,768
MTA's actual covered payroll	\$ 110,702	\$ 102,838	\$ 105,457	\$ 109,252	\$ 105,269	\$ 96,583	\$ 87,670	\$ 87,315	\$ 87,670	\$ 87,315
MTA's proportionate share of the net pension liability as a percentage of the MTA's covered payroll	-23.360%	0.000%	86.788%	22.400%	10.025%	30.273%	55.386%	11.187%		
Plan fiduciary net position as a percentage of the total pension liability	103.650%	99.950%	86.392%	96.267%	98.240%	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.

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

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
(\$ in thousands)										
Additional Plan*										
Actuarially Determined Contribution	\$ 70,764	\$ 70,553	\$ 68,723	\$ 62,774	\$ 59,196	\$ 76,523	\$ 83,183	\$ 82,382	\$ 112,513	\$ -
Actual Employer Contribution	70,764	70,553	68,724	62,774	59,500	221,523	151,100	100,000	407,513	-
Contribution Deficiency (Excess)	-	-	\$(1)	-	\$(304)	\$(145,000)	\$(67,917)	\$(17,618)	\$(295,000)	-\$
Covered Payroll	\$ 2,043	\$ 3,230	\$ 5,174	\$ 7,236	\$ 13,076	\$ 20,500	\$ 29,312	\$ 39,697	\$ 43,267	-\$
Contributions as a % of Covered Payroll	3463.99%	2184.33%	1328.26%	867.54%	455.02%	1080.62%	515.49%	251.91%	941.87%	N/A
MaBSTOA Plan										
Actuarially Determined Contribution	\$ 158,618	\$ 156,204	\$ 159,486	\$ 209,314	\$ 202,509	\$ 202,924	\$ 220,697	\$ 214,881	\$ 226,374	\$ 234,474
Actual Employer Contribution	158,618	156,204	159,486	206,390	205,434	202,684	220,697	214,881	226,374	234,474
Contribution Deficiency (Excess)	-	-	-\$	2,924	\$(2,925)	240	-\$	-\$	-\$	-\$
Covered Payroll	\$ 775,512	\$ 768,868	\$ 802,100	\$ 786,600	\$ 776,200	\$ 749,666	\$ 716,527	\$ 686,674	\$ 653,287	\$ 582,081
Contributions as a % of Covered Payroll	20.45%	20.32%	19.88%	26.24%	26.47%	27.04%	30.80%	31.29%	34.65%	40.28%
Metro-North Cash Balance Plan*										
Actuarially Determined Contribution	\$ 4	-\$	-\$	\$ 8	\$ 5	-\$	\$ 23	-\$	\$ 5	-\$
Actual Employer Contribution	4	-	-	-	5	-	23	14	-	-
Contribution Deficiency (Excess)	-	-	-\$	-	-\$	-\$	-\$	\$(14)	5	-\$
Covered Payroll	-\$	-\$	277	278	268	471	846	1,474	2,274	-\$
Contributions as a % of Covered Payroll	0.00%	0.00%	0.00%	0.00%	1.87%	0.00%	2.68%	0.96%	0.00%	N/A
MTA Defined Benefit Plan*										
Actuarially Determined Contribution	\$ 404,245	\$ 392,547	\$ 392,921	\$ 349,928	\$ 331,566	\$ 316,916	\$ 290,415	\$ 273,700	\$ 271,523	-\$
Actual Employer Contribution	404,245	396,144	393,961	343,862	339,800	321,861	280,767	221,694	331,259	-
Contribution Deficiency (Excess)	-	\$(3,597)	\$(1,040)	\$ 6,066	\$(8,234)	\$(4,945)	\$ 9,648	\$ 52,006	\$(59,736)	-\$
Covered Payroll	\$ 2,111,293	\$ 2,028,938	\$ 2,050,970	\$ 2,052,657	\$ 2,030,695	\$ 1,857,026	\$ 1,784,369	\$ 1,773,274	\$ 1,679,558	-\$
Contributions as a % of Covered Payroll	19.15%	19.52%	19.21%	16.75%	16.73%	17.33%	15.73%	12.50%	19.72%	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.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

(\$ in thousands)	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
NYCERS										
Actuarially Determined Contribution	\$ 797,299	\$ 842,269	\$ 882,690	\$ 952,616	\$ 807,097	\$ 800,863	\$ 797,845	\$ 736,212	\$ 741,223	\$ 736,361
Actual Employer Contribution	797,299	842,269	882,690	952,616	807,097	800,863	797,845	736,212	741,223	736,361
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 3,848,798	\$ 3,637,544	\$ 3,771,595	\$ 3,948,283	\$ 3,974,494	\$ 3,768,885	\$ 3,523,993	\$ 3,494,907	\$ 3,617,087	\$ 2,943,195
Contributions as a % of Covered Payroll	20.72%	23.15%	23.40%	24.13%	20.31%	21.25%	22.64%	21.07%	20.49%	25.02%
NYSLERS **										
Actuarially Determined Contribution	\$ 16,284	\$ 16,284	\$ 14,533	\$ 14,851	\$ 14,501	\$ 13,969	\$ 12,980	\$ 15,792	\$ 13,816	\$ -
Actual Employer Contribution	16,284	16,284	14,533	14,851	14,501	13,969	12,980	15,792	13,816	-
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 110,702	\$ 99,129	\$ 102,838	\$ 106,913	\$ 109,210	\$ 103,787	\$ 94,801	\$ 86,322	\$ 84,041	\$ -
Contributions as a % of Covered Payroll	14.71%	16.43%	14.13%	13.89%	13.28%	13.46%	13.69%	18.29%	16.44%	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.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	Additional Plan			
Valuation Dates:	January 1, 2021	January 1, 2020	January 1, 2019	January 1, 2018
Measurement Date:	December 31, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Actuarial cost method:	Entry Age Normal Cost			
Amortization method:	Period specified in current valuation report (closed 12-year period from January 1, 2021) with level dollar payments.	Period specified in current valuation report (closed 13 year period beginning January 1, 2020) with level dollar payments.	Period specified in current valuation report (closed 14 year period beginning January 1, 2019) with level dollar payments.	Period specified in current valuation report (closed 15 year period beginning January 1, 2018) with level dollar payments.
Asset Valuation Method:	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.
Salary increases:	3.00%	3.00%	3.00%	3.00%
Actuarial assumptions:				
Discount Rate:	6.50%	6.50%	6.50%	7.00%
Investment rate of return :	6.50%, net of investment expenses	6.50%, net of investment expenses.	6.50%, net of investment expenses.	7.00%, net of investment expenses.
Mortality:	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021	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.
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.	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.	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	N/A
Inflation/Railroad Retirement Wage Base:	2.25%; 3.25%	2.25%; 3.25%	2.25%; 3.25%	2.50%; 3.50%
Cost-of-Living Adjustments:	N/A	N/A	N/A	N/A

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	Additional Plan (continued)			
Valuation Dates:	January 1, 2017	January 1, 2016	January 1, 2015	January 1, 2014
Measurement Date:	December 31, 2017	December 31, 2016	December 31, 2015	December 31, 2014
Actuarial cost method:	Entry Age Normal Cost			
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.	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 fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.
Salary increases:	3.00%	3.00%	3.00%	3.00%
Actuarial assumptions:				
Discount Rate:	7.00%	7.00%	7.00%	7.00%
Investment rate of return :	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.	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.	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.	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	N/A
Inflation/Railroad Retirement Wage Base:	2.50%; 3.50%	2.50%; 3.50%	2.50%; 3.50%	2.50%; 3.50%
Cost-of-Living Adjustments:	N/A	N/A	N/A	N/A

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MaBSTOA Plan		
Valuation Dates:	January 1, 2021	January 1, 2020	January 1, 2019
Measurement Date:	December 31, 2021	December 31, 2020	December 31, 2019
Actuarial cost method:	Frozen Initial Liability cost method	Frozen Initial Liability (FIL)	Frozen Initial Liability (FIL)
Amortization method:	For FIL bases, 15 years for Fresh Start base as of January 1, 2020 and period specified in current valuation report for specific assumption changes. 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 fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.
Salary increases:	Reflecting general wage, merit and promotion increases for operating and non-operating members. Varies by years of employment.	Reflecting general wage, merit and promotion increases for operating employees and non-operating members. Varies by years of employment.	Reflecting general wage, merit, and promotion increases of 3.5% for operating employees and 4.0% for non-operating employees per year. Large increases are assumed in the first 5 years of a member's career.
Actuarial assumptions:			
Discount Rate:	6.50%	6.50%	6.50%
Investment rate of return :	6.50%, net of investment expenses.	6.50%, net of investment expenses.	6.50%, net of investment expenses.
Mortality:	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021	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:	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:	RP-2014 Disabled Annuitant mortality table for males and females.	RP-2014 Disabled Annuitant mortality table for males and females.	RP-2014 Disabled Annuitant mortality table for males and females.
Inflation/Railroad Retirement Wage Base:	2.25%	2.25%	2.25%
Cost-of-Living Adjustments:	60% of inflation assumption or 1.35% per annum, if applicable	1.35% per annum	1.35% per annum

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MaBSTOA Plan (continued)		
	January 1, 2018	January 1, 2017	January 1, 2016
Valuation Dates:	January 1, 2018	January 1, 2017	January 1, 2016
Measurement Date:	December 31, 2018	December 31, 2017	December 31, 2016
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 fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.
Salary increases:	Varies by years of employment and employment type.	Varies by years of employment and employment type.	Varies by years of employment and employment type.
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.
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:	RP-2014 Disabled Annuitant mortality table for males and females.	RP-2014 Disabled 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

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REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MNR Cash Balance Plan			
Valuation Dates:	January 1, 2021	January 1, 2020	January 1, 2019	January 1, 2019
Measurement Date:	December 31, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Actuarial cost method:	Unit Credit Cost	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.	One-year amortization of the unfunded liability, if any.	One-year amortization of the unfunded liability, if any.
Asset Valuation Method:	Actuarial value equals fair value.	Actuarial value equals fair value.	Actuarial value equals fair value.	Actuarial value equals fair value.
Salary increases:	N/A	N/A	N/A	N/A
Actuarial assumptions:				
Discount Rate:	3.00%	3.00%	3.50%	4.00%
Investment rate of return :	3.00%, net of investment expenses.	3.00%, net of investment expenses.	3.50%, net of investment expenses.	4.00%, net of investment expenses.
Mortality:	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA. Mortality assumption is based on an 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 an 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 2017 experience study for all MTA plans.
Pre-retirement:	RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments, projected on a generational basis using Scale AA.	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, noth projected on a generational basis using Scale AA.	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	N/A
Inflation/Railroad Retirement Wage Base:	2.25%	2.25%	2.25%	2.50%
Cost-of-Living Adjustments:	N/A	N/A	N/A	N/A

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REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MNR Cash Balance Plan (continued)			
Valuation Dates:	January 1, 2018	January 1, 2017	January 1, 2016	January 1, 2014
Measurement Date:	December 31, 2017	December 31, 2016	December 31, 2015	December 31, 2014
Actuarial cost method:	Unit Credit Cost	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.	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 fair value.	Actuarial value equals fair value.	Actuarial value equals fair 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	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%	4.00%	4.50%
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. Mortality assumption is based on a 2017 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. 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.	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.	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	N/A
Inflation/Railroad Retirement Wage Base:	2.50%	2.30%	2.30%	2.50%
Cost-of-Living Adjustments:	N/A	N/A	N/A	N/A

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REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MTA Defined Benefit Plan		
Valuation Dates:	January 1, 2021	January 1, 2020	January 1, 2019
Measurement Date:	December 31, 2021	December 31, 2020	December 31, 2019
Actuarial cost method:	Entry Age Normal Cost	Entry Age Normal Cost	Entry Age Normal Cost
Amortization method:	For FIL bases, 18 years for Fresh start base as of January 1, 2020 and period specified in current valuation report for specific assumption and plan change bases. 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 or service, of the projected population for each group and further weighted by total present value of benefits for each group.	For Frozen Initial Liability ("FIL") bases, 18 years for Fresh start base as of Jan 1, 2020 and period specified in current valuation report for specific plan change bases. 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 or service, of the projected population for each group and further weighted by total present value of benefits 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 fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.
Salary increases:	Varies by years of employment, and employee group; 2.75% general wage increases increases for TWU Local 100 MTA Bus hourly employees.	Varies by years of employment, and employee group. 2.75% general wage increases for TWU Local 100 MTA Bus hourly employees.	Varies by years of employment, and employee group. 2.75% general wage increases for TWU Local 100 MTA Bus hourly employees.
Actuarial assumptions:			
Discount Rate:	6.50%	6.50%	6.50%
Investment rate of return :	6.50%	6.50%	6.50%
Mortality:	Based on experience of all MTA sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021	Pre-retirement and post-retirement 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.	Pre-retirement and post-retirement 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.
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 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:	RP-2014 Disabled Annuitant mortality table for males and females.	RP-2014 Disabled Annuitant mortality table for males and females	RP-2014 Disabled Annuitant mortality table for males and females
Inflation/Railroad Retirement Wage Base:	2.25%; 3.25%	2.25%; 3.25%	2.25%; 3.25%
Cost-of-Living Adjustments:	60% of inflation assumption or 1.35%, if applicable.	60% of inflation assumption or 1.35%, if applicable.	60% of inflation assumption or 1.35%, if applicable.

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REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MTA Defined Benefit Plan (continued)		
Valuation Dates:	January 1, 2018	January 1, 2017	January 1, 2016
Measurement Date:	December 31, 2018	December 31, 2017	December 31, 2016
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 fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair 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. 3.5% for MTA Bus hourly employees.
Actuarial assumptions:			
Discount Rate:	7.00%	7.00%	7.00%
Investment rate of return :	7.00%	7.00%	7.00%
Mortality:	Pre-retirement and post-retirement 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.	Pre-retirement and post-retirement 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.	Pre-retirement and post-retirement 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.
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:	RP-2014 Disabled Annuitant mortality table for males and females	RP-2014 Disabled Annuitant mortality table for males and females	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%; 3.50%
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.

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REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

	MTA Defined Benefit Plan (continued)	
Valuation Dates:	January 1, 2015	January 1, 2014
Measurement Date:	December 31, 2015	December 31, 2014
Actuarial cost method:	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.
Asset Valuation Method:	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair value of assets.	Actuarial value equals fair value less unrecognized gains/losses over a 5-year period. Gains/losses are based on fair 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.
Actuarial assumptions:		
Discount Rate:	7.00%	7.00%
Investment rate of return :	7.00%	7.00%
Mortality:	Pre-retirement and post-retirement 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.	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. 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.
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.
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.
Inflation/Railroad Retirement Wage Base:	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.

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

	NYCERS Plan			
Valuation Dates:	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018
Measurement Date:	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019
Actuarial cost method:	Entry Age Normal Cost	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.	Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfunded.
Asset Valuation Method:	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.
Salary increases:	3% per annum.	3% per annum.	3% per annum.	3% per annum.
Actuarial assumptions:				
Discount Rate:	7.00%	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.	7.00%, net of investment expenses.
Mortality:	Tables adopted by the Boards of Trustees during Fiscal Year 2019. Applies mortality improvement scale MP-2020 published by the Society of Actuaries.	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 prepared by Bolton, Inc. dated June 2019 analyzed the four-year and ten-year periods ended June 30, 2017.	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 prepared by Bolton, Inc. dated June 2019 analyzed the four-year and ten-year periods ended June 30, 2017.	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 through 2013.
Pre-retirement:	N/A	N/A	N/A	N/A
Post-retirement Healthy Lives:	N/A	N/A	N/A	N/A
Post-retirement Disabled Lives:	N/A	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.50%	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.	1.5% per annum for Auto COLA and 2.5% per annum for Escalation.

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

	NYCERS Plan (continued)			
Valuation Dates:	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Measurement Date:	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015
Actuarial cost method:	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.	Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfunded.
Asset Valuation Method:	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.	Modified six-year moving average of fair values with a Market Value Restart as of June 30, 2011.
Salary increases:	3% per annum.	3% per annum.	3% per annum.	3% per annum.
Actuarial assumptions:				
Discount Rate:	7.00%	7.00%	7.00%	7.00%
Investment rate of return :	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 through 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 through 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 through 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 through 2013.
Pre-retirement:	N/A	N/A	N/A	N/A
Post-retirement Healthy Lives:	N/A	N/A	N/A	N/A
Post-retirement Disabled Lives:	N/A	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.50%	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.	1.5% per annum for Auto COLA and 2.5% per annum for Escalation.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

Notes to Schedule of the MTA’s Contributions for All Pension Plans

NYSLERS Plan					
Valuation Dates:	April 1, 2021	April 1, 2020	April 1, 2019	April 1, 2018	April 1, 2017
Measurement Date:	March 31, 2022	March 31, 2021	March 31, 2020	March 31, 2019	March 31, 2018
Actuarial cost method:	Aggregate Cost method	Aggregate 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.	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.	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:	4.4% in ERS, 6.2% in PFRS	4.40% in ERS; 6.20% in PFRS	4.20% in ERS; 5.00% in PFRS	3.80%	0.038
Actuarial assumptions:					
Discount Rate:	5.90%	5.90%	6.80%	7.00%	7.00%
Investment rate of return :	6.80%, net of investment expenses.	5.90%, net of investment expenses.	6.80%, net of investment expenses.	7.00%, net of investment expenses.	7.00%, net of investment expenses.
Mortality:	Annuitant mortality rates are based on April 1, 2015 – March 31, 2020 System experience with adjustments for mortality improvements based on the Society of Actuaries’ Scale MP-2020.	Annuitant mortality rates are based on NYSLERS’s 2015 experience study of the period April 1, 2015 through March 31, 2020 with adjustments for mortality improvements based on the Society of Actuaries’ Scale MP-2020.	Annuitant mortality rates are based on NYSLERS’s 2015 experience study of the period April 1, 2010 through March 31, 2015 with adjustments for mortality improvements based on the Society of Actuaries’ Scale MP-2018.	Annuitant mortality rates are based on NYSLERS’s 2015 experience study of the period April 1, 2010 through March 31, 2015 with adjustments for mortality improvements based on the Society of Actuaries’ Scale MP-2014.	Annuitant mortality rates are based on NYSLERS’s 2015 experience study of the period April 1, 2010 through March 31, 2015 with adjustments for mortality improvements based on the Society of Actuaries’ Scale MP-2014.
Pre-retirement:	N/A	N/A	N/A	N/A	N/A
Post-retirement Healthy Lives:	N/A	N/A	N/A	N/A	N/A
Post-retirement Disabled Lives:	N/A	N/A	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.70%	2.70%	2.50%	2.50%	2.50%
Cost-of-Living Adjustments:	1.3% per annum.	1.4% per annum.	1.3% per annum.	1.3% per annum.	1.3% per annum.

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

	NYSLERS Plan (continued)			
Valuation Dates:	April 1, 2016	April 1, 2016	April 1, 2015	April 1, 2014
Measurement Date:	March 31, 2017	March 31, 2017	March 31, 2016	March 31, 2015
Actuarial cost method:	Aggregate 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.	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.	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%	3.80%	4.90%
Actuarial assumptions:				
Discount Rate:	7.00%	7.00%	7.00%	7.50%
Investment rate of return :	7.00%, net of investment expenses.	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' 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' 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' 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' Scale MP-2014.
Pre-retirement:	N/A	N/A	N/A	N/A
Post-retirement Healthy Lives:	N/A	N/A	N/A	N/A
Post-retirement Disabled Lives:	N/A	N/A	N/A	N/A
Inflation/Railroad Retirement Wage Base:	2.50%	2.50%	2.50%	2.70%
Cost-of-Living Adjustments:	1.3% per annum.	1.3% per annum.	1.3% per annum.	1.4% per annum.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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 significant legislative changes in benefit for the June 30, 2021 valuation for the NYCERS plan.

There were no significant legislative changes in benefit for the April 1, 2021 valuation for the NYSLERS plan.

Changes of Assumptions:

There were no significant changes in the economic and demographic used in the June 30, 2021 valuation for the NYCERS plan.

There were no significant changes in the economic and demographic assumptions used in the April 1, 2021 valuation for the NYSLERS plan.

(A Component Unit of the State of New York)

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

Schedule of Changes in the MTA's Net OPEB Liability and Related Ratios and Notes to Schedule

(\$ in thousands)

Plan Measurement Date (December 31):	2021	2020	2019	2018	2017
Total OPEB liability:					
Service cost	\$ 1,250,950	\$ 1,097,051	\$ 928,573	\$ 1,002,930	\$ 884,548
Interest on total OPEB liability	535,642	610,160	840,532	734,968	731,405
Effect of plan changes		-	-	1,580	27,785
Effect of economic/demographic (gains) or losses	292,154	(43,890)	247,871	(19,401)	13,605
Effect of assumption changes or inputs	(738,829)	1,939,528	311,286	(1,800,135)	911,465
Benefit payments	(792,984)	(724,741)	(730,677)	(691,122)	(650,994)
Net change in total OPEB liability	546,933	2,878,108	1,597,585	(771,180)	
Total OPEB liability—beginning	24,409,581	21,531,473	19,933,888	20,705,068	
Total OPEB liability—ending (a)	24,956,514	24,409,581	21,531,473	19,933,888	
Plan fiduciary net position:					
Employer contributions	792,984	387,371	730,677	691,122	650,994
Net investment income	-	(77,118)	63,647	(18,916)	47,370
Benefit payments	(792,984)	(724,741)	(730,677)	(691,122)	(650,994)
Administrative expenses	(46)	(209)	(200)	(56)	-
Net change in plan fiduciary net position	(46)	(414,697)	63,447	(18,972)	47,370
Plan fiduciary net position—beginning	130	414,827	351,380	370,352	322,982
Plan fiduciary net position—ending (b)	84	130	414,827	351,380	370,352
	\$	\$	\$	\$	
Net OPEB liability—ending (a)-(b)	24,956,430	24,409,451	21,116,646	19,582,508	\$
Plan fiduciary net position as a percentage					
of the total OPEB liability	0.00%	0.00%	1.93%	1.76%	1.79%
Covered payroll	\$ 6,537,709	\$ 6,716,423	\$ 6,901,690	\$ 6,903,700	\$
Net OPEB liability as a percentage of covered payroll	381.73%	363.43%	305.96%	283.65%	376.96%

Notes to Schedule:

Changes of benefit terms:

In the July 1, 2021 actuarial valuation, there were no changes to the benefit terms.

Changes of assumptions:

In the July 1, 2021 actuarial valuation, there were updates to various healthcare assumptions including the per capita claim costs assumption and healthcare trend assumptions.

Note: This schedule is intended to show information for ten years. However, until a full 10-year trend has been compiled, information is presented only for the years for which the required supplementary information is available.

(A Component Unit of the State of New York)

**REQUIRED SUPPLEMENTARY
INFORMATION (UNAUDITED)**

Schedule of the MTA's Contributions to the OPEB Plan for the years ended December 31:

(\$ in thousands)	2022	2021	2020	2019	2018	2017
Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	N/A
Actual Employer Contribution (1)	\$ 846,299	\$ 813,195	\$ 391,529	\$ 737,297	\$ 691,122	\$ 650,994
Contribution Deficiency (Excess)	N/A	N/A	N/A	N/A	N/A	N/A
Covered Payroll	\$ 6,848,347	\$ 6,537,709	\$ 6,716,423	\$ 6,901,690	\$ 6,903,700	\$ 5,394,200
Actual Contribution as a Percentage of Covered Payroll	12.36%	12.44%	5.83%	10.68%	10.01%	12.07%

(1) Actual employer contribution includes the implicit rate of subsidy adjustment of \$52,933 and \$62,852 for the years ended December 31, 2021 and 2020, respectively.

Note: This schedule is intended to show information for ten years. However, until a full 10-year trend has been compiled, information is presented only for the years for which the required supplementary information is available.

(A Component Unit of the State of New York)
**REQUIRED
SUPPLEMENTARY
INFORMATION
(UNAUDITED)**
Notes to Schedule of the MTA's Contributions to the OPEB Plan:

Valuation date	July 1, 2021	July 1, 2019	July 1, 2019	July 1, 2017	July 1, 2017
Measurement date	December 31, 2021	December 31, 2020	December 31, 2019	December 31, 2018	December 31, 2017
Discount rate	2.06%, net of expenses	2.12%, net of expenses	2.74%, net of expenses	4.10%, net of expenses	3.44%, net of expenses
Inflation	2.30%	2.25%	2.25%	2.50%	2.50%
Actuarial cost method	Entry Age Normal Level percentage of payroll				
Amortization method	4.25%	4.25%	4.50%	4.50%	4.50%
Normal cost increase factor	2.06%	2.12%	5.75%	6.50%	6.50%
Investment rate of return	3%. Varies by years of service and differs for members of the various pension plans.	3%. Varies by years of service and differs for members of the various pension plans.	3%. Varies by years of service and differs for members of the various pension plans.	3%. Varies by years of service and differs for members of the various pension plans.	3%. Varies by years of service and differs for members of the various pension plans.
Salary increases					

Note: This schedule is intended to show information for ten years. However, until a full 10-year trend has been compiled, information is presented only for the years for which the required supplementary information is available.

(A Component Unit of the State of New York)
SUPPLEMENTARY INFORMATION
Pension And Other Employee Benefit Trust Funds
Combining Statement of Fiduciary Net Position as of December 31, 2022

(\$ in thousands)	Pension Funds		Other Employee Benefit Trust Fund		Total
	Defined Benefit Pension Plan	LIRR Company Plan for Additional Pensions	MaBSTOA Plan	Other Post-employment Benefits Plan	
ASSETS:					
Cash	\$ 6,594	\$ 696	\$ 3,695	\$ -	\$ 10,985
Receivables:					
Employee loans	-	-	26,521	-	26,521
Investment securities sold	-	175	1,635	-	1,810
Accrued interest and dividends	3,786	400	1,787	38	6,011
Other receivables	2,657	23	-	-	2,680
Total receivables	6,443	598	29,943	38	37,022
Investments at fair value	5,366,950	652,011	3,289,326	11,698	9,319,985
Total assets	\$ 5,379,987	\$ 653,305	\$ 3,322,964	\$ 11,736	\$ 9,367,992
LIABILITIES:					
Accounts payable and accrued liabilities	\$ 5,607	\$ 238	\$ 474	\$ -	\$ 6,319
Payable for investment securities purchased	5,789	611	3,592	-	9,992
Accrued benefits payable	-	-	75	1	76
Accrued postretirement death benefits (PRDB) payable	-	-	5,719	-	5,719
Accrued 55/25 Additional Members Contribution (AMC) payable	-	-	2,527	-	2,527
Other liabilities	557	59	466	-	1,082
Total liabilities	11,953	908	12,853	1	25,715
NET POSITION:					
Restricted for pensions	5,368,034	652,397	3,310,111	-	9,330,542
Restricted for postemployment benefits other than pensions	-	-	-	11,735	11,735
Total net position	5,368,034	652,397	3,310,111	11,735	9,342,277
Total liabilities and net position	\$ 5,379,987	\$ 653,305	\$ 3,322,964	\$ 11,736	\$ 9,367,992

See Independent Auditor's Report and notes to the consolidated financial statements.

(A Component Unit of the State of New York)
SUPPLEMENTARY INFORMATION
Pension And Other Employee Benefit Trust Funds
Combining Statement of Fiduciary Net Position as of December 31, 2021

(\$ in thousands)	Pension Funds		Other Employee Benefit Trust Fund	Total
	Defined Benefit Pension Plan	LIRR Company Plan for Additional Pensions		
ASSETS:				
Cash	\$ 24,495	\$ 2,956	\$ 11,821	\$ 39,379
Receivables:				
Employee loans	-	-	26,082	26,082
Participant and union contributions	-	(20)	-	(20)
Investment securities sold	-	139	5,532	5,671
Accrued interest and dividends	2,798	338	1,746	4,882
Other receivables	2,412	1,358	-	3,770
Total receivables	5,210	1,815	33,360	40,385
Investments at fair value	5,739,559	773,997	3,630,953	10,144,509
Total assets	\$ 5,769,264	\$ 778,768	\$ 3,676,134	\$ 10,224,273
LIABILITIES:				
Accounts payable and accrued liabilities	\$ 6,471	\$ 279	\$ 1,565	\$ 8,315
Payable for investment securities purchased	8,155	984	5,620	14,759
Accrued benefits payable	-	-	50	74
Accrued postretirement death benefits (PRDB) payable	-	-	5,405	5,405
Accrued 55/25 Additional Members Contribution (AMC) payable	-	-	3,847	3,847
Other liabilities	1,509	182	1,296	2,987
Total liabilities	16,135	1,445	17,783	35,387
NET POSITION:				
Restricted for pensions	5,753,129	777,323	3,658,351	10,188,803
Restricted for postemployment benefits other than pensions	-	-	-	83
Total net position	5,753,129	777,323	3,658,351	10,188,886
Total liabilities and net position	\$ 5,769,264	\$ 778,768	\$ 3,676,134	\$ 10,224,273

See Independent Auditor's Report and notes to the consolidated financial statements.

(A Component Unit of the State of New York)
SUPPLEMENTARY INFORMATION
Pension And Other Employee Benefit Trust Funds
Combining Statement of Changes in Fiduciary Net Position for the year ended December 31, 2022

(\$ in thousands)	Pension Funds		Other Employee Benefit Trust Fund		Total
	Defined Benefit Pension Plan	LIRR Additional Plan	MaBSTOA Plan	Other Post-employment Benefit Plan	
ADDITIONS:					
Contributions:					
Employer contributions	\$ 400,648	\$ 70,764	\$ 158,618	\$ 788,310	\$ 1,418,340
Implicit rate subsidy contribution	-	-	-	57,989	57,989
Member contributions	34,471	50	25,548	-	60,069
Total contributions	435,119	70,814	184,166	846,299	1,536,398
Investment income:					
Net (depreciation) / appreciation in fair value of investments	(520,371)	(56,789)	(307,355)	11,671	(872,844)
Dividend income	72,743	8,067	45,924	3	126,737
Interest income	16,505	1,773	10,719	154	29,151
Less: Investment expenses	32,900	4,266	22,915	-	60,081
Investment income, net	(464,023)	(51,215)	(273,627)	11,828	(777,037)
Total additions	(28,904)	19,599	(89,461)	858,127	759,361
DEDUCTIONS:					
Benefit payments and withdrawals	351,857	143,764	257,973	788,310	1,541,904
Implicit rate subsidy payments	-	-	-	57,989	57,989
Administrative expenses	4,334	761	806	176	6,077
Total deductions	356,191	144,525	258,779	846,475	1,605,970
Net increase (decrease) in fiduciary net position	(385,095)	(124,926)	(348,240)	11,652	(846,609)
NET POSITION:					
Restricted for Benefits:					
Beginning of year	5,753,129	777,323	3,658,351	83	10,188,886
End of year	\$ 5,368,034	\$ 652,397	\$ 3,310,111	\$ 11,735	\$ 9,342,277

See Independent Auditor's Report and notes to the consolidated financial statements.

(A Component Unit of the State of New York)
SUPPLEMENTARY INFORMATION
Pension And Other Employee Benefit Trust Funds
Combining Statement of Changes in Fiduciary Net Position for the year ended December 31, 2021

	Pension Funds			Other Employee Benefit Trust Fund	Total
	Defined Benefit Pension Plan	LIRR Additional Plan	MaBSTOA Plan		
(\$ in thousands)					
ADDITIONS:					
Contributions:					
Employer contributions	\$ 396,144	\$ 70,553	\$ 156,204	\$ 740,051	\$ 1,362,952
Implicit rate subsidy contribution	-	-	-	52,933	52,933
Member contributions	33,832	73	24,935	-	58,840
Total contributions	429,976	70,626	181,139	792,984	1,474,725
Investment income:					
Net appreciation in fair value of investments	618,496	93,218	401,056	-	1,112,770
Dividend income	64,476	8,131	42,762	-	115,369
Interest income	10,895	1,361	8,197	-	20,453
Less: Investment expenses	47,492	6,495	31,205	-	85,192
Investment income, net	646,375	96,215	420,810	-	1,163,400
Total additions	1,076,351	166,841	601,949	792,984	2,638,125
DEDUCTIONS:					
Benefit payments and withdrawals	324,999	148,630	243,251	740,051	1,456,931
Implicit rate subsidy payments	-	-	-	52,933	52,933
Transfer to other plans	474	-	-	-	474
Distribution to participants	-	-	2,175	-	2,175
Administrative expenses	3,513	610	264	47	4,434
Total deductions	328,986	149,240	245,690	793,031	1,516,947
Net increase in fiduciary net position	747,365	17,601	356,259	(47)	1,121,178
NET POSITION:					
Restricted for Benefits:					
Beginning of year	5,005,764	759,722	3,302,092	130	9,067,708
End of year	5,753,129	777,323	3,658,351	83	10,188,886

See Independent Auditor's Report and notes to the consolidated financial statements.

(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 MARCH 31, 2023**

(\$ in millions)

Category	Financial Plan Actual	Statement GAAP Actual	Variance
REVENUE:			
Farebox revenue	\$ 1,025	\$ 1,062	\$ 37
Vehicle toll revenue	517	553	36
Other operating revenue	211	149	(62)
Total revenue	1,753	1,764	11
OPERATING EXPENSES:			
Labor:			
Payroll	1,441	1,387	(54)
Overtime	221	269	48
Health and welfare	415	380	(35)
Pensions	339	357	18
Other fringe benefits	265	257	(8)
Postemployment benefits	209	199	(10)
Reimbursable overhead	(112)	(118)	(6)
Total labor expenses	2,778	2,731	(47)
Non-labor:			
Electric power	168	158	(10)
Fuel	67	65	(2)
Insurance	15	9	(6)
Claims	112	97	(15)
Paratransit service contracts	115	120	5
Maintenance and other operating contracts	225	171	(54)
Professional service contract	143	145	2
Pollution remediation project costs	-	5	5
Materials and supplies	169	167	(2)
Other business expenses	56	65	9
Total non-labor expenses	1,070	1,002	(68)
Depreciation and amortization	805	856	51
Other Expenses Adjustment	1	-	(1)
Total operating expenses	4,654	4,589	(65)
NET OPERATING LOSS	\$ (2,901)	\$ (2,825)	\$ 76

(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 MARCH 31, 2023
(\$ in millions)**

Accrued Subsidies	Financial Plan	Financial Statement	Variance	
	Actual	GAAP Actual		
Mass transit trust fund subsidies	143	122	(21)	{1}
Mortgage recording tax 1 and 2	159	92	(67)	{1}
MRT transfer		(1)	(1)	{1}
Urban tax	125	101	(24)	{1}
State and local operating assistance	56	7	(49)	{1}
Station maintenance	46	48	2	{1}
Connecticut Department of Transportation (CDOT)	67	77	10	{1}
Subsidy from New York City for MTA Bus and SIRTOA	143	172	29	{1}
Build American Bonds Subsidy	-	2	2	{1}
Mobility tax	479	572	93	{1}
Assistance Fund (For hire vehicle)	85	86	1	{1}
Real Property Transfer Tax Surcharge (Mansion Tax)	78	77	(1)	{1}
Internet Marketplace Tax	82	88	6	{1}
Transfer to Central Business District Capital Lockbox	(160)	-	160	{1}
Other non-operating income	-	113	113	{2}
Total accrued subsidies	1,303	1,556	253	
Net operating deficit before subsidies and debt service	(2,901)	(2,825)	76	
Debt Service	(818)	(507)	311	
Conversion to Cash basis: Pollution & Remediation	1	-	(1)	
Total net operating surplus/(deficit) before appropriations, grants and other receipts restricted for capital projects	\$ (2,415)	\$ (1,776)	\$ 639	

{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 fair value.

{3} Timing of receipt in the Financial Plan.

(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 MARCH 31, 2023
(\$ in millions)**

Financial Plan Actual Operating Loss at March 31, 2023	\$ (2,901)
The Financial Plan Actual Includes:	
1 Lower Other operating revenue	11
2 Higher labor expense primarily from higher payroll expense projections	47
3 Higher non-labor expense primarily from higher professional service contract expense	68
4 Other expense adjustments	<u>(50)</u>
Total operating reconciling items	<u>76</u>
Financial Statements Operating Loss at March 31, 2023	<u>(2,825)</u>
Financial Plan Deficit after Subsidies and Debt Service	(2,415)
The Audited Financial Statements Includes:	
1 Debt service bond principal payments	311
2 Adjustments for non-cash liabilities:	
Other non-cash liability adjustment	<u>(1)</u> (1)
The Financial Statement includes:	
3 Higher subsidies and other non-operating revenues and expenses	253
4 Total operating reconciling items (from above)	<u>76</u>
Financial Statement Loss Before Capital Appropriations	<u>\$ (1,776)</u>

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Metropolitan Transportation Authority Deferred Compensation Program

(A Fiduciary Component Unit of the Metropolitan
Transportation Authority)

Financial Statements as of and for the
Years Ended December 31, 2022 and 2021, and
Independent Auditor's Report

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METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR’S REPORT	1-2
MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)	3-19
FINANCIAL STATEMENTS	
Statements of Fiduciary Net Position as of December 31, 2022 and 2021	20
Statements of Changes in Fiduciary Net Position for the Year Ended December 31, 2022 and 2021	21
Notes to Financial Statements	22-43

INDEPENDENT AUDITOR'S REPORT

To the Committee of the
Metropolitan Transportation Authority Deferred Compensation Program

Opinion

We have audited each of the accompanying statements of fiduciary 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 "401(k) Plan"), (collectively the "Plans") as of December 31, 2022 and 2021, and each of the related statements of changes in fiduciary 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our

opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

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 19 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.

July 17, 2023

METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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, 2022 and 2021. 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 20.

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 Fiduciary 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 Fiduciary 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 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 \$3.540 billion and the assets of the 401(k) Plan exceeded its liabilities by \$4.941 billion as of December 31, 2022. This net position restricted for benefits is held in trust for distribution to the Plans participants and/or beneficiaries. During 2022, the net positions held in trust for the 457 Plan and the 401(k) Plan decreased by \$452.7 million and \$629.6 million, respectively, due primarily to net decrease in investment income to the plans.

The assets of the 457 Plan exceeded its liabilities by \$3.993 billion and the assets of the 401(k) Plan exceeded its liabilities by \$5.571 billion as of December 31, 2021. This net position restricted for benefits is held in trust for distribution to the Plans participants and/or beneficiaries. During 2021, the net positions held in trust for the 457 Plan and the 401(k) Plan increased by \$445.9 million and \$637.0 million, respectively, due primarily to net increase in investment income to the plans.

Deductions from the Plans' net position consist primarily of distributions to participant and transfers to other plans, and plan expenses in the amounts of \$220.482 million and \$193.903 million for the 457 Plan and \$296.963 million and \$277.047 million for the 401(k) Plan for the years ended December 31, 2022 and 2021.

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

457 Plan

				Amount of Change		Percentage Change	
	2022	2021	2020	(2022 - 2021)	(2021 - 2020)	(2022 - 2021)	(2021 - 2020)
ASSETS:							
Investments	\$ 3,462,358	\$ 3,916,332	\$ 3,469,102	\$(453,974)	\$ 447,230	(11.6)%	12.9 %
Participant loans receivable	79,829	78,188	78,273	1,641	(85)	2.1	(0.1)
Total assets	3,542,187	3,994,520	3,547,375	(452,333)	447,145	(11.3)	12.6
LIABILITIES:							
Administrative expense reimbursement	1,946	1,557	298	389	1,259	25.0	422.5
Total liabilities	1,946	1,557	298	389	1,259	25.0	422.5
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
	\$ 3,540,241	\$ 3,992,963	\$ 3,547,077	\$(452,722)	\$ 445,886	(11.3)%	12.6 %

401(k) Plan

				Amount of Change		Percentage Change	
	2022	2021	2020	(2022 - 2021)	(2021 - 2020)	(2022 - 2021)	(2021 - 2020)
ASSETS:							
Investments	\$ 4,780,089	\$ 5,413,112	\$ 4,772,163	\$(633,023)	\$ 640,949	(11.7)%	13.4 %
Participant loans receivable	162,609	159,285	162,496	3,324	(3,211)	2.1	(2.0)
Total assets	4,942,698	5,572,397	4,934,659	(629,699)	637,738	(11.3)	12.9
LIABILITIES:							
Administrative expense reimbursement	1,568	1,651	877	(83)	774	(5.0)	88.3
Total liabilities	1,568	1,651	877	(83)	774	(5.0)	88.3
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
	\$ 4,941,130	\$ 5,570,746	\$ 4,933,782	\$(629,616)	\$ 636,964	(11.3)%	12.9 %

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

457 Plan

				Amount of Change		Percentage Change	
	2022	2021	2020	(2022 - 2021)	(2021 - 2020)	(2022 - 2021)	(2021 - 2020)
ADDITIONS:							
Investment income/(loss)	\$ (468,018)	\$ 406,887	\$ 389,523	\$ (874,905)	\$ 17,364	(215.0)%	4.5 %
Contributions and additional deposits	231,990	228,918	219,322	3,072	9,596	1.3	4.4
Loan repayments - interest	3,788	3,984	4,615	(196)	(631)	(4.9)	(13.7)
Total additions	(232,240)	639,789	613,460	(872,029)	26,329	(136.3)	4.3
DEDUCTIONS:							
Distribution to participants	103,238	96,758	207,389	6,480	(110,631)	6.7	(53.3)
Transfers to other plans	110,373	91,464	73,609	18,909	17,855	20.7	24.3
Net participant loan activity	3,633	3,323	3,862	310	(539)	9.3	(13.9)
Other	3,238	2,358	785	880	1,573	37.3	200.4
Total deductions	220,482	193,903	285,645	26,579	(91,742)	13.7	(32.1)
Increase/(decrease) in net position	(452,722)	445,886	327,815	(898,608)	118,071	(201.5)	36.0
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
Beginning of year	3,992,963	3,547,077	3,219,262	445,886	327,815	12.6	10.2
End of year	\$ 3,540,241	\$ 3,992,963	\$ 3,547,077	\$ (452,722)	\$ 445,886	(11.3)%	12.6 %

401(k) Plan

				Amount of Change		Percentage Change	
	2022	2021	2020	(2022 - 2021)	(2021 - 2020)	(2022 - 2021)	(2021 - 2020)
ADDITIONS:							
Investment Income/(loss)	\$ (674,552)	\$ 580,914	\$ 555,751	\$ (1,255,466)	\$ 25,163	(216.1)%	4.5 %
Contributions and additional deposits	334,139	324,880	312,923	9,259	11,957	2.9	3.8
Loan repayments - interest	7,760	8,217	9,382	(457)	(1,165)	(5.6)	(12.4)
Total additions	(332,653)	914,011	878,056	(1,246,664)	35,955	(136.4)	4.1
DEDUCTIONS:							
Distribution to participants	141,811	125,410	312,540	16,401	(187,130)	13.1	(59.9)
Transfers to other plans	147,251	144,048	114,052	3,203	29,996	2.2	26.3
Net participant loan activity	5,166	4,910	4,557	256	353	5.2	7.7
Other	2,735	2,679	3,099	56	(420)	2.1	(13.6)
Total deductions	296,963	277,047	434,248	19,916	(157,201)	7.2	(36.2)
Increase/(decrease) in net position	(629,616)	636,964	443,808	(1,266,580)	193,156	(198.8)	43.5
TOTAL NET POSITION RESTRICTED FOR BENEFITS							
Beginning of year	5,570,746	4,933,782	4,489,974	636,964	443,808	12.9	9.9
End of year	\$ 4,941,130	\$ 5,570,746	\$ 4,933,782	\$ (629,616)	\$ 636,964	(11.3)%	12.9 %

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Investment Options

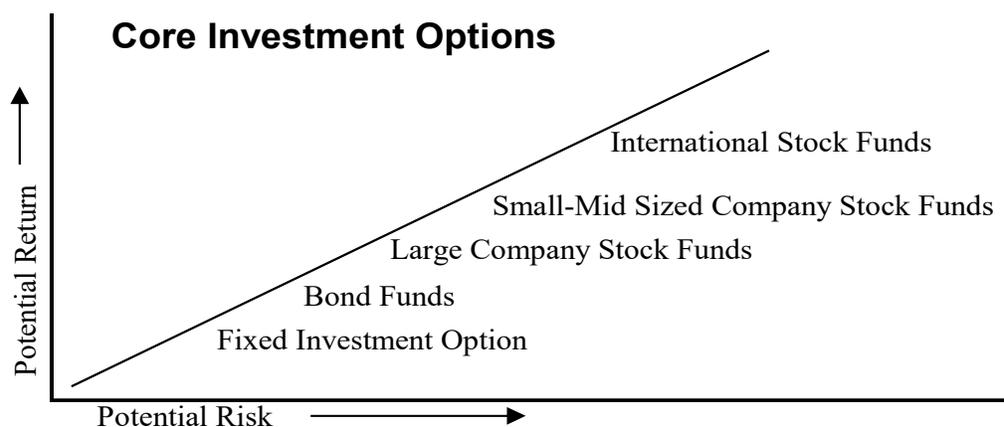
The MTA Plans offer eleven (11) Target-Year Lifecycle Funds, which provide a diversified mix of certain of the Plans' investment options and allow a participant to choose the fund closest to their anticipated withdrawal date. The Target-Year Lifecycle Funds are designed to provide an asset allocation 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 2020 Fund	Large Cap 14.60% Small - Mid Cap 3.50% Intl Equity 12.50% Fixed Income 16.00% Real Asset 10.90% Stable Value 42.50%	MTA Large Cap Equity Index Fund 9.70% MTA Large Cap Equity Fund 4.90% MTA Small-Mid Cap Equity Fund 3.50% MTA International Equity Fund 12.50% MTA Bond Fund 16.00% MTA Real Asset Fund 10.90% MTA Stable Value Fund 42.50%
MTA Target-Year Lifecycle 2025 Fund	Large Cap 20.60% Small - Mid Cap 4.90% Intl Equity 17.40% Fixed Income 18.20% Real Asset 8.60% Stable Value 30.30%	MTA Large Cap Equity Index Fund 13.40% MTA Large Cap Equity Fund 7.20% MTA Small-Mid Cap Equity Fund 4.90% MTA International Equity Fund 17.40% MTA Bond Fund 18.20% MTA Real Asset Fund 8.60% MTA Stable Value Fund 30.30%
MTA Target-Year Lifecycle 2030 Fund	Large Cap 27.20% Small - Mid Cap 6.80% Intl Equity 23.20% Fixed Income 17.30% Real Asset 6.10% Stable Value 19.40%	MTA Large Cap Equity Index Fund 17.10% MTA Large Cap Equity Fund 10.10% MTA Small-Mid Cap Equity Fund 6.80% MTA International Equity Fund 23.20% MTA Bond Fund 17.30% MTA Real Asset Fund 6.10% MTA Stable Value Fund 19.40%
MTA Target-Year Lifecycle 2035 Fund	Large Cap 32.30% Small - Mid Cap 10.00% Intl Equity 28.50% Fixed Income 14.50% Real Asset 5.00% Stable Value 9.70%	MTA Large Cap Equity Index Fund 19.60% MTA Large Cap Equity Fund 12.70% MTA Small-Mid Cap Equity Fund 10.00% MTA International Equity Fund 28.50% MTA Bond Fund 14.50% MTA Real Asset Fund 5.00% MTA Stable Value Fund 9.70%
MTA Target-Year Lifecycle 2040 Fund	Large Cap 34.30% Small - Mid Cap 13.30% Intl Equity 32.10% Fixed Income 12.50% Real Asset 5.00% Stable Value 2.80%	MTA Large Cap Equity Index Fund 19.10% MTA Large Cap Equity Fund 15.20% MTA Small-Mid Cap Equity Fund 13.30% MTA International Equity Fund 32.10% MTA Bond Fund 12.50% MTA Real Asset Fund 5.00% MTA Stable Value Fund 2.80%

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<u>Fund Name</u>	<u>Asset Class</u>	<u>Portfolio Allocations</u>
MTA Target-Year Lifecycle 2045 Fund	Large Cap 35.60% Small - Mid Cap 15.10% Intl Equity 34.00% Fixed Income 10.30% Real Asset 5.00%	MTA Large Cap Equity Index Fund 16.70% MTA Large Cap Equity Fund 18.90% MTA Small-Mid Cap Equity Fund 15.10% MTA International Equity Fund 34.00% MTA Bond Fund 10.30% MTA Real Asset Fund 5.00%
MTA Target-Year Lifecycle 2050 Fund	Large Cap 36.80% Small - Mid Cap 15.70% Intl Equity 35.40% Fixed Income 7.10% Real Asset 5.00%	MTA Large Cap Equity Index Fund 15.00% MTA Large Cap Equity Fund 21.80% MTA Small-Mid Cap Equity Fund 15.70% MTA International Equity Fund 35.40% MTA Bond Fund 7.10% MTA Real Asset Fund 5.00%
MTA Target-Year Lifecycle 2055 Fund	Large Cap 37.40% Small - Mid Cap 16.00% Intl Equity 35.60% Fixed Income 6.00% Real Asset 5.00%	MTA Large Cap Equity Index Fund 13.40% MTA Large Cap Equity Fund 24.00% MTA Small-Mid Cap Equity Fund 16.00% MTA International Equity Fund 35.60% MTA Bond Fund 6.00% MTA Real Asset Fund 5.00%
MTA Target-Year Lifecycle 2060 Fund	Large Cap 37.40% Small - Mid Cap 16.00% Intl Equity 35.60% Fixed Income 6.00% Real Asset 5.00%	MTA Large Cap Equity Index Fund 12.50% MTA Large Cap Equity Fund 24.90% MTA Small-Mid Cap Equity Fund 16.00% MTA International Equity Fund 35.60% MTA Bond Fund 6.00% MTA Real Asset Fund 5.00%
MTA Target-Year Lifecycle 2065 Fund	Large Cap 37.40% Small - Mid Cap 16.00% Intl Equity 35.60% Fixed Income 6.00% Real Asset 5.00%	MTA Large Cap Equity Index Fund 12.50% MTA Large Cap Equity Fund 24.90% MTA Small-Mid Cap Equity Fund 16.00% MTA International Equity Fund 35.60% MTA Bond Fund 6.00% MTA Real Asset Fund 5.00%
MTA Income Fund	Large Cap 11.70% Small - Mid Cap 2.60% Intl Equity 9.50% Fixed Income 13.20% Real Asset 12.00% Stable Value 51.00%	MTA Large Cap Equity Index Fund 7.80% MTA Large Cap Equity Fund 3.90% MTA Small-Mid Cap Equity Fund 2.60% MTA International Equity Fund 9.50% MTA Bond Fund 13.20% MTA Real Asset Fund 12.00% MTA Stable Value Fund 51.00%

In addition to the eleven Target-Year lifecycle funds, the Plans offer a spectrum of investment options that include two international funds, four small-mid company stock funds, two large company stock funds, three 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 Equity 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. The fund seeks to provide long-term growth of capital.
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 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. The 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 Growth) - 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 employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. It 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 Fund 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 Fund 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 or C.I.T.). The Fund seeks an investment return that approximates, as closely as practicable, 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 fund 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 Trust 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. WTC CIF II World Bond Portfolio** (Fixed Income) - The Collective Investment Trust Fund is sub-advised by Wellington Management Company, LLP. The portfolio seeks to generate consistent total returns over a full market cycle. The 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.

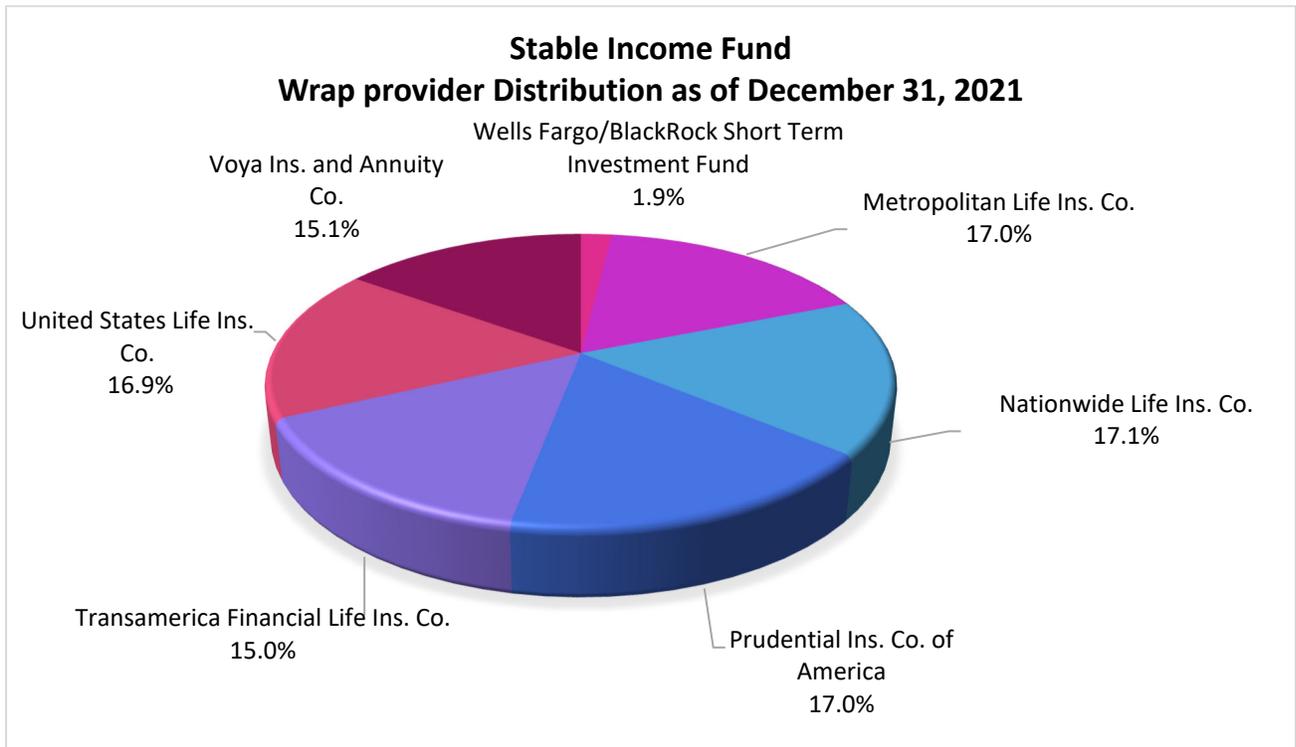
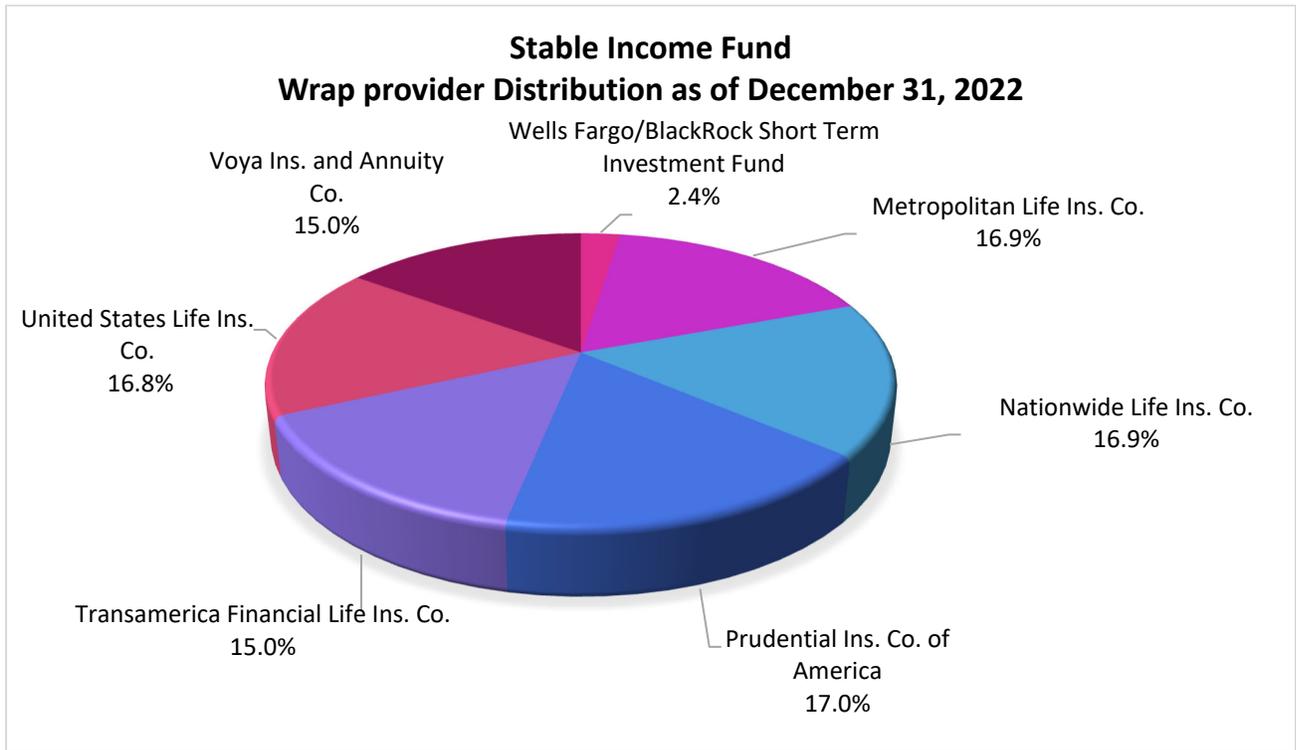
Stable Value Option

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 and 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, 2022 and 2021.



*The Wells Fargo Stable Return Fund W and Wells Fargo/BlackRock STIF are not a part of the wrapped portfolio.

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, 2022

Stable Value

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Stable Value	0.6%	1.9%	2.0%	2.2%	2.1%
Galliard 3YrCMT+50bps	1.2%	3.6%	1.8%	2.2%	2.1%

Fixed Income

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA U.S. Bond Index Fund	1.7%	-13.2%	-2.8%	0.0%	0.8%
Blmbg. U.S. Aggregate	1.9%	-13.0%	-2.7%	0.0%	0.9%
Loomis Sayles Core Plus Bond Fund	2.1%	-12.6%	-1.3%	1.0%	2.4%
Blmbg. U.S. Aggregate	1.9%	-13.0%	-2.7%	0.0%	0.9%
TCW MetWest Core Plus Fixed Income	1.9%	-14.2%	-2.3%	0.4%	1.2%
Blmbg. U.S. Aggregate	1.9%	-13.0%	-2.7%	0.0%	0.9%
Wellington World Bond Fund	2.6%	-3.2%	-0.8%	1.0%	1.3%
FTSE World Government Bond Index	3.8%	-18.3%	-5.7%	-2.5%	-0.6%

Domestic Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
Vanguard Institutional 500 Index Trust	7.6%	-18.1%	7.7%	9.4%	11.5%
S&P 500	7.6%	-18.1%	7.7%	9.4%	11.5%
T. Rowe Price Large Cap Value Fund (Prudential Separate Account)	12.2%	-4.4%	7.7%	7.6%	10.1%
Russell 1000 Value Index	12.4%	-7.5%	6.0%	6.7%	9.1%
Jennison Large Cap Growth (Prudential Separate Account)	-1.3%	-38.8%	3.9%	8.1%	10.6%
Russell 1000 Growth Index	2.2%	-29.1%	7.8%	11.0%	12.9%
SSgA Small/Mid Cap Index Fund	4.9%	-25.5%	3.6%	5.3%	8.6%
Russell Small Cap Completeness Index	4.8%	-25.5%	3.7%	5.3%	8.7%
AB US SMID Cap Value Equity (Separate Account)	9.3%	-15.5%	6.2%	4.2%	NA
Russell 2500 Value Index	9.2%	-13.1%	5.2%	4.8%	8.3%
DFA US Targeted Value Fund (MTA)	12.6%	-4.6%	11.2%	7.0%	NA
Russell 2500 Value Index	9.2%	-13.1%	5.2%	4.8%	8.3%
William Blair SMID Growth (Separate Account)	9.1%	-22.3%	4.2%	7.9%	NA
Russell 2500 Growth Index	4.7%	-26.2%	2.9%	6.0%	9.0%

Performance Summary

Year ended December 31, 2022 (continued)

International Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA MSCI ACWI ex-U.S. IMI Index Fund	14.7%	-16.3%	0.4%	1.0%	5.1%
MSCI AC Wld ex US IMI (Net)	14.1%	-16.6%	0.2%	0.8%	4.8%
William Blair Institutional International Growth All Cap (Separate Account)	11.8%	-28.8%	1.5%	2.6%	5.4%
MSCI AC Wld Index ex USA.IMI Growth (Net)	12.7%	-23.5%	-0.3%	1.4%	5.1%
Mondrian ACWI ex US	16.5%	-11.7%	-2.0%	-0.5%	NA
MSCI AC Wld ex USA Value (Net)	15.7%	-8.6%	0.1%	-0.1%	4.2%

Diversified Inflation

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA Real Asset Fund	7.1%	3.1%	8.8%	6.3%	7.7%
SSgA Custom Real Asset Index	7.1%	3.1%	8.6%	6.3%	7.7%

Lifecycle

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Income	3.9%	-4.7%	3.5%	3.7%	4.4%
MTA Income Composite Index	4.1%	-3.7%	2.9%	3.4%	4.2%
MTA 2020	4.6%	-7.1%	3.7%	4.1%	5.3%
MTA 2020 Composite Index	4.7%	-6.2%	3.0%	3.7%	5.1%
MTA 2025	5.6%	-10.0%	3.7%	4.3%	5.9%
MTA 2025 Composite Index	5.6%	-9.0%	3.7%	4.3%	5.7%
MTA 2030	6.9%	-13.2%	3.7%	4.5%	6.3%
MTA 2030 Composite Index	6.8%	-11.9%	3.0%	4.0%	6.2%
MTA 2035	8.1%	-15.6%	3.8%	4.7%	6.6%
MTA 2035 Composite Index	7.9%	-14.1%	3.3%	4.2%	6.6%
MTA 2040	9.0%	-17.2%	3.7%	4.6%	6.9%
MTA 2040 Composite Index	8.7%	-15.5%	3.3%	4.2%	7.0%
MTA 2045	9.4%	-18.0%	3.6%	4.6%	7.1%
MTA 2045 Composite Index	9.1%	-16.0%	3.3%	4.2%	7.2%
MTA 2050	9.6%	-18.4%	3.7%	4.6%	7.1%
MTA 2050 Composite Index	9.4%	-16.2%	3.4%	4.3%	7.3%
MTA 2055	9.6%	-18.6%	3.6%	4.6%	7.1%
MTA 2055 Composite Index	9.5%	-16.2%	3.4%	4.3%	7.3%
MTA 2060	9.6%	-18.6%	3.6%	4.6%	NA
MTA 2060 Composite Index	9.5%	-16.2%	3.4%	4.3%	7.2%
MTA 2065	9.6%	-18.6%	3.6%	4.6%	NA
MTA 2065 Composite Index	9.5%	-16.2%	3.4%	4.3%	7.2%

Performance Summary

Year ended December 31, 2021

Stable Value

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Stable Value	0.4%	1.8%	2.2%	2.2%	2.1%
Galliard 3YrCMT+50bps	0.3%	1.0%	1.5%	1.9%	1.8%

Fixed Income

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA U.S. Bond Index Fund	0.0%	-1.7%	4.8%	3.6%	3.0%
Blmbg. U.S. Aggregate	0.0%	-1.5%	4.8%	3.6%	3.0%
Loomis Sayles Core Plus Bond Fund	-0.2%	-1.1%	6.4%	4.8%	NA
Blmbg. U.S. Aggregate	0.0%	-1.5%	4.8%	3.6%	3.0%
TCW MetWest Core Plus Fixed Income	-0.1%	-1.0%	4.9%	4.3%	NA
Blmbg. U.S. Aggregate	0.0%	-1.5%	4.8%	3.6%	3.0%
Wellington World Bond Fund	-0.8%	-0.8%	1.7%	2.4%	NA
FTSE World Government Bond Index	-1.1%	-7.0%	2.7%	2.9%	1.8%

Domestic Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
Vanguard Institutional 500 Index Trust	11.0%	28.7%	26.1%	18.5%	14.9%
S&P 500	11.0%	28.7%	26.1%	18.5%	14.9%
T. Rowe Price Large Cap Value Fund (Prudential Separate Account)	7.0%	26.1%	18.4%	12.0%	10.3%
Russell 1000 Value Index	7.0%	25.2%	17.6%	11.2%	9.7%
Jennison Large Cap Growth (Prudential Separate Account)	4.2%	15.7%	34.8%	26.9%	20.4%
Russell 1000 Growth Index	11.6%	27.6%	34.1%	25.3%	19.6%
SSgA Small/Mid Cap Index Fund	1.3%	12.6%	24.1%	15.5%	12.7%
Russell Small Cap Completeness Index	1.3%	12.6%	24.2%	15.5%	12.8%
AB US SMID Cap Value Equity (Separate Account)	7.8%	36.2%	19.5%	NA	NA
Russell 2500 Value Index	6.4%	27.8%	18.3%	9.9%	9.6%
DFA US Targeted Value Fund (MTA)	7.1%	38.8%	20.5%	NA	NA
Russell 2500 Value Index	6.4%	27.8%	18.3%	9.9%	9.6%
William Blair SMID Growth (Separate Account)	1.6%	9.1%	24.2%	NA	NA
Russell 2500 Growth Index	0.2%	5.0%	25.1%	17.7%	13.8%
Jackson Square SMID Cap Growth Focus (Separate Account)	-9.0%	-12.0%	23.9%	NA	NA
Russell 2500 Growth Index	0.2%	5.0%	25.1%	17.7%	13.8%

Performance Summary

Year ended December 31, 2021 (continued)

International Equity

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA MSCI ACWI ex-U.S. IMI Index Fund	2.1%	8.7%	13.8%	10.0%	7.1%
MSCI AC Wld ex US IMI (Net)	1.6%	8.5%	13.6%	9.8%	6.9%
William Blair Institutional International Growth All Cap (Separate Account)	2.5%	12.7%	24.4%	15.8%	10.6%
MSCI AC Wld Index ex USA.IMI Growth (Net)	2.1%	6.0%	18.1%	13.1%	9.2%
Mondrian ACWI ex US	0.3%	6.2%	7.9%	6.2%	NA
MSCI AC Wld ex USA Value (Net)	1.2%	10.5%	8.2%	6.0%	3.9%

Diversified Inflation

	3 Months	1 Year	3 Years	5 Years	7 Years
SSgA Real Asset Fund	4.8%	21.0%	12.4%	7.4%	5.0%
SSgA Custom Real Asset Index	4.7%	21.2%	12.2%	7.4%	4.9%

Lifecycle

	3 Months	1 Year	3 Years	5 Years	7 Years
MTA Income	2.0%	7.5%	8.6%	6.3%	5.3%
MTA Income Composite Index	2.2%	6.9%	7.5%	5.7%	4.9%
MTA 2020	2.4%	8.7%	11.0%	8.1%	6.6%
MTA 2020 Composite Index	2.7%	8.2%	9.7%	7.4%	6.0%
MTA 2025	2.9%	10.7%	13.1%	9.5%	7.7%
MTA 2025 Composite Index	3.3%	10.0%	11.7%	8.7%	7.1%
MTA 2030	3.5%	12.6%	15.4%	10.8%	8.6%
MTA 2030 Composite Index	4.1%	12.3%	14.0%	10.0%	8.0%
MTA 2035	4.0%	14.6%	17.4%	11.9%	9.4%
MTA 2035 Composite Index	4.7%	14.4%	15.9%	11.0%	8.7%
MTA 2040	4.1%	15.5%	18.5%	12.8%	10.0%
MTA 2040 Composite Index	4.9%	15.4%	16.9%	11.8%	9.4%
MTA 2045	4.1%	16.1%	19.0%	13.2%	10.3%
MTA 2045 Composite Index	5.1%	16.1%	17.4%	12.1%	9.6%
MTA 2050	4.1%	15.5%	19.3%	13.4%	10.4%
MTA 2050 Composite Index	5.2%	16.7%	17.7%	12.3%	9.6%
MTA 2055	4.0%	16.4%	19.3%	13.4%	NA
MTA 2055 Composite Index	5.2%	16.7%	17.7%	12.3%	9.6%
MTA 2060	4.0%	16.4%	19.3%	NA	NA
MTA 2060 Composite Index	5.2%	16.7%	17.7%	12.2%	9.5%
MTA 2065	4.0%	16.4%	19.3%	NA	NA
MTA 2065 Composite Index	5.2%	16.7%	17.7%	12.2%	9.5%

At December 31, 2022, the investment option holding the largest portion of participants' funds in both the 457 and 401(k) Plans was the Target Year Lifecycle Funds with 32.22% and 35.99% of invested funds, respectively. This was followed by the Stable Value Funds with 31.53% and 28.28% of invested 457 and 401(k) funds, respectively.

The table below summarizes the Plans' investments by category at December 31, 2022 and 2021:

2022

FUND INVESTMENT SUMMARY

Investment at Fair, Contract and NAV Values	457		401(k)	
	Allocation		Allocation	
Target-Year Lifecycle Funds	\$1,115,580,034	32.22%	\$1,720,460,046	35.99%
International Equity Funds	103,059,826	2.98%	132,596,844	2.77%
Small-Mid Cap Equity Funds	326,040,496	9.42%	417,425,815	8.73%
Large-Cap Equity Funds	743,719,791	21.48%	1,038,505,562	21.73%
Bond Funds	79,028,281	2.28%	114,752,821	2.40%
Stable Income Fund	1,091,818,709	31.53%	1,351,640,566	28.28%
Self-Directed Investment Option	3,111,336	0.09%	4,707,204	0.10%
Total Investments	\$3,462,358,474	100.00%	\$4,780,088,858	100.00%

At December 31, 2021, the investment options holding the largest portion of participants' funds in the 457 and 401(k) Plans were the Stable Income Funds with 29.97% and 30.18% of the large-Cap Equity Funds respectively. This was followed by the Large-Cap Equity Funds with 29.97% and Stable Income Funds with 27.32% of invested 457 and 401(k) funds, respectively.

2021

FUND INVESTMENT SUMMARY

Investment at Fair, Contract and NAV Values	457		401(k)	
	Allocation		Allocation	
Target-Year Lifecycle Funds	\$574,911,381	14.68%	\$845,421,881	15.62%
International Equity Funds	271,880,523	6.94%	403,229,292	7.45%
Small-Mid Cap Equity Funds	526,930,351	13.46%	709,174,502	13.10%
Large-Cap Equity Funds	1,136,411,092	29.02%	1,633,522,408	30.18%
Bond Funds	228,072,648	5.82%	336,596,155	6.22%
Stable Income Fund	1,173,898,287	29.97%	1,478,957,893	27.32%
Self-Directed Investment Option	4,227,265	0.11%	6,210,031	0.11%
Total Investments	\$3,916,331,547	100.00%	\$5,413,112,162	100.00%

Economic Factors

Market Overview – 2022

The year 2022 was a tumultuous year for markets and was characterized by heightened inflation, tightened monetary policies, skyrocketing interest rates, and geopolitical tensions such as Russia's invasion of Ukraine and China's aggressive posturing towards Taiwan. Following the strong global economic recovery of the

previous year, the economic conditions in 2022 brought with it historically volatile oil and gas prices, suppression of global economic growth rate forecasts, and tremendous uncertainty. Heightened interest rates and hawkish policy adopted by the Federal Reserve gave people far less access to money and reduced buying power. Personal income decreased, while personal consumption expenditures and the U.S unemployment rate remained favorable. Global assets broadly declined, volatility metrics increased, home affordability fell materially, and a sharply inverted yield curve echoed the market's stagflation and recession concerns.

While initially expected to be transitory by the Federal Reserve, U.S. inflation reached a 40-year high in 2022, as large consumer demand was curbed by pandemic and geopolitical related supply constraints. The Federal Reserve raised the federal funds rate by a total of 425 bps throughout the year, such a pace has not been seen since the 1980s, leading to an unprecedented decline in bond prices. The European Central Bank, which was formed in 1998, hiked rates at such a pace that have never been seen in its history as well. Energy prices rose by over 35% for the year, driven by export sanctions on Russia as a result of the Russia-Ukraine war.

Except for commodities, global risk assets plummeted across the board. The strong shift upwards in correlations between equity and fixed income markets resulted in the one of the worst years for the 60/40 equity bond mix portfolio that we have ever seen. With few places to hide in 2022, investors may look to expand alternative asset allocations moving forward. In foreign exchange markets, the U.S. Dollar strengthened considerably, posting very significant gains against the Euro, the Yen, and most other currencies.

Macro Themes

- Stagflation Trends
- Recession Outlook
- European Energy Transition
- China's Reopening
- U.S. Dollar Trajectory

United States

The U.S. economy tumbled from a 5.9% increase in Real GDP in 2021 to a 2.1% increase in 2022. The unemployment rate continued to fall, finishing 2022 at 3.5% compared to 3.9% in 2021. Consumer Prices rose 6.5% in 2022 and CPI peaked at 9.1% in June 2022, while core inflation, excluding the volatile food and energy components, rose 5.7%.

U.S. equities were negative across the board, with the S&P 500 and Russell 1000 indices posting returns of (-18.1%) and (-19.1%), respectively. Across market caps, Large Cap, as measured by the S&P 500 (-18.1%), Mid Cap, as measured by the S&P 400 (-13.1%), and Small Cap, as measured by the Russell 2000 (-20.4%) all posted double digit negative returns. Across styles, Growth, as measured by the Russell 1000 Growth (-29.1%) significantly underperformed Value, as measured by the Russell 1000 Value (-7.5%).

U.S. Treasury yields drastically increased in 2022 and the yield curve inverted amid elevated inflation and the shift to a hawkish Federal Reserve policy. Credit spreads were volatile in 2022 and slightly widened for the year. Diversified fixed income returned -13.0% (Bloomberg U.S. Aggregate Index), with losses dominated by long U.S. Treasuries at -29.3% (Bloomberg Long Treasury Index) and Credit at -15.3% (Bloomberg Credit Index). Negative returns of -11.8% were realized in Treasury Inflation Protected Securities (Bloomberg TIPS Index) and of -11.2% in High Yield (Bloomberg High Yield Index).

International Developed

International developed equity markets posted weak results in 2022, but outperformed the U.S. equity markets, returning (-14.5%) as measured by the MSCI EAFE Index. Both European and Japanese equities had negative performance in 2022 with the MSCI Europe Index returning (-14.5%) and the MSCI Japan Index returning (-

16.3%). The Small Cap portion of international developed markets posted far weaker returns in 2022 (-21.0%) as compared to 2021 (+10.5%).

Emerging Markets

Emerging markets posted weak returns in 2022, underperforming both the U.S. and international developed equity markets. The broad MSCI Emerging Market Index returned (-20.1%) for the year. The underperformance was led by Asian Markets and the removal of Russia from the Index, given that major index providers deemed Russia not investable following the Russian invasion of Ukraine. Geopolitical tensions, inflationary pressures, and a strong US dollar dampened sentiment in developing countries despite higher commodity prices.

The bond markets of emerging markets underperformed in 2022. Both hard currency and local currency bonds posted negative returns. Hard currency bonds, predominately issued in U.S. Dollars, as represented by the JPMorgan EMBI Global Diversified Index, returned (-17.8%) in 2022. Local currency bonds, represented by the JPMorgan GBI-EM Global Diversified Index, returned (-11.7%) for the year.

Commodities

The S&P Goldman Sachs Commodity Index (GSCI) jumped 26.0%, largely influenced by a 20% increase in natural gas prices. Commodity prices were extremely volatile in 2022 with the GSCI surging 52.1% from January through May and then cooling for the rest of the year. Industrial metals were the laggards in this category, with Aluminum being down over 16% for 2022.

Market Outlook -- 2023

Through the first quarter of 2023, equity markets were mostly higher with gains in the low to mid-single digits. Growth equities and Developed International equities have led the way, recovering some of their 2022 losses. Fixed income markets also had a good start to the year with most markets up low single digits. The Fed was still increasing rates, but at a slower pace. The only negative spot was in the commodities markets, with the GSCI down -4.9%. This year is expected to be less tumultuous than 2022, but an unfavorable macroeconomic backdrop still looms.

2023's macroeconomic backdrop will likely be dominated by recession risk, the Russia-Ukraine war, tight monetary policy, elevated inflation pressure and the regional bank failures, all of which are expected to impact economic growth negatively. With global central banks no longer accommodative, a "V" shaped recovery seems unlikely. Global growth expectations have a high degree of uncertainty as investors weigh the possibilities of more banking failures, the U.S raising its debt limit, China's re-opening with the abandonment of the "Zero-COVID" policy, and the escalation of the Russia-Ukraine war.

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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**STATEMENTS OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2022 and 2021
(\$ In THOUSANDS)**

	<u>2022</u>		<u>2021</u>	
	<u>457</u>	<u>401(k)</u>	<u>457</u>	<u>401(k)</u>
ASSETS:				
Investments measured at fair value level	\$ 100,039	\$ 143,612	\$ 133,581	\$ 193,118
Investments at contract value	1,286,673	1,649,043	1,295,221	1,654,203
Investments at fair value- net asset value	2,075,646	2,987,434	2,487,530	3,565,791
Total investments	<u>3,462,358</u>	<u>4,780,089</u>	<u>3,916,332</u>	<u>5,413,112</u>
Other plan assets:				
Participant loans receivable	79,829	162,609	78,188	159,285
Total other plan assets	<u>79,829</u>	<u>162,609</u>	<u>78,188</u>	<u>159,285</u>
Total assets	<u>3,542,187</u>	<u>4,942,698</u>	<u>3,994,520</u>	<u>5,572,397</u>
LIABILITIES:				
Administrative expense reimbursement	1,946	1,568	1,557	1,651
Total liabilities	<u>1,946</u>	<u>1,568</u>	<u>1,557</u>	<u>1,651</u>
TOTAL NET POSITION				
RESTRICTED FOR BENEFITS	<u>\$ 3,540,241</u>	<u>\$ 4,941,130</u>	<u>\$ 3,992,963</u>	<u>\$ 5,570,746</u>

See notes to financial statements.

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METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2022 and 2021 (\$ In THOUSANDS)

	2022		2021	
	457	401(k)	457	401(k)
ADDITIONS:				
Investment Income:				
Net appreciation in fair value of investments	\$ (468,018)	\$ (672,901)	\$ 406,887	\$ 580,914
Total investment income	(468,018)	(672,901)	406,887	580,914
Contributions:				
Employee contributions, net	221,646	311,131	220,172	305,155
Participant rollovers	10,344	19,175	8,746	15,786
Employer contributions	-	3,833	-	3,939
Total contributions	231,990	334,139	228,918	324,880
Other additions:				
Loan repayments - interest	3,788	7,760	3,984	8,217
Total additions	(232,240)	(331,002)	639,789	914,011
DEDUCTIONS:				
Distribution to participants	103,238	141,811	96,758	125,410
Transfers to other plans	110,373	147,251	91,464	144,048
Net loan initiations/repayments	(47)	(158)	(66)	(157)
Loan defaults/offsets	3,447	4,790	3,179	4,586
Loan fees transfers to other plans	233	534	210	481
Other deductions	1,292	2,818	801	1,028
Administrative expense	1,946	1,568	1,557	1,651
Total deductions	220,482	298,614	193,903	277,047
Net increase in net position	(452,722)	(629,616)	445,886	636,964
TOTAL NET POSITION RESTRICTED FOR BENEFITS				
Beginning of year	3,992,963	5,570,746	3,547,077	4,933,782
End of year	\$ 3,540,241	\$ 4,941,130	\$ 3,992,963	\$ 5,570,746

See notes to financial statements.

METROPOLITAN TRANSPORTATION AUTHORITY DEFERRED COMPENSATION PROGRAM

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2022 AND 2021 (\$ 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 Program provides the MTA Target Year Funds for those participants who would like to make retirement investing easy. Investments are diversified among a range of investment options based on the target year, which is the year the money is intended to be needed for retirement income. The mix of investments becomes more conservative as the target year approaches by lessening stock exposure and increasing exposure in fixed-income type investments.
- 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 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

GASB Statement No.92, *Omnibus 2020*.The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan
- The applicability of Statements 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, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

The adoption of this Statement has no impact on the net position of The Program.

Recent Accounting Pronouncements - Not yet adopted but currently being reviewed

GASB State ment No.	GASB Accounting Standard	MTA DC Program Required Year of Adoption
96	<i>Subscription-based Information Technology Arrangements</i>	2023
99	<i>Omnibus 2022</i>	2023
100	<i>Accounting Changes and Error Corrections</i>	2024
101	<i>Compensated Absences</i>	2024

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 value of investments.

Investment Valuation and Income Recognition - Investments are stated at fair, 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 fair, 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 fair, 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 fiduciary net position available for benefits at December 31, 2022 and 2021 is as follows:

Investment at NAV – December 31, 2022	457 Value	401(k) Value
Vanguard Institutional Index Fund	\$575,615,741	\$812,439,499
Jennison Large Cap Growth Fund	238,770,432	352,411,165
T. Rowe Price Large Cap Value Fund	238,770,432	352,411,165
William Blair Intuitional International Growth Fund	175,905,610	284,343,882

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Mondrian All Countries World Ex-U.S. Equity Fund	175,905,610	265,390,055
Investment at NAV – December 31, 2021	457 Value	401(k) Value
Vanguard Institutional Index Fund	\$642,053,877	\$910,912,085
Jennison Large Cap Growth Fund	321,857,549	471,847,976
T. Rowe Price Large Cap Value Fund	321,857,549	471,847,976
William Blair Intuitional International Growth Fund	N/A	280,892,798
Mondrian All Countries World Ex-U.S. Equity Fund	N/A	280,892,798

The following table shows the fair, contract and NAV values of investment in the various investment options at December 31, 2022 and 2021.

Investments at Contract, Fair Value and NAV at December 31, 2022

<u>Target-Year Lifecycle Funds</u>	<u>457 Value</u>	<u>401(k) Value</u>
MTA Target-Year Lifecycle 2020 Fund	\$ 71,342,637	\$ 107,949,522
MTA Target-Year Lifecycle 2025 Fund	201,446,821	303,374,675
MTA Target-Year Lifecycle 2030 Fund	166,539,812	268,416,181
MTA Target-Year Lifecycle 2035 Fund	210,809,859	326,982,330
MTA Target-Year Lifecycle 2040 Fund	117,840,642	179,616,642
MTA Target-Year Lifecycle 2045 Fund	105,975,760	173,814,934
MTA Target-Year Lifecycle 2050 Fund	79,448,118	116,073,931
MTA Target-Year Lifecycle 2055 Fund	42,026,251	68,897,906
MTA Target-Year Lifecycle 2060 Fund	20,218,229	29,558,022
MTA Target-Year Lifecycle 2065 Fund	6,915,345	6,987,673
MTA Income Fund	93,016,560	138,788,230
 <u>International Equity Funds</u>		
MTA International Portfolio	73,682,889	100,469,713
MTA International Index Fund	29,376,937	32,127,131
 <u>Small- Mid Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	200,742,033	276,754,733
MTA Small-Mid Cap Index	125,298,462	140,671,082
 <u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	340,216,439	492,548,052
MTA Large Cap Core Index Fund	403,503,352	545,957,510
 <u>Bond Funds</u>		
MTA Bond Core Plus Portfolio	51,383,181	77,093,193
MTA Bond Aggregate Index Fund	27,645,101	37,659,629
 <u>Fixed Investment Option</u>		
MTA Stable Value Fund	1,091,818,709	1,351,640,566
 <u>Self-Directed Investment Account</u>		
	3,111,336	4,707,204
Total	\$ 3,462,358,474	\$ 4,780,088,858

Investments at Contract, Fair Value and NAV at December 31, 2021

<u>Target-Year Lifecycle Funds</u>		<u>457 Value</u>		<u>401(k) Value</u>
MTA Target-Year Lifecycle 2020 Fund	\$	43,853,913	\$	62,012,182
MTA Target-Year Lifecycle 2025 Fund		135,058,620		202,906,194
MTA Target-Year Lifecycle 2030 Fund		64,349,847		92,027,115
MTA Target-Year Lifecycle 2035 Fund		108,330,307		173,734,076
MTA Target-Year Lifecycle 2040 Fund		38,775,977		59,172,143
MTA Target-Year Lifecycle 2045 Fund		50,232,827		79,969,007
MTA Target-Year Lifecycle 2050 Fund		34,460,899		39,744,461
MTA Target-Year Lifecycle 2055 Fund		3,369,750		4,662,889
MTA Target-Year Lifecycle 2060 Fund		1,447,295		1,184,104
MTA Target-Year Lifecycle 2065 Fund		2,641,528		2,243,524
MTA Income Fund		92,390,418		127,766,185
<u>International Equity Funds</u>				
MTA International Portfolio		237,046,114		365,741,877
MTA International Index Fund		34,834,409		37,487,415
<u>Small- Mid Cap Equity Funds</u>				
MTA Small-Mid Cap Portfolio		357,145,534		514,802,249
MTA Small-Mid Cap Index		169,784,817		194,372,252
<u>Large-Cap Equity Funds</u>				
MTA Large Cap Portfolio		580,047,193		850,170,917
MTA Large Cap Core Index Fund		556,363,899		783,351,491
<u>Bond Funds</u>				
MTA Bond Core Plus Portfolio		190,671,610		288,257,514
MTA Bond Aggregate Index Fund		37,401,038		48,338,642
<u>Fixed Investment Option</u>				
MTA Stable Value Fund		1,173,898,287		1,478,957,894
<u>Self-Directed Investment Account</u>				
		4,227,265		6,210,031
Total	\$	3,916,331,547	\$	5,413,112,162

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The following tables show the interest and/or dividends earned on investments and net appreciation/ (depreciation) for the years ended December 31, 2022 and 2021.

457 Investments at December 31, 2022

<u>Target-Year Lifecycle Funds</u>	<u>Cash Earnings</u>	<u>Appreciation/(Depreciation) In Fair Value - Net</u>
MTA Target-Year Lifecycle 2020 Fund	\$ - \$	(3,821,331)
MTA Target-Year Lifecycle 2025 Fund	-	(15,750,003)
MTA Target-Year Lifecycle 2030 Fund	-	(12,705,619)
MTA Target-Year Lifecycle 2035 Fund	-	(22,185,380)
MTA Target-Year Lifecycle 2040 Fund	-	(10,617,343)
MTA Target-Year Lifecycle 2045 Fund	-	(12,042,272)
MTA Target-Year Lifecycle 2050 Fund	-	(8,811,692)
MTA Target-Year Lifecycle 2055 Fund	-	(2,449,992)
MTA Target-Year Lifecycle 2060 Fund	-	(1,165,621)
MTA Target-Year Lifecycle 2065 Fund	-	(699,629)
MTA Income Fund	-	(4,474,185)
<u>International Equity Funds</u>		
MTA International Portfolio	-	(48,190,098)
MTA International Index Fund	-	(5,645,387)
<u>Small-Mid-Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	-	(60,248,126)
MTA Small-Mid Cap Index Fund	-	(42,940,243)
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	-	(120,492,947)
MTA Large Cap Index Fund	5	(96,706,503)
<u>Bond Funds</u>		
MTA Bond Portfolio	-	(16,223,442)
MTA Bond Index Fund	-	(4,546,519)
<u>Stable Value Option</u>		
MTA Stable Value Fund	-	20,982,377
<u>Self-Directed Investment Account</u>		
	-	(841,029)
Total	\$5	(\$469,574,982)

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457 Investments at December 31, 2021

<u>Target-Year Lifecycle Funds</u>	<u>Cash Earnings</u>	<u>Appreciation/(Depreciation) In Fair Value - Net</u>
MTA Target-Year Lifecycle 2020 Fund	\$ 2 \$	3,645,334
MTA Target-Year Lifecycle 2025 Fund	-	12,754,619
MTA Target-Year Lifecycle 2030 Fund	-	6,780,184
MTA Target-Year Lifecycle 2035 Fund	-	13,321,324
MTA Target-Year Lifecycle 2040 Fund	-	4,901,710
MTA Target-Year Lifecycle 2045 Fund	-	6,751,509
MTA Target-Year Lifecycle 2050 Fund	-	4,668,914
MTA Target-Year Lifecycle 2055 Fund	-	431,812
MTA Target-Year Lifecycle 2060 Fund	-	173,152
MTA Target-Year Lifecycle 2065 Fund	-	274,989
MTA Income Fund	-	6,431,397
<u>International Equity Funds</u>		
MTA International Portfolio	9	19,366,254
MTA International Index Fund	7	2,572,579
<u>Small-Mid-Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	20	61,590,763
MTA Small-Mid Cap Index Fund	18	18,418,142
<u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	20	102,980,813
MTA Large Cap Index Fund	100	123,312,865
<u>Bond Funds</u>		
MTA Bond Portfolio	9	(1,719,344)
MTA Bond Index Fund	-	(864,835)
<u>Stable Value Option</u>		
MTA Stable Value Fund	9	20,649,653
<u>Self-Directed Investment Account</u>		
	-	445,090
Total	\$194	\$406,886,924

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401(k) Investments at December 31, 2022

		<u>Cash</u>	<u>Appreciation/(Depreciation)</u>
<u>Target-Year Lifecycle Funds</u>	<u>Earnings</u>		<u>In Fair Value - Net</u>
MTA Target-Year Lifecycle 2020 Fund	\$ -	\$	(5,487,077)
MTA Target-Year Lifecycle 2025 Fund	-		(23,649,322)
MTA Target-Year Lifecycle 2030 Fund	-		(19,069,225)
MTA Target-Year Lifecycle 2035 Fund	-		(34,849,131)
MTA Target-Year Lifecycle 2040 Fund	29		(16,164,819)
MTA Target-Year Lifecycle 2045 Fund	37		(19,630,168)
MTA Target-Year Lifecycle 2050 Fund	-		(11,341,233)
MTA Target-Year Lifecycle 2055 Fund	-		(4,004,773)
MTA Target-Year Lifecycle 2060 Fund	-		(1,605,145)
MTA Target-Year Lifecycle 2065 Fund	-		(634,150)
MTA Income Fund	-		(6,416,269)
 <u>International Equity Funds</u>			
MTA International Portfolio	-		(74,355,198)
MTA International Index Fund	-		(6,086,548)
 <u>Small-Mid-Cap Equity Funds</u>			
MTA Small-Mid Cap Portfolio	-		(86,366,972)
MTA Small-Mid Cap Index Fund	-		(48,803,770)
 <u>Large-Cap Equity Funds</u>			
MTA Large Cap Portfolio	-		(176,125,704)
MTA Large Cap Index Fund	7		(134,762,375)
 <u>Bond Funds</u>			
MTA Bond Portfolio	-		(24,501,020)
MTA Bond Index Fund	1		(5,938,936)
 <u>Stable Value Option</u>			
MTA Stable Value Fund	11		26,270,559
 <u>Self-Directed Investment Account</u>			
	-		(1,030,915)
Total	\$ 85	\$	(674,552,191)

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401(k) Investments at December 31, 2021

<u>Target-Year Lifecycle Funds</u>	<u>Cash</u> <u>Earnings</u>	<u>Appreciation</u> <u>In Fair Value - Net</u>
MTA Target-Year Lifecycle 2020 Fund	\$ 46	\$ 5,102,973
MTA Target-Year Lifecycle 2025 Fund	26	18,927,056
MTA Target-Year Lifecycle 2030 Fund	-	9,612,237
MTA Target-Year Lifecycle 2035 Fund	-	21,825,135
MTA Target-Year Lifecycle 2040 Fund	116	7,591,762
MTA Target-Year Lifecycle 2045 Fund	-	10,909,378
MTA Target-Year Lifecycle 2050 Fund	-	5,337,216
MTA Target-Year Lifecycle 2055 Fund	-	577,511
MTA Target-Year Lifecycle 2060 Fund	-	148,722
MTA Target-Year Lifecycle 2065 Fund	-	215,630
MTA Income Fund	-	8,889,457
 <u>International Equity Funds</u>		
MTA International Portfolio	52	29,784,968
MTA International Index Fund	-	2,782,396
 <u>Small-Mid-Cap Equity Funds</u>		
MTA Small-Mid Cap Portfolio	86	89,168,564
MTA Small-Mid Cap Index Fund	25	21,235,170
 <u>Large-Cap Equity Funds</u>		
MTA Large Cap Portfolio	76	151,299,212
MTA Large Cap Index Fund	158	174,467,504
 <u>Bond Funds</u>		
MTA Bond Portfolio	25	(2,600,602)
MTA Bond Index Fund	23	(1,142,998)
 <u>Stable Value Option</u>		
MTA Stable Value Fund	85	25,957,099
 <u>Self-Directed Investment Account</u>		
	-	825,815
Total	\$ 718	\$ 580,914,205

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 credit risk of the investment strategy in the various investment accounts is based upon the performance of the securities in the underlying portfolios. Investments in these investment strategies 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 investment strategies pursuant to the investment policy and objectives. When the investment strategies are determined to not meet the criteria, the strategy is terminated as outlined by the investment policy statement.

At December 31, 2022, the following credit quality rating has been assigned by a nationally recognized statistical rating organization (“NRSRO”) to the portion of Fixed Income Portfolio of the Plans which are held in Separate Manager Accounts (“SMAs”):

Quality Rating	457		401(k)	
	457	Percentage of Fixed Income Portfolio	401(k)	Percentage of Fixed Income Portfolio
AAA	\$ 505,290,723	30.94%	\$ 658,705,182	30.06%
AA	45,825,535	2.81%	60,368,850	2.75%
A	200,813,978	12.30%	262,220,236	11.97%
BBB	216,507,957	13.25%	283,795,116	12.95%
BB	7,079,262	0.43%	9,999,309	0.46%
Below BB	<u>1,709,973</u>	<u>0.10%</u>	<u>2,649,668</u>	<u>0.12%</u>
Credit Risk Debt Securities	977,227,428	59.83%	1,277,738,361	58.31%
U.S. Government Bonds	<u>410,958,133</u>	<u>25.16%</u>	<u>538,730,641</u>	<u>24.58%</u>
Total fixed income securities in SMAs	1,388,185,561	84.99%	1,816,469,002	82.89%
Other Fixed Income Investments	<u>245,077,408</u>	<u>15.01%</u>	<u>374,979,587</u>	<u>17.11%</u>
Total Fixed Income Investments	1,633,262,969	100.00%	2,191,448,589	100.00%
Other securities not rated - equity, international funds and corporate bonds	<u>1,829,095,505</u>		<u>2,588,640,269</u>	
Total investments	<u>\$ 3,462,358,474</u>		<u>\$ 4,780,088,858</u>	

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At December 31, 2021, the following credit quality rating has been assigned by a nationally recognized statistical rating organization (“NRSRO”) to the portion of Fixed Income Portfolio of the Plans which are held in SMAs:

Quality Rating	457		401(k)	
		Percentage of Fixed Income Portfolio		Percentage of Fixed Income Portfolio
AAA	\$ 440,975,216	26.24%	\$ 571,567,146	25.54%
AA	55,033,623	3.27%	71,855,503	3.21%
A	189,872,012	11.30%	246,762,260	11.03%
BBB	205,115,203	12.21%	267,531,690	11.96%
BB	8,841,746	0.53%	12,204,434	0.55%
Below BB	<u>1,475,954</u>	<u>0.09%</u>	<u>2,237,489</u>	<u>0.10%</u>
Credit Risk Debt Securities	901,313,754	53.64%	1,172,158,522	52.39%
U.S. Government Bonds	<u>514,378,278</u>	<u>30.61%</u>	<u>674,148,336</u>	<u>30.13%</u>
Total fixed income securities in SMAs	1,415,692,032	84.25%	1,846,306,858	82.52%
Other Fixed Income Investments	<u>264,599,283</u>	<u>15.75%</u>	<u>391,090,424</u>	<u>17.48%</u>
Total Fixed Income Investments	1,680,291,315	100.00%	2,237,397,282	100.00%
Other securities not rated - equity, international funds and corporate bonds	<u>2,236,040,232</u>		<u>3,175,714,880</u>	
Total investments	<u>\$ 3,916,331,547</u>		<u>\$ 5,413,112,162</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 sensitivity to interest rate risk. The greater the duration of a portfolio, the greater its principle value will fluctuate in response to a change in interest rate risk and vice versa. Modified duration is an indicator of bond price’s sensitivity and is the percentage change in a bond principle value given a 100-basis point parallel change in interest rates.

DRAFT

2022

<u>Investment Type</u>	<u>457</u>	<u>401(k)</u>	<u>Total</u>	<u>Duration</u>
Galliard Stable Value Fund	\$ 1,286,672,980	\$ 1,649,042,928	\$ 2,935,715,908	2.94 *
TCW Core Plus Bond Fund	<u>70,228,468</u>	<u>107,668,029</u>	<u>177,896,497</u>	6.72
Total Fixed Income assets in SMAs	1,356,901,448	1,756,710,957	3,113,612,405	3.16
Total Other Fixed Income assets	<u>239,554,349</u>	<u>362,643,539</u>	<u>602,197,888</u>	5.13
Total Fixed Income				
Portfolio Modified Duration	1,596,455,797	2,119,354,496	3,715,810,293	3.48
Investment with no duration reported	<u>1,865,902,677</u>	<u>2,660,734,362</u>	<u>4,526,637,039</u>	
Total investments	<u>\$ 3,462,358,474</u>	<u>\$ 4,780,088,858</u>	<u>\$ 8,242,447,332</u>	

* Portfolio Duration - the price sensitivity to yield and the rate of change of price with respect to yield due to the passage of time.

2021

<u>Investment Type</u>	<u>457</u>	<u>401(k)</u>	<u>Total</u>	<u>Duration</u>
Galliard Stable Value Fund	\$ 1,295,221,300	\$ 1,654,203,145	\$ 2,949,424,445	2.96 *
TCW Core Plus Bond Fund	<u>92,760,534</u>	<u>139,328,998</u>	<u>232,089,532</u>	6.32
Total Fixed Income assets in SMAs	1,387,981,834	1,793,532,143	3,181,513,977	3.21
Total Other Fixed Income assets	<u>259,420,120</u>	<u>379,911,521</u>	<u>639,331,641</u>	4.36
Total Fixed Income				
Portfolio Modified Duration	1,647,401,954	2,173,443,664	3,820,845,618	3.40
Investment with no duration reported	<u>2,268,929,593</u>	<u>3,239,668,498</u>	<u>5,508,598,091</u>	
Total investments	<u>\$ 3,916,331,547</u>	<u>\$ 5,413,112,162</u>	<u>\$ 9,329,443,709</u>	

* Portfolio Duration - the price sensitivity to yield and the rate of change of price with respect to yield due to the passage of time.

Other Risks and Uncertainties - In March 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. As a result, global financial markets have experienced, and may continue to experience, significant volatility resulting from the spread of COVID-19. The values of the Plan's individual investments have and will fluctuate in response to changing market conditions and therefore, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined. The extent of the impact of COVID-19 on the Plan's net assets available for benefits and contributions will depend on future developments, including the

DRAFT

duration and continued spread of the outbreak. The full impact of the COVID-19 outbreak continues to evolve as of the date of this report.

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 exposure to foreign currency fluctuations for the Plans' SMAs investments are as follows:

2022	457	401(k)	Total
<u>Currency</u>	<u>Holdings in</u>	<u>Holdings in</u>	<u>Holdings in</u>
	<u>U.S. Dollars</u>	<u>U.S. Dollars</u>	<u>U.S. Dollars</u>
Australian Dollar	\$ 3,807,322	\$ 2,380,041	\$ 6,187,363
Canada Dollar	12,655,189	7,911,036	20,566,225
Danish Krone	8,278,855	5,175,293	13,454,148
Euro	45,005,549	28,133,953	73,139,503
Hong Kong Dollar	3,064,192	1,915,494	4,979,686
Israel Shekel	388,185	242,663	630,848
Japanese Yen	15,066,277	9,418,259	24,484,536
Norwegian Krone	1,667,978	1,042,689	2,710,667
Singapore Dollar	2,423,658	1,515,082	3,938,740
Swedish Krona	6,530,825	4,082,561	10,613,386
Swiss Franc	11,536,719	7,211,856	18,748,575
United Kingdom British Pound	<u>26,187,617</u>	<u>16,370,452</u>	<u>42,558,070</u>
Total	<u>\$ 136,612,367</u>	<u>\$ 85,399,380</u>	<u>\$ 222,011,748</u>

2021	457	401(k)	Total
<u>Currency</u>	<u>Holdings in</u>	<u>Holdings in</u>	<u>Holdings in</u>
	<u>U.S. Dollars</u>	<u>U.S. Dollars</u>	<u>U.S. Dollars</u>
Australian Dollar	\$ 1,669,751	\$ 907,418	\$ 2,577,169
Canada Dollar	4,466,109	2,427,084	6,893,193
Danish Krone	7,371,059	4,005,763	11,376,822
Euro	47,784,314	25,968,134	73,752,448
Hong Kong Dollar	2,619,975	1,423,811	4,043,786
Japanese Yen	18,933,804	10,289,476	29,223,280
Norwegian Krone	1,239,338	673,512	1,912,850
Swedish Krona	14,867,397	8,079,609	22,947,006
Swiss Franc	14,689,691	7,983,035	22,672,726
United Kingdom British Pound	<u>22,648,613</u>	<u>12,308,270</u>	<u>34,956,883</u>
Total	<u>\$ 136,290,051</u>	<u>\$ 74,066,112</u>	<u>\$ 210,356,163</u>

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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 readily determined fair value (FV)

(\$ In thousands)

	2022			
	December 31, 2022	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
457 Plan				
Equity Securities:				
Small-Mid cap equity mutual fund	\$ 100,039	100,039	-	-
Total equity investments	100,039	100,039	-	-

Investments measured at readily determined fair value (FV)

(\$ In thousands)

	2022			
	December 31, 2022	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
401K Plan				
Equity Securities:				
Small-Mid cap equity mutual fund	\$ 143,612	143,612	-	-
Total equity investments	143,612	143,612	-	-

Investments measured at readily determined fair value (FV)

(\$ In thousands)

	2021			
	December 31, 2021	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
457 Plan				
Equity Securities:				
Small-Mid cap equity mutual fund	\$ 133,581	133,581	-	-
Total equity investments	133,581	133,581	-	-

Investments measured at readily determined fair value (FV)

(\$ In thousands)

	2021			
	December 31, 2021	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
401K Plan				
Equity Securities:				
Small-Mid cap equity mutual fund	\$ 193,118	193,118	-	-
Total equity investments	193,118	193,118	-	-

**Investments measured at Fair, Contract and NAV values
(\$ In thousands)**

	2022			
	December 31, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
457 Plan				
Equity Securities:				
Commingled large-cap equity funds	\$ 1,053,157	\$ -	Daily	None
Commingled Small-Mid cap equity funds	125,298	-	Daily	None
Separate Manager Account: Small-Mid cap equity funds	203,109	-	Daily	None
Commingled international equity fund	205,283	-	Daily	None
Separate Manager Account: International equity mutual fund	175,906	-	Daily	None
Total equity securities	1,762,753	-		
Debt Securities				
Commingled debt funds	163,971	-	Daily	None
Separate Manager Account: debt funds	70,228	-	Daily	None
Total debt securities	234,199	-		
Real assets				
Commingled real asset equity fund	75,583	-	Daily	None
Total real assets	75,583	-		
Other:				
Self direct investment option	3,111	-	Daily	None
Total other	3,111	-		
Total investments measured at the NAV	2,075,646	-		
Investment measured at Fair Value	100,039	-		
Investments measured at Contract Value	1,286,673	-		
Total investments	\$ 3,462,358	\$ -		

**Investments measured at Fair, Contract and NAV values
(\$ In thousands)**

	2022			
	December 31, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
401(k) Plan				
Equity Securities:				
Commingled large-cap equity funds	\$ 1,517,262	\$ -	Daily	None
Commingled Small-Mid cap equity funds	140,671	-	Daily	None
Separate Manager Account: Small-Mid cap equity funds	272,622	-	Daily	None
Commingled international equity fund	297,517	-	Daily	None
Separate Manager Account: International equity mutual fund	284,344	-	Daily	None
Total equity securities	2,512,416	-		
Debt Securities				
Commingled debt funds	246,662	-	Daily	None
Separate Manager Account: debt funds	107,668	-	Daily	None
Total debt securities	354,330	-		
Real assets				
Commingled real asset equity fund	115,981	-	Daily	None
Total real assets	115,981	-		
Other:				
Self direct investment option	4,707	-	Daily	None
Total other	4,707	-		
Total investments measured at the NAV	2,987,434	-		
Investment measured at Fair Value	143,612	-		
Investments measured at Contract Value	1,649,043	-		
Total investments	\$ 4,780,089	\$ -		

**Investments measured at Fair, Contract and NAV values
(\$ In thousands)**

	2021			
	December 31, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
457 Plan				
Equity Securities:				
Commingled large-cap equity funds	\$ 1,285,769	\$ -	Daily	None
Commingled Small-Mid cap equity funds	169,785	-	Daily	None
Separate Manager Account: Small-Mid cap equity funds	271,210	-	Daily	None
Commingled international equity fund	219,596	-	Daily	None
Separate Manager Account: International equity mutual fund	184,761	-	Daily	None
Total equity securities	<u>2,131,121</u>	<u>-</u>		
Debt Securities				
Commingled debt funds	217,466	-	Daily	None
Separate Manager Account: debt funds	92,761	-	Daily	None
Total debt securities	<u>310,227</u>	<u>-</u>		
Real assets				
Commingled real asset equity fund	41,955	-	Daily	None
Total real assets	<u>41,955</u>	<u>-</u>		
Other:				
Self direct investment option	4,227	-	Daily	None
Total other	<u>4,227</u>	<u>-</u>		
Total investments measured at the NAV	2,487,530	-		
Investment measured at Fair Value	133,581	-		
Investments measured at Contract Value	1,295,221	-		
Total investments	<u>\$ 3,916,332</u>	<u>\$ -</u>		

**Investments measured at Fair, Contract and NAV values
(\$ In thousands)**

	2021			
	December 31, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
401(k) Plan				
Equity Securities:				
Commingled large-cap equity funds	\$ 1,854,608	\$ -	Daily	None
Commingled Small-Mid cap equity funds	194,372	-	Daily	None
Separate Manager Account: Small-Mid cap equity funds	392,087	-	Daily	None
Commingled international equity fund	318,380	-	Daily	None
Separate Manager Account: International equity mutual fund	280,893	-	Daily	None
Total equity securities	<u>3,040,340</u>	<u>-</u>		
Debt Securities				
Commingled debt funds	318,801	-	Daily	None
Separate Manager Account: debt funds	139,329	-	Daily	None
Total debt securities	<u>458,130</u>	<u>-</u>		
Real assets				
Commingled real asset equity fund	61,111	-	Daily	None
Total real assets	<u>61,111</u>	<u>-</u>		
Other:				
Self direct investment option	6,210	-	Daily	None
Total other	<u>6,210</u>	<u>-</u>		
Total investments measured at the NAV	3,565,791	-		
Investment measured at Fair Value	193,118	-		
Investments measured at Contract Value	1,654,203	-		
Total investments	<u>\$ 5,413,112</u>	<u>\$ -</u>		

Investments Measured at Contract Value

Stable Value Funds - Stable value funds typically have three components. The first component is primarily comprised of Investment Contracts issued by banks and insurance companies. The Investment Contracts help to assure that participants can transact at book value (principal plus accrued interest) as well as maintain a relatively stable return profile for the portfolio. Generally, contract issuers are rated "investment grade" by at least one of the Nationally Recognized Statistical Rating Organizations at time of purchase that are able to do business in New York State. The second component consists of an underlying portfolio of fixed income securities which are subject to the Investment Contracts and are often referred to as "underlying securities". Finally, the portfolio may also hold cash or cash equivalents. The Stable Value fund return is expected to be higher than that of a 3-year Constant Maturity Treasury + 0.5% with similar volatility over the long-term.

Investments Measured at NAV

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, small and mid-cap funds 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.

Separate Manager Account (SMAs) - This investment vehicle follows a single-style strategy, with funds comprised of large cap fixed, large cap value and large cap growth. These three separate SMAs allow the MTA to impose reasonable stock and bonds sector preferences and restrictions on the securities in the accounts. The two equity SMAs are co-invested with external managers through Prudential Securities. The fair values of the investments in this vehicle are determined using the NAV per share of the investments by the external manager. Prudential Securities whom the MTA holds a contractual agreement with and whom controls the investments, revalues the NAV per share after certain expense deductions and provides the MTA with its percentage allocation on an annual basis.

Small-Mid Cap Funds - This investment option has four institutional investments funds - two growth and two value investment strategies with the objective of matching the return and risk characteristics of the Russell Small Cap Completeness Index or a similar index which measures the broad U.S. small and mid-capitalization equity market. The option's investment profile is long term capital growth through a combination of capital appreciation and to a lesser extent reinvested dividend income. The investment option is expected to have high volatility over a market cycle. The fair values of the investments in these types have been determined using the NAV per share of the investments.

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 Larger Mid Cap 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

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

MTA Bus - Effective 2019, employer contributions were discontinued. Prior to 2019, certain members who were employed by Queens Surface Corporation on February 26, 2005, and who became employees of MTA Bus on February 27, 2005, received a matching contribution equal to 50% of member's before-tax contributions up to 3% of the member's base pay. MTA Bus also made a basic contribution equal to 2% of the member's compensation. These contributions vested 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, 2022 and 2021, 42.8% and 43.3% of the eligible employees were enrolled in the 457 Plan and 60.9% and 61.6% of the eligible employees were enrolled in the 401(k) Plan, respectively. There were 34,676 and 33,594 active participants in the 457 Plan and 48,640 and 47,197 active participants in the 401(k) Plan as of December 31, 2022 and 2021, respectively. The average account balance in the 457

Plan was \$72,328 and \$84,599 and in the 401(k) Plan was \$75,223 and \$88,290 in 2022 and 2021, 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. In addition, up to four times a year, 401(k) Plan participants may withdraw their elective deferral balance from the Plan if they are over age 59½. These withdrawals can be cash distributions or rollovers to another eligible retirement plan. 457 Plan participants may request an in-service withdrawal only after attainment of age 70½, or at any age if their account balance is less than \$5,000 and there has been no activity in their account for at least two years.

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. Individuals who attained age 70 ½ before January 1, 2020 were required to begin receiving minimum distributions from their accounts by April 1st of the calendar year following the later of (1) attainment of age 70 ½ or (2) the calendar year in which they separate from service with the MTA. Individuals who attain age 70 ½ after January 1, 2020 are required to begin receiving minimum distributions from their accounts by April 1st of the calendar year following the later of (1) attainment of age 72 or (2) the calendar year in which they separate from service with the MTA.

Method of Distribution for Direct Payment - If a participant chooses; 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
- Any other amount of payment, subject to the required minimum distribution rules.

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 457 Plan’s net loans outstanding is \$79.83 million and \$78.19 million at December 31, 2022 and 2021 respectively, and the 401(k) Plan’s was \$162.61 million and \$159.29 million at December 31, 2022 and 2021 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. Participants may also choose to schedule automated, annual increases in their deferral elections. 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 or the 401(k) Plan could have deferred up to \$22,500 plus an additional \$7,500 and \$20,500 plus an additional \$6,500 for participants age 50 and over in calendar years 2022 and 2021. Alternatively, for the 457 Plan, 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. Participants may not make both the Retirement Catch-Up and the Age 50 Catch-Up to the 457 Plan in the same year.

Membership – As of December 31, 2022 and 2021, the Plans' membership with balances consisted of:

	2022		2021	
	457	401(k)	457	401(k)
Active employees	34,676	48,460	33,594	47,197
Terminated/Inactive employees	13,173	14,851	12,679	14,061
Total active and inactive members	<u>47,849</u>	<u>63,311</u>	<u>46,273</u>	<u>61,258</u>
Vested employees	47,849	63,230	46,273	61,139

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 a portion of staff salaries and benefits.

As part of the CARES Act, which was passed in March 2020, the government relaxed restrictions on accessing funds from the 401(k) and 457 Plans. Participants that met the criteria were allowed to take a Coronavirus Related Distribution (CRD) up to \$100,000 without the usual 10% penalty and the required 20% federal withholding. Participants could also take loans up to \$100,000 or 100% of their balance. This was above the normal maximum loan amount of \$50,000 or 50% of the account balance. Participants could also defer making loan repayments in 2020. These Plan changes ended effective December 31, 2020.

8. TRUSTEE AND OTHER PROFESSIONAL SERVICES

The Trustee for the MTA is Prudential Bank & Trust, Federal Savings Bank ("PB&T"). Record-keeping, Administrative, and investment management services are provided by Prudential Retirement Insurance & Annuity Company ("PRIAC"). With regards to other providers of investment management services; separate accounts are managed by Alliance Bernstein, TCW, William Blair and Galliard (which in turn has executed agreements with Jennison, Dodge & Cox, Loomis Sayles, TCW); commingled trusts are managed by SSGA, Loomis Sayles, Wellington, Vanguard and Mondrian; a mutual fund is managed by Dimensional Fund Advisors. The Financial Advisor is Mercer Investments LLC which reviews the investment policies adopted by the Investment Committee, the Plans' portfolio and the Investment Managers' performance.

9. SUBSEQUENT EVENTS

In October of 2022, the Committee voted to terminate Jackson Square Partners as one of (the four) underlying managers in the MTA SMID Cap Fund. In December of 2022, the assets held by Jackson Square were transferred into the SSGA Russell Small/Mid Cap Index Fund temporarily, while a new manager was chosen by the Committee. In January 2023, the Committee chose Westfield Capital Management to replace Jackson Square and in February 2023 the Committee voted on a revised allocation of assets among the four SMID cap managers. In June 2023 the, the assets in the MTA SMID Cap fund were rebalanced among the four managers: 21% to the Alliance Bernstein US SMID Cap portfolio, 31% to the DFA US Targeted Value, 20% to the William Blair Small-Mid Cap Growth portfolio, and 28% Westfield Capital Management Small/Mid Cap Growth Equity portfolio.

On April 4, 2022, PRIAC was acquired by Empower Annuity Insurance Company of America. Effective March 31, 2023, PB&T merged into Empower Trust Company, LLC.

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Metro-North Commuter Railroad Company Cash Balance Plan

(A Fiduciary Component Unit of the
Metropolitan Transportation Authority)

Financial Statements as of and for the
Years Ended December 31, 2022 and 2021,
Supplemental Schedules, and
Independent Auditor's Report

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METRO-NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR'S REPORT	1-2
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)	3-7
FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021:	
Statements of Fiduciary Net Position	8
Statements of Changes in Fiduciary Net Position	9
Notes to Financial Statements	10-22
REQUIRED SUPPLEMENTAL SCHEDULES (UNAUDITED):	
Schedule of Changes in the Employer's Net Pension Liability and Related Ratios – Schedule I	23-24
Schedule of Employer Contributions – Schedule II	25-27
Schedule of Investment Returns – Schedule III	28

INDEPENDENT AUDITOR'S REPORT

To the Board of Managers of Pensions of the
Metro-North Commuter Railroad Company Cash Balance Plan

Opinion

We have audited the accompanying statements of fiduciary net position of the Metro-North Commuter Railroad Company Cash Balance Plan (the "Plan") as of December 31, 2022 and 2021, and the related statements of changes in fiduciary 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued

Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or

the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

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 23-24, Schedule of Employer Contributions - Schedule II on pages 25 through 27, and Schedule of Investment Returns - Schedule III on page 28 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.

July 17, 2023

METRO-NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) FOR THE YEAR ENDED DECEMBER 31, 2022 AND 2021

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, 2022 and 2021. 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 are 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 are 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.

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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, 2022, 2021, and 2020

(Dollars in thousands)

	2022	2021	2020	Increase/(Decrease)	
				2022-2021	2021-2020
Investments, at fair value	\$ 283	\$ 359	\$ 395	\$ (76)	\$ (36)
Accrued interest	2	2	2	(0)	-
Other receivable	-	-	2	-	(2)
Total assets	<u>284</u>	<u>361</u>	<u>399</u>	<u>(77)</u>	<u>(38)</u>
Payable for investment securities purchased	<u>5</u>	<u>10</u>	<u>5</u>	<u>(5)</u>	<u>5</u>
Total liabilities	<u>5</u>	<u>10</u>	<u>5</u>	<u>(5)</u>	<u>5</u>
Net position - restricted for pensions	<u>\$ 279</u>	<u>\$ 351</u>	<u>\$ 394</u>	<u>\$ (72)</u>	<u>\$ (43)</u>

December 31, 2022 versus December 31, 2021

Investments at December 31, 2022 were \$283 thousand, a decrease of \$76 thousand from 2021. The decrease is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and accrued interest at December 31, 2022 were \$2 thousand, same as at December 31, 2021.

Payables at December 31, 2022 were \$5 thousand, a decrease of \$5 thousand from 2021. The decrease is the result of a decrease in net securities purchased at the end of 2022.

Net position restricted for pensions at December 31, 2022 was \$279 thousand, a decrease of \$72 thousand from 2021 as a result of the changes noted above.

December 31, 2021 versus December 31, 2020

Investments at December 31, 2021 were \$359 thousand, a decrease of \$36 thousand from 2020. The decrease is the result of investment activity and plan contributions net of benefit payments and expenses.

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Receivables and accrued interest at December 31, 2021 were \$2 thousand, a decrease of \$2 thousand. The decrease was primarily due to decrease of other receivables by \$2 thousand.

Payables at December 31, 2021 were \$10 thousand, an increase of \$5 thousand from 2020. The increase is the result of an increase in net securities purchased at the end of 2021.

Net position restricted for pensions at December 31, 2021 was \$351 thousand, a decrease of \$43 thousand from 2020 as a result of the changes noted above.

**Changes in Fiduciary Net Position
For the Years Ended December 31, 2022, 2021 and 2020
(Dollars in thousands)**

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>Increase/(Decrease)</u>	
				<u>2022-2021</u>	<u>2021-2020</u>
Additions:					
Net investment income/(loss)	\$ (43)	\$ (5)	\$ 32	\$ (38)	\$ (37)
Employer contributions	4	-	9	4	(9)
Other receipts	<u>-</u>	<u>-</u>	<u>3</u>	<u>-</u>	<u>(3)</u>
Total additions	<u>(39)</u>	<u>(5)</u>	<u>44</u>	<u>(34)</u>	<u>(49)</u>
Deductions:					
Benefits paid to participants	33	38	105	(5)	(67)
Other disbursements	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total deductions	<u>33</u>	<u>38</u>	<u>105</u>	<u>(5)</u>	<u>(67)</u>
Net decrease in net position	<u>(72)</u>	<u>(43)</u>	<u>(61)</u>	<u>(29)</u>	<u>18</u>
Net position-restricted for pensions:					
Beginning of year	<u>351</u>	<u>394</u>	<u>455</u>	<u>(43)</u>	<u>(61)</u>
End of year	<u>\$ 279</u>	<u>\$ 351</u>	<u>\$ 394</u>	<u>\$ (72)</u>	<u>\$ (43)</u>

CHANGES IN FIDUCIARY NET POSITION

The Plan is a closed plan and does not have active members as of January 1, 2022. 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, 2022 versus December 31, 2021

Net investment income decreased by \$38 thousand in 2022 due to net investment losses of \$43 thousand in 2022 versus net investment loss of \$5 thousand in 2021.

Contributions were \$4 thousand in 2022 and \$0 in 2021 due to timing of payments. The Actuarial Determined Contributions (“ADC”) of \$4 thousand for 2022 was paid in 2022.

Benefit payments decreased by \$5 thousand in 2022 compared to 2021. In 2022 there were less retirees taking lump sum distributions when compared to 2021.

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There were no securities disbursed in-kind in 2022.

December 31, 2021 versus December 31, 2020

Net investment income decreased by \$37 thousand in 2021 due to net investment losses of \$5 thousand in 2021 versus net investment gains of \$32 thousand in 2020.

Contributions were zero in 2021 compared to \$9 thousand in 2020 due to timing of payments. The Actuarial Determined Contributions (“ADC”) of \$9 thousand for 2020 was paid in 2021.

Benefit payments decreased by \$67 thousand in 2021 compared to 2020. In 2021, there were less retirees taking lump sum distributions when compared to 2020.

There were no securities disbursed in-kind in 2021.

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INVESTMENTS

The table below summarizes the Plan's investment allocations and investment returns.

Investment Summary (Dollars in thousands)

<u>Type of Investment</u>	<u>Fair Value</u>	<u>Allocation</u>	<u>Current Year Return</u>
December 31, 2022			
U.S. government & agency securities	\$ 156	55.2 %	2.8 %
Corporate bonds & asset backed securities	109	38.6 %	3.6 %
Short-term investments	12	4.4 %	0.1 %
Other bonds & fixed income securities	<u>5</u>	<u>1.8 %</u>	<u>5.2 %</u>
Total	<u>\$ 283</u>	<u>100.0 %</u>	<u>3.1 %</u>
December 31, 2021			
U.S. government & agency securities	\$ 167	46.4 %	2.3 %
Corporate bonds & asset backed securities	171	47.6 %	3.2 %
Short-term investments	15	4.2 %	0.1 %
Other bonds & fixed income securities	<u>6</u>	<u>1.8 %</u>	<u>5.2 %</u>
Total	<u>\$ 359</u>	<u>100.0 %</u>	<u>2.7 %</u>
December 31, 2020			
U.S. government & agency securities	\$ 174	44.1 %	2.3 %
Corporate bonds & asset backed securities	213	53.9 %	3.2 %
Short-term investments	2	0.5 %	0.1 %
Other bonds & fixed income securities	<u>6</u>	<u>1.5 %</u>	<u>5.3 %</u>
Total	<u>\$ 395</u>	<u>100.0 %</u>	<u>2.8 %</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 Deputy Chief, Controller's Office, Metropolitan Transportation Authority, 2 Broadway, 15th Floor, New York, NY 10004.

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METRO-NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN

STATEMENTS OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2022 AND 2021

	2022	2021
ASSETS:		
Investments, at fair value:		
U.S. government & agency securities	\$ 155,926	\$ 166,901
Corporate bonds & asset backed securities	109,246	171,193
Other bonds & fixed income securities	5,082	6,352
Short-term investments	<u>12,375</u>	<u>14,942</u>
Total investments	<u>282,628</u>	<u>359,388</u>
Accrued interest	1,677	1,853
Other receivable	<u>-</u>	<u>-</u>
Total assets	<u>284,305</u>	<u>361,241</u>
LIABILITIES:		
Payable for investment securities purchased	<u>(4,990)</u>	<u>(9,921)</u>
Total liabilities	<u>(4,990)</u>	<u>(9,921)</u>
NET POSITION - restricted for pensions	<u>\$ 279,314</u>	<u>\$ 351,320</u>

See notes to financial statements.

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CASH BALANCE PLAN

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	2022	2021
ADDITIONS:		
Investment income:		
Interest	\$ 9,194	\$ 10,259
Net appreciation in fair value of investments	(52,233)	(14,759)
Other receipts	<u>-</u>	<u>-</u>
Total investment income	(43,039)	(4,500)
Contributions:		
Employer	<u>4,463</u>	<u>-</u>
Total additions	<u>(38,576)</u>	<u>(4,500)</u>
DEDUCTIONS:		
Benefits paid to participants	(33,430)	(37,776)
Other disbursements	<u>-</u>	<u>-</u>
Total deductions	<u>(33,430)</u>	<u>(37,776)</u>
NET DECREASE IN NET POSITION	(72,006)	(42,277)
NET POSITION - restricted for pensions	351,320	
Beginning of year	<u>351,320</u>	<u>393,597</u>
End of year	<u>\$ 279,314</u>	<u>\$ 351,320</u>

METRO-NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN

NOTES TO FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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, 2022 and 2021, the dates of the latest actuarial valuation:

	<u>2022</u>	<u>2021</u>
Active Plan Members	0	0
Retirees and beneficiaries receiving benefits	22	23
Vested formerly active members not yet receiving benefits	5	5
Total	<u>27</u>	<u>28</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, 2022 valuation, the unfunded accrued liability was \$4,463 and the actuarially determined contribution was \$4,463. Per the January 1, 2021 valuation, there was no unfunded accrued liability and the actuarially determined contribution was \$0.

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 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 zero for the years ended December 31, 2022 and 2021, 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 Statement for the year ended December 31, 2022:

GASB Statement No. 92, *Omnibus 2020*. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan

- The applicability of Statements 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, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

The adoption of this Statement has no material impact on the net position of the Plan.

Recent Accounting Pronouncements — Not yet adopted but currently being evaluated

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
96	<i>Subscription-based Information Technology Arrangements</i>	2023
99	<i>Omnibus 2022</i>	2023
100	<i>Accounting Changes and Error Corrections</i>	2024
101	<i>Compensated Absences</i>	2024

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, 2022 and December 31, 2021:

GASB 72 Disclosure **(in thousands)**

INVESTMENTS - fair value level	2022			
	Level 1	Level 2	Level 3	Total
Debt securities:				
U.S government agency	\$ 73	\$ 83	\$ -	\$ 156
Corporate bonds	-	96	-	96
Commerical mortgage-backed securities	-	13	-	13
Other bonds	-	5	-	5
Total debt securities	73	197	-	270
Total investments by fair value level	73	197	-	270
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	\$ 73	\$ 197	\$ -	\$ 283

GASB 72 Disclosure **(in thousands)**

INVESTMENTS - fair value level	2021			
	Level 1	Level 2	Level 3	Total
Debt securities:				
U.S government agency	\$ 85	\$ 82	\$ -	\$ 167
Corporate bonds	-	151	-	151
Commerical mortgage-backed securities	-	20	-	20
Other bonds	-	6	-	6
Total debt securities	85	259	-	344
Total investments by fair value level	85	259	-	344
INVESTMENTS- measured at the net asset value (NAV)				
Short-term other				15
Total investments measured at the NAV				15
Total investments by fair value level	\$ 85	\$ 259	\$ -	\$ 359

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, 2022 and December 31, 2021, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, for the Plan were -12.95% and -1.21%, 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,	
	2022	2021
U.S. government & agency securities	\$ (29,037)	\$ (6,822)
Corporate bonds & asset backed securities	(21,925)	(8,133)
Other bonds & fixed income securities	(1,270)	196
	<u>\$ (52,233)</u>	<u>\$ (14,759)</u>

Credit Risk.

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2022 and December 31, 2021 respectively, are as follows:

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December 31, 2022	Fair	Percentage of
Quality Rating	Value	Portfolio
AAA	\$ 14,883	11.75%
AA+	8,969	7.08%
AA	4,791	3.78%
A	6,668	5.26%
AA-	4,820	3.80%
A-	22,287	17.59%
BBB+	22,455	17.72%
BBB	27,703	21.86%
BBB-	1,752	1.38%
NR	12,375	9.77%
Total credit risk debt securities	126,703	44.83%
U.S. government & agency securities*	155,926	55.17%
Total investment portfolio	\$ 282,628	100.00%

December 31, 2021	Fair	Percentage of
Quality Rating	Value	Portfolio
AAA	\$ 23,993	12.46%
AA	5,339	2.77
AA-	5,335	2.77
A-	23,059	11.98
BBB+	40,144	20.86
BBB	42,778	22.22
BBB-	7,168	3.72
NR	19,583	10.17
Total credit risk debt securities	192,487	53.56%
U.S. government & agency securities*	166,901	46.44%
Total investment portfolio	\$ 359,388	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, 2022	Fair	Percentage of	Duration
Investment Type	Value	Portfolio	(Years)
U.S. government & agency securities	\$ 155,926	55.17%	5.78
Corporate bonds & asset backed securities	109,246	38.65%	7.07
Other bonds & fixed income securities	5,082	1.80%	6.46
Short-term investments	12,375	4.38%	0.00
Total investment	<u>\$ 282,628</u>	<u>100.00%</u>	
Portfolio average duration			<u>6.20</u>

December 31, 2021	Fair	Percentage of	Duration
Investment Type	Value	Portfolio	(Years)
U.S. government & agency securities	\$ 166,901	46.44%	6.89
Corporate bonds & asset backed securities	171,193	47.63%	6.57
Other bonds & fixed income securities	6,352	1.77%	6.57
Short-term investments	14,942	4.16%	0.00
Total investment	<u>\$ 359,388</u>	<u>100.00%</u>	
Portfolio average duration			<u>6.45</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 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, 2022 and 2021, for the Plan, were as follows:

	<u>2022</u>	<u>2021</u>
Total pension liability	\$ 310,040	\$ 355,185
Plan's fiduciary net position	<u>279,314</u>	<u>351,320</u>
Employer's net pension (asset) liability	<u>\$ 30,726</u>	<u>\$ 3,865</u>
Plan's fiduciary net position as a percentage of the total pension liability	90.09%	98.91%

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.

	<u>2022</u>	<u>2021</u>
Discount rate	4.00%	3.00%
Long-term expected rate of return net of investment expense	4.00%	3.00%
Municipal bond rate	N/A	N/A

Other Key Actuarial Methods and Assumptions for the years ended December 31, 2022 and December 31, 2021 were as follows:

The actuarial assumptions that determined the total pension liability as of December 31, 2022 and December 31, 2021 was based on an experience study for the period January 1, 2015 - December 31, 2020.

	<u>2022</u>	<u>2021</u>
Valuation date:	January 1, 2022	January 1, 2021
Measurement date:	December 31, 2022	December 31, 2021
Actuarial cost method:	Unit Credit	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:	2.40%	2.34%
Benefit escalator:	2.25% per annum, compounded annually	1.5% per annum, compounded annually
Provision for Expenses:	None assumed from Plan assets	None assumed from Plan assets

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Age and Benefit Profile of Participants in Pay Status as of January 1, 2022:

Retired Participants and Beneficiaries:

<u>Attained Age</u>	<u>Number</u>	<u>Annual Pension</u>
<50	-	\$ -
50-54	-	-
55-59	-	-
60-64	-	-
65-69	3	1,189
70-74	5	3,837
75-79	4	3,647
80-84	5	12,328
85-89	2	11,611
>90	3	8,914
Total	<u>22</u>	<u>\$41,526</u>

Average age = 78.6

Average Annual Pension = \$1,888

Mortality: During 2021, there was no change in the terminated vested participants. There was a mortality loss in 2021 among the participants in pay status even though two deaths [one had a surviving spouse] occurred during the year.

The mortality assumption was updated based on a study of all MTA-sponsored pension plan members from January 1, 2015 through December 31, 2020. This change increased the accrued liability by \$14,303 or 4.2%.

Pre-termination: Pri-2012 Employee mortality table with blue collar adjustments multiplied by 97% for males and 100% for females, projected on a generational basis using Scale MP-2021.

Post-termination: Pre-2012 Retiree mortality table with the blue collar adjustments multiplied by 97% for males and 100% for females, projected on a generational basis using Scale MP-2021. As generational tables, they reflect mortality improvements both before and after the measurement date.

As a result of the above, there is an unfunded accrued liability as of January 1, 2022 of \$4,333 and the Actuarially Determined Contribution [ADC] for the fiscal year ending December 31, 2022 is \$4,463. The ADC reflects a one-year amortization of the unfunded accrued liability in accordance with the funding policy adopted by MTA.

Form of Payment for Cash Balance Account: 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, 2022 and 2021.

Asset Class	Index	Target Allocation	2022	2021
Core Fixed Income	Bloomberg Barclays Aggregate	100.00%	2.16%	1.03%
Assumed Inflation - Mean			2.40%	2.34%
Assumed Inflation - Standard Deviation			1.41%	1.23%
Portfolio Nominal Mean Return			4.56%	3.37%
Portfolio Standard Deviation			4.22%	4.06%
Long-Term Expected Rate of Return selected by MTA			4.00%	3.00%

Sensitivity Analysis

The following presents the net pension liability of the Metro-North Commuter Railroad Company Cash Balance Plan as of December 31, 2022 and December 31, 2021, respectively, calculated using the current discount rate, 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 or 1 percentage point higher than the current rate.

	December 31, 2022			December 31, 2021		
	1% Decrease 3.00%	Discount Rate 4.00%	1% Increase 5.00%	1% Decrease 2.00%	Discount Rate 3.00%	1% Increase 4.00%
Net Pension Liability	\$49,069	\$30,726	\$14,453	\$26,611	\$3,865	(\$16,181)

5. SUBSEQUENT EVENTS

Subsequent events have been evaluated through July 17, 2023.

**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>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Total Pension Liability:					
Interest	\$ 10	\$ 11	\$ 14	\$ 18	\$ 20
Changes of economic/demographic (gains) or losses	(6)	(11)	10	-	(11)
Changes of assumptions	(16)	15	11	4	-
Benefit payments	<u>(33)</u>	<u>(38)</u>	<u>(105)</u>	<u>(53)</u>	<u>(58)</u>
Net change in total pension liability	(45)	(23)	(70)	(31)	(49)
Total pension liability - beginning	<u>355</u>	<u>378</u>	<u>448</u>	<u>479</u>	<u>528</u>
Total pension liability - ending (a)	<u>\$ 310</u>	<u>\$ 355</u>	<u>\$ 378</u>	<u>\$ 448</u>	<u>\$ 479</u>
Fiduciary Net Position:					
Employer contributions	\$ 4	\$ -	\$ 9	\$ -	\$ 5
Net investment income	(43)	(5)	32	40	1
Benefit payments	(33)	(38)	(105)	(53)	(58)
Administrative expenses	<u>-</u>	<u>-</u>	<u>3</u>	<u>(3)</u>	<u>-</u>
Net change in plan fiduciary net position	(72)	(43)	(61)	(16)	(52)
Fiduciary net position - beginning	<u>351</u>	<u>394</u>	<u>455</u>	<u>471</u>	<u>523</u>
Fiduciary net position - ending (b)	<u>279</u>	<u>351</u>	<u>394</u>	<u>455</u>	<u>471</u>
Net pension liability - ending (a) - (b)	<u>\$ 31</u>	<u>\$ 4</u>	<u>\$ (16)</u>	<u>\$ (6)</u>	<u>\$ 8</u>
Fiduciary net position as a percentage of the total pension liability					
	90.09%	98.91%	104.20%	101.45%	98.28%
Covered payroll	\$ -	\$ -	\$ -	\$ 277	\$ 275
Net pension liability as a percentage of covered payroll					
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>-2.35%</u>	<u>3.00%</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 I (continued)

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:				
Interest	\$ 21	\$ 24	\$ 29	\$ 32
Changes of economic/demographic (gains) or losses	12	(15)	(10)	-
Changes of assumptions	-	-	18	-
Benefit payments	<u>(71)</u>	<u>(77)</u>	<u>(113)</u>	<u>(88)</u>
Net change in total pension liability	(38)	(68)	(76)	(56)
Total pension liability - beginning	<u>566</u>	<u>634</u>	<u>710</u>	<u>766</u>
Total pension liability - ending (a)	<u>\$ 528</u>	<u>\$ 566</u>	<u>\$ 634</u>	<u>\$ 710</u>
Fiduciary Net Position:				
Employer contributions	\$ -	\$ 23	\$ 18	\$ -
Net investment income	20	16	6	41
Benefit payments	(71)	(77)	(113)	(88)
Administrative expenses	<u>-</u>	<u>-</u>	<u>3</u>	<u>(3)</u>
Net change in plan fiduciary net position	(51)	(38)	(86)	(50)
Fiduciary net position - beginning	<u>574</u>	<u>612</u>	<u>698</u>	<u>748</u>
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
2013	-	-	-	-	N/A
2014	4,977	17,856	(12,879)	2,080,077	0.86%
2015	-	-	-	-	0.00%
2016	22,721	22,721	-	648,524	3.50%
2017	-	-	-	268,488	0.00%
2018	5,444	5,444	-	274,921	1.98%
2019	8,582	8,582	-	276,569	3.10%
2020	-	-	-	-	N/A
2021	-	-	-	-	N/A
2022	4,463	4,463	-	-	N/A

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.

The actual employer contribution for 2014 is the June 5, 2015 contribution that was recognized by the Plan as a receivable contribution for the 2014 plan year.

The actual employer contribution for 2019 is the April 15, 2020 contribution that was recognized by the Plan as a receivable contribution for the 2019 plan year.

**METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN**

Schedule II

**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, 2022	January 1, 2021	January 1, 2020	January 1, 2019
Measurement Date	December 31, 2022	December 31, 2021	December 31, 2020	December 31, 2019
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	Unit Credit	Entry Age Normal	Entry Age Normal	Entry Age Normal
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.	One-year amortization of the unfunded liability, if any.
Asset Valuation Method	Actuarial value equals market value.	Actuarial value equals market value.	Actuarial value equals market value.	Actuarial value equals market value.
Inflation	2.40%	2.25%	2.25%	2.50%
Salary Increases	N/A	N/A	N/A	N/A
Investment Rate of Return	4.00%, net of investment expenses	3.00%, net of investment expenses	3.00%, net of investment expenses	3.50%, net of investment expenses
Mortality	Based on experience of all MTA-sponsored pension plan members from Jan. 1, 2015-Dec. 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021	Based on experience of all MTA-sponsored pension plan members from Jan. 1, 2015-Dec. 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021	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 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
Measurement Date	December 31, 2017	December 31, 2016	December 31, 2015	December 31, 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
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.

Fiscal Year Ending December 31	Net Money-Weighted Rate of Return
2013	N/A
2014	5.96%
2015	0.93%
2016	2.75%
2017	3.67%
2018	0.06%
2019	9.01%
2020	7.79%
2021	-1.21%
2022	-12.95%

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.

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Metropolitan Transportation Authority
Retiree Welfare
Benefits Plan
(“Other Postemployment
Benefits Plan” or “OPEB Plan”)

(A Fiduciary Component Unit of the Metropolitan
Transportation Authority)

Financial Statements as of and for the
Years Ended December 31, 2022 and 2021
Supplemental Schedules, and
Independent Auditor’s Report

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POST EMPLOYMENT BENEFITS PLAN

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR’S REPORT	1-2
MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)	3–8
FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 and 2021:	
Statements of Fiduciary Net Position	9
Statements of Changes in Fiduciary Net Position	10
Notes to Financial Statements	11–30
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED):	31
Schedule of Changes in Employers’ Net OPEB Liability and Related Ratios - Schedule I	32
Schedule of Employer Contributions - Schedule II	33
Schedule of Investment Returns - Schedule III	34

INDEPENDENT AUDITOR’S REPORT

To the Board of Managers of the
Metropolitan Transportation Authority Retiree Welfare Benefits Plan

Opinion

We have audited the accompanying statement of fiduciary net position of the Metropolitan Transportation Authority Retiree Welfare Benefits Plan (the “Plan”) as of December 31, 2022 and 2021, and the related statement of changes in fiduciary net position for the year 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan’s ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor’s Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when

it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

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 on page 33, the Schedule of Employer Contributions on page 32 and the Schedule of Investment Returns on page 34 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.

July 17, 2023

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (UNAUDITED)

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, 2022 and 2021. 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 9.

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 Fiduciary 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 Statement 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 Governmental Accounting Standards Board (“GASB”) is presented after the management discussion and analysis, the statement of fiduciary net position, the statement of changes in fiduciary 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

Fiduciary Net Position

December 31, 2022, 2021 and 2020

(Dollars in thousands)

	2022	2021	2020	Amount of Change		Percentage Change	
				(2022 - 2021)	(2021 - 2020)	(2022 - 2021)	(2021 - 2020)
ASSETS:							
Investments	\$11,698	\$ 107	\$ 172	\$ 11,591	\$ (65)	10832.7 %	(37.8)%
Receivables and other assets	38	-	-	38	-	100.0	-
TOTAL ASSETS	11,736	107	172	11,629	(65)	10,868.2	(37.8)
LIABILITIES:							
Benefits payable and accrued expenses	1	24	42	(23)	(18)	(95.8)	(42.9)
TOTAL LIABILITIES	1	24	42	(23)	(18)	(95.8)	(42.9)
NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS							
	\$11,735	\$ 83	\$ 130	\$ 11,652	\$ (47)	14038.6 %	(36.2)%

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 \$11.7 million and \$83 thousand as of December 31, 2022 and 2021. The net increase in Plan value in 2022 compared to 2021 is a result of the monies received from the settled lawsuit from AllianzGI Structured Alpha Funds.

**Changes in Fiduciary Net Position
For the Years Ended December 31, 2022, 2021, and 2020**

(Dollars in thousands)				Amount of Change		Percentage Change	
	2022	2021	2020	(2022 - 2021)	(2021 - 2020)	(2022 - 2021)	(2021 - 2020)
ADDITIONS:							
Total investment income/(loss)	\$ 11,828	\$ -	\$ (76,723)	\$ 11,828	\$ 76,723	100.0 %	(100.0)%
Less:							
Investment expenses	-	-	395	-	(395)	-	(100.0)
Net investment income/(loss)	11,828	-	(77,118)	11,828	77,118	100.0	(100.0)
Add:							
Employer contributions	788,310	740,051	317,899	48,259	422,152	6.5	132.8
Implicit rate subsidy contribution	57,989	52,933	69,472	5,056	(16,539)	9.6	(23.8)
Total additions	858,127	792,984	310,253	65,143	482,731	8.2	155.6
DEDUCTIONS							
Benefit payments	788,310	740,051	655,269	48,259	84,782	6.5	12.9
Implicit rate subsidy payments	57,989	52,933	69,472	5,056	(16,539)	9.6	(23.8)
Administrative expenses	176	47	209	129	(162)	274.5	(77.5)
Total deductions	846,475	793,031	724,950	53,444	68,081	6.7	9.4
Net increase/(decrease) in net position	11,652	(47)	(414,697)	11,699	414,650	(24,891.5)	(100.0)
NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS							
Beginning of year	83	130	414,827	(47)	(414,697)	(36.2)	(100.0)
End of year	\$ 11,735	\$ 83	\$ 130	\$ 11,652	\$ (47)	14038.6 %	(36.2)%

The Plan's net position held in trust increased by \$11.7 million in 2022 and decreased by \$47 thousand in 2021. The change in 2022 is due to the recognition of the lawsuit settlement from AllianzGI Structured Alpha Funds. For 2021, the Plan's net depreciation in the fair market values and investment fees were \$0.

Investments

The table below summarizes the Plan's investment measured at fair value.

December 31, 2022 (Dollars in thousands)	Fair Value	Allocation
Type of Investments		
Investment measured at readily determined fair value	\$ 11,698	100 %
	<u>\$ 11,698</u>	<u>100 %</u>

December 31, 2021 (Dollars in thousands)	Fair Value	Allocation
Type of Investments		
Investment measured at readily determined fair value	\$ 107	100 %
	<u>\$ 107</u>	<u>100 %</u>

Economic Factors

Market Overview – 2022

The year 2022 was a tumultuous year for markets and was characterized by heightened inflation, tightened monetary policies, skyrocketing interest rates, and geopolitical tensions such as Russia's invasion of Ukraine and China's aggressive posturing towards Taiwan. Following the strong global economic recovery of the previous year, the economic conditions in 2022 brought with it historically volatile oil and gas prices, suppression of global economic growth rate forecasts, and tremendous uncertainty. Heightened interest rates and hawkish policy adopted by the Federal Reserve gave people far less access to money and reduced buying power. Personal income decreased, while personal consumption expenditures and the U.S unemployment rate remained favorable. Global assets broadly declined, volatility metrics increased, home affordability fell materially, and a sharply inverted yield curve echoed the market's stagflation and recession concerns.

While initially expected to be transitory by the Federal Reserve, U.S. inflation reached a 40-year high in 2022, as large consumer demand was curbed by pandemic and geopolitical related supply constraints. The Federal Reserve raised the federal funds rate by a total of 425 bps throughout the year, such a pace has not been seen since the 1980s, leading to an unprecedented decline in bond prices. The European Central Bank, which was formed in 1998, hiked rates at such a pace that have never been seen in its history as well. Energy prices rose by over 35% for the year, driven by export sanctions on Russia as a result of the Russia-Ukraine war.

Except for commodities, global risk assets plummeted across the board. The strong shift upwards in correlations between equity and fixed income markets resulted in the one of the worst years for the 60/40 equity bond mix portfolio that we have ever seen. With few places to hide in 2022, investors may look to expand alternative asset

allocations moving forward. In foreign exchange markets, the U.S. Dollar strengthened considerably, posting very significant gains against the Euro, the Yen, and most other currencies.

Macro Themes

- Stagflation Trends
- Recession Outlook
- European Energy Transition
- China's Reopening
- U.S. Dollar Trajectory

United States

The U.S. economy tumbled from a 5.9% increase in Real GDP in 2021 to a 2.1% increase in 2022. The unemployment rate continued to fall, finishing 2022 at 3.5% compared to 3.9% in 2021. Consumer Prices rose 6.5% in 2022 and CPI peaked at 9.1% in June 2022, while core inflation, excluding the volatile food and energy components, rose 5.7%.

U.S. equities were negative across the board, with the S&P 500 and Russell 1000 indices posting returns of (-18.1%) and (-19.1%), respectively. Across market caps, Large Cap, as measured by the S&P 500 (-18.1%), Mid Cap, as measured by the S&P 400 (-13.1%), and Small Cap, as measured by the Russell 2000 (-20.4%) all posted double digit negative returns. Across styles, Growth, as measured by the Russell 1000 Growth (-29.1%) significantly underperformed Value, as measured by the Russell 1000 Value (-7.5%).

U.S. Treasury yields drastically increased in 2022 and the yield curve inverted amid elevated inflation and the shift to a hawkish Federal Reserve policy. Credit spreads were volatile in 2022 and slightly widened for the year. Diversified fixed income returned -13.0% (Bloomberg U.S. Aggregate Index), with losses dominated by long U.S. Treasuries at -29.3% (Bloomberg Long Treasury Index) and Credit at -15.3% (Bloomberg Credit Index). Negative returns of -11.8% were realized in Treasury Inflation Protected Securities (Bloomberg TIPS Index) and of (-11.2%) in High Yield (Bloomberg High Yield Index).

International Developed

International developed equity markets posted weak results in 2022, but outperformed the U.S. equity markets, returning (-14.5%) as measured by the MSCI EAFE Index. Both European and Japanese equities had negative performance in 2022 with the MSCI Europe Index returning (-14.5%) and the MSCI Japan Index returning (-16.3%). The Small Cap portion of international developed markets posted far weaker returns in 2022 (-21.0%) as compared to 2021 (+10.5%).

Emerging Markets

Emerging markets posted weak returns in 2022, underperforming both the U.S. and international developed equity markets. The broad MSCI Emerging Market Index returned (-20.1%) for the year. The underperformance was led by Asian Markets and the removal of Russia from the Index, given that major index providers deemed Russia not investable following the Russian invasion of Ukraine. Geopolitical tensions, inflationary pressures, and a strong US dollar dampened sentiment in developing countries despite higher commodity prices.

The bond markets of emerging markets underperformed in 2022. Both hard currency and local currency bonds posted negative returns. Hard currency bonds, predominately issued in U.S. Dollars, as represented by the JPMorgan EMBI Global Diversified Index, returned (-17.8%) in 2022. Local currency bonds, represented by the JPMorgan GBI-EM Global Diversified Index, returned (-11.7%) for the year.

Commodities

The S&P Goldman Sachs Commodity Index (GSCI) jumped 26.0%, largely influenced by a 20% increase in natural gas prices. Commodity prices were extremely volatile in 2022 with the GSCI surging 52.1% from January through May and then cooling for the rest of the year. Industrial metals were the laggards in this category, with Aluminum being down over 16% for 2022.

Market Outlook -- 2023

Through the first quarter of 2023, equity markets were mostly higher with gains in the low to mid-single digits. Growth equities and Developed International equities have led the way, recovering some of their 2022 losses. Fixed income markets also had a good start to the year with most markets up low single digits. The Fed was still increasing rates, but at a slower pace. The only negative spot was in the commodities markets, with the GSCI down -4.9%. This year is expected to be less tumultuous than 2022, but an unfavorable macroeconomic backdrop still looms.

2023's macroeconomic backdrop will likely be dominated by recession risk, the Russia-Ukraine war, tight monetary policy, elevated inflation pressure and the regional bank failures, all of which are expected to impact economic growth negatively. With global central banks no longer accommodative, a "V" shaped recovery seems unlikely. Global growth expectations have a high degree of uncertainty as investors weigh the possibilities of more banking failures, the U.S raising its debt limit, China's re-opening with the abandonment of the "Zero-COVID" policy, and the escalation of the Russia-Ukraine war.

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 Deputy Chief, Controller's Office, Metropolitan Transportation Authority, 2 Broadway, 15th Floor, New York, NY 10004.

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METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

STATEMENTS OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2022 AND 2021 (In thousands)

	2022	2021
ASSETS:		
Investments at fair value (Notes 3 and 4):		
Investments measured at readily determined fair value	\$ 11,698	\$ 107
Interest receivable	<u>38</u>	<u>-</u>
Total assets	<u>11,736</u>	<u>107</u>
LIABILITIES:		
Benefits payable and accrued expenses	<u>1</u>	<u>24</u>
Total liabilities	<u>1</u>	<u>24</u>
NET POSITION RESTRICTED FOR POSTEMPLOYEMENT BENEFITS OTHER THAN PENSIONS	<u>\$ 11,735</u>	<u>\$ 83</u>

See notes to financial statements.

(Concluded)

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2022 AND 2021
(In thousands)

	2022	2021
ADDITIONS:		
Net realized and unrealized gains	\$ 11,671	\$ -
Dividends	3	-
Interest	154	-
Total investment income	<u>11,828</u>	<u>-</u>
Add:		
Employer contributions	788,310	740,051
Implicit rate subsidy contribution	57,989	52,933
Total additions	<u>858,127</u>	<u>792,984</u>
DEDUCTIONS:		
Benefit Payments	788,310	740,051
Implicit rate subsidy payments	57,989	52,933
Administrative expenses	176	47
Total deductions	<u>846,475</u>	<u>793,031</u>
Net increase / (decrease) in net position	11,652	(47)
NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS:		
Beginning of year	<u>83</u>	<u>130</u>
End of year	<u>\$ 11,735</u>	<u>\$ 83</u>

(Concluded)

METROPOLITAN TRANSPORTATION AUTHORITY OTHER POSTEMPLOYMENT BENEFITS PLAN

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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 and Development
- MTA Grand Central Madison Concourse Operating Company

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:

the persons holding the following positions:

- (i) the Chairman of the MTA;
 - (ii) the MTA Chief Financial Officer; and
 - (iii) the MTA Director of Labor Relations.
- (a) 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 MTA Headquarters and MTA New York City Transit and funded an additional \$50 million during 2013 allocated between MTA Long Island Rail Road and MTA Metro-North Railroad. There have been no further contributions made to the Trust. Since the amount of benefits paid during 2022 exceeds 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, 2022 and 2021 are 3.72% and 2.06%, respectively.

**Blended and Age-adjusted Premium
(in thousands)**

	2022	2021
	<u>Retirees</u>	<u>Retirees</u>
Total blended premiums	\$788,310	\$740,051
Employment payment for retiree healthcare	<u>57,989</u>	<u>52,933</u>
Net Payments	<u>\$846,299</u>	<u>\$792,984</u>

The \$57,989 and \$52,933 employer payments for retiree healthcare shown in the preceding table are cash payments in the years 2022 and 2021, respectively. Based on the premium rate structure of NYSHIP, it is part of the employers’ payments for active-employee healthcare benefits; and reflects the higher costs among retirees than actives. The \$57,989 and \$52,933, therefore, is not a payment for active-employee benefits; rather, but represents benefit payment for healthcare coverage for the years 2022 and 2021 for retirees.

Significant Changes - This valuation reflects updates to healthcare-related assumptions which increased plan liabilities by \$2,050.1 million. The discount rate increased from 2.06% as of December 31, 2021 to 3.72% as of December 31, 2022 based on the Bond Buyer GO 20-Bond Municipal Bond Index, which decreased

liabilities by \$5.5 billion. The net effect of all assumption changes was a decrease of \$3,449.4 million as of December 31, 2022.

While the Chapter 56 Laws of 2022 reduced the vesting requirement from 10 years of service to 5 years of service for Tiers 5 and 6 members for pension purposes, 10 years of service is still required for OPEB benefits. Therefore, there is no impact for OPEB purposes.

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 MTA Group 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, MTA 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 July 1, 2019. The total number of plan participants as of July 1, 2021 (the latest Plan valuation date) receiving retirement benefits was approximately 48,888.

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 the New York State VDC), 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 MTA New York City Transit and MTA 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, 25, 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.

Benefits are established and amended by the MTA, except to the extent that they have been established by collective bargaining agreement.

Plan Membership - As permitted under GASB 74, the Plan has elected to use July 1, 2021, as the valuation date of the OPEB actuarial valuation. The Plan's combined membership consisted of the following at July 1, 2021 and July 1, 2019 the date of the most recent OPEB actuarial valuation:

	July 1, 2021	July 1, 2019
Active Plan members	68,672	73,588
Inactive Plan members currently receiving Plan benefit payments	48,888	46,994
Inactive Plan members entitled to but not yet receiving benefit payments	<u>131</u>	<u>186</u>
Total number of participating employees	<u><u>117,691</u></u>	<u><u>120,768</u></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”).

GASB Statement No. 72, *Fair Value Measurement and Application* (“GASB 72”), requires the Funds to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach, or an income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management’s estimates of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that were used for the fair value measurements.

New Accounting Standards Adopted - The Plan adopted the following GASB Statement in 2022:

GASB Statement No.92, *Omnibus 2020*.The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan
- The applicability of Statements 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, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

The adoption of this Statement has no material impact on the financial net position of MTA’s OPEB Plan.

Accounting Standards Issued but Not Yet Adopted

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
96	<i>Subscription-based Information Technology Arrangements</i>	2023
99	<i>Omnibus 2022</i>	2023
100	<i>Accounting Changes and Error Corrections</i>	2024
101	<i>Compensated Absences</i>	2024

Investments - The Plan's investments are those which are held in the Trust. Investments are reported on the statement of fiduciary net position at fair value based on quoted market prices. Investment income, including changes in the fair value of investments, is reported on the statement of changes in fiduciary 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.

Administrative Expenses - Administrative expenses of the Plan are paid for by the Plan.

4. INVESTMENTS

Investment Policy - 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 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, 2022.

Asset Class	Target Allocation (%)	Policy Benchmark
Global Equity	35.0	MSCI ACWI
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 investment objective of the Plan is to achieve the actuarial return target with an appropriate risk position.

Investment Guidelines - The Board of Managers 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.

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates that will affect the fair value of an investment. Duration is a measure of sensitivity to 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. Modified duration is an indicator of bond price’s sensitivity to a parallel 100 basis point change in interest rates. No interest rate risk was reported for years ended December 31, 2022 and 2021.

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 credit risk if the securities are uninsured and are not registered in the name of the Trust. No credit risk was reported for years ended December 31, 2022 and 2021.

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. No concentration of credit risk was reported for years ended December 31, 2022 and 2021.

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. Some of the Plan’s investment managers will have foreign currency exposure through holdings of foreign securities, currency derivatives or private investments whose revenue will be non-USD based. No credit risk was reported for years ended December 31, 2022 and 2021.

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. All investments were redeemed and used to pay benefits, other than cash retained to pay expenses. The fair value of investments reported for years ended December 31, 2022 and 2021 were \$11.7 million and \$83 thousand, respectively.

Other Risks and Uncertainties - In March 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. As a result, global financial markets have experienced, and may continue to experience, significant volatility resulting from the spread of COVID-19. The values of the Plan's individual investments have and will fluctuate in response to changing market conditions and therefore, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined. The extent of the impact of COVID-19 on the Plan's net assets available for benefits and contributions will depend on future developments, including the duration and continued spread of the outbreak. The full impact of the COVID-19 outbreak continues to evolve as of the date of this report.

In year 2015, the MTA Retiree Welfare Benefits Plan adopted GASB Statement No. 72 (“GASB 72”), *Fair Value Measurement and Application*. 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 have the following recurring fair value measurements as of December 31, 2022 and 2021:

Investments measured at readily determined fair value (FV)
(\$ In thousands)

	2022			
	December 31, 2022	Quoted Price in		
		Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Debt Securities:				
Short term bond mutual fund	\$ 11,698	11,698	-	-
Total debt investments	11,698	11,698	-	-

Investments measured at readily determined fair value (FV)
(\$ In thousands)

	2021			
	December 31, 2021	Quoted Price in		
		Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Debt Securities:				
Short term bond mutual fund	\$ 107	107	-	-
Total debt investments	107	107	-	-

5. NET OPEB LIABILITY

The components of the net OPEB liability of the Plan for the years ended December 31, 2022 and 2021 were as follows (in thousands):

	December 31, 2022	December 31, 2021
Total OPEB liability	\$ 22,446,401	\$ 24,956,514
Fiduciary net position	11,735	83
Net OPEB liability	<u>22,434,666</u>	<u>24,956,431</u>
Fiduciary net position as a percentage of the total OPEB liability	0.05%	0.00%

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

	2022	2021
Valuation date	July 1, 2021	July 1, 2021
Measurement date	December 31, 2022	December 31, 2021
Reporting date	December 31, 2022	December 31, 2021
Actuarial cost method	Entry Age Normal	Entry Age Normal
Normal cost increase factor	4.25%	4.25%

Discount Rate – XXX% per annum as of December 31, 2022 (Bond Buyer General Obligation 20-Bond Municipal Bond Index) and 20.6% per annum as of December 31, 2021.

	2022	2021
Discount rate	3.72%	2.06%
Long-term expected rate of return, net of investment expense	3.72%	2.06%
Bond Buyer General Obligation 20-Bond Municipal Bond Index	3.72%	2.06%

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 and Healthcare Cost Trend Rate

The following presents the net OPEB liability of the Authority, calculated using the discount rate of 3.72 percent; as well as what the Authority's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower (2.72 percent) or 1-percentage point higher (4.72 percent) than the current rate:

2022

(in thousands)

	1% Decrease 2.72%	Current Discount Rate 3.72%	1% Increase 4.72%
Net OPEB liability	\$25,527,147	\$22,434,666	\$19,880,017

The following presents the net OPEB liability of the Authority, calculated using the discount rate of 2.06 percent; as well as what the Authority's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower (1.06 percent) or 1-percentage point higher (3.06 percent) than the current rate:

2021

(in thousands)

	1% Decrease 1.06%	Current Discount Rate 2.06%	1% Increase 3.06%
Net OPEB liability	\$28,857,427	\$24,956,431	\$21,790,175

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.

2022

(in thousands)

	1% Decrease	* Current Trend Rate	1% Increase
Net OPEB liability	\$19,236,720	\$22,434,666	\$26,461,563

* See Health Care Cost Trend Rates table on page 27 of report.

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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.

2021
(in thousands)

	1% Decrease	* Current Trend Rate	1% Increase
Net OPEB liability	\$21,198,435	\$24,956,431	\$29,769,162

* See Health Care Cost Trend Rates table on page 27 of report.

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 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.

2022 Schedule of Calculations of Money-Weighted Rate of Return

(in dollars)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2022	\$83,414	12.00	1.00	\$19,153,603
Monthly net external cash flows:				
January	(14,661)	11.50	0.96	(2,708,490)
February	(14,661)	10.50	0.88	(1,753,260)
March	(14,661)	9.50	0.79	(1,074,868)
April	(14,661)	8.50	0.71	(695,784)
May	(14,661)	7.50	0.63	(450,395)
June	(14,661)	6.50	0.54	(276,123)
July	(14,661)	5.50	0.46	(178,740)
August	(14,661)	4.50	0.38	(115,702)
September	(14,661)	3.50	0.29	(70,933)
October	(14,661)	2.50	0.21	(45,913)
November	(14,661)	1.50	0.13	(29,723)
December	(14,661)	0.50	0.04	(18,222)
Ending Value - December 31, 2022				\$11,735,450
Money-Weighted Rate of Return	22862.10%			

2021 Schedule of Calculations of Money-Weighted Rate of Return

(in dollars)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2021	\$129,872	12.00	1.00	\$129,911
Monthly net external cash flows:				
January	(3,874)	11.50	0.96	(3,875)
February	(3,874)	10.50	0.88	(3,875)
March	(3,874)	9.50	0.79	(3,875)
April	(3,874)	8.50	0.71	(3,875)
May	(3,874)	7.50	0.63	(3,875)
June	(3,874)	6.50	0.54	(3,875)
July	(3,874)	5.50	0.46	(3,875)
August	(3,874)	4.50	0.38	(3,875)
September	(3,874)	3.50	0.29	(3,875)
October	(3,874)	2.50	0.21	(3,874)
November	(3,874)	1.50	0.13	(3,874)
December	(3,874)	0.50	0.04	(3,874)
Ending Value - December 31, 2021				\$83,414
Money-Weighted Rate of Return	0.03%			

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, 2022 and 2021.

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2022

Asset Class	Index	Target Allocation*	Long-Term Expected Arithmetic Real Rate of Return
US Short (1-3 Years) Government/Credit Bonds	Bloomberg US Short Government/Credit Bonds (1-3 Years) Treasury USD	100.00%	1.31%
Assumed Inflation - Mean			2.33%
Assumed Inflation - Standard Deviation			1.41%
Portfolio Nominal Mean Return			3.64%
Portfolio Standard Deviation			2.05%
Long-Term Expected Rate of Return selected by MTA			3.72%

* Based on March 2014 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2021

Asset Class	Index	Target Allocation*	Long-Term Expected Arithmetic Real Rate of Return
US Cash	BAML 3-Month Treasury Bill	100.00%	-0.26%
Assumed Inflation - Mean			2.30%
Assumed Inflation - Standard Deviation			1.23%
Portfolio Nominal Mean Return			2.03%
Portfolio Standard Deviation			1.11%
Long-Term Expected Rate of Return selected by MTA			2.06%

* Based on March 2014 Investment Policy

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.

Actuarial Assumptions - The non-healthcare assumptions described below were adopted by the Authority based on experience analyses covering the period from January 1, 2012 – December 31, 2017 dated October 4, 2019 for members of the MaBSTOA Pension Plan and the MTA DB Plan, in addition to a postretirement mortality study covering the period from January 1, 2015 – December 31, 2020 dated April 21, 2022. In addition, demographic assumptions are based on those used in the most recent NYCERS or NYSLRS actuarial valuations for MTA employees participating in these city-wide or state-wide pension plans.

Actuarial Cost Method - In accordance with GASB 74, the Entry Age Normal cost method was used for determining service costs and the actuarial accrued liability. Costs are determined as a level percent of pay.

Census data was collected as of July 1, 2021, which is the valuation date. Liabilities as of December 31, 2022 were determined using roll-forward methods, assuming no liability gains and losses. Past and future normal costs were assumed to increase 4.25% per year.

Significant Changes – This valuation reflects updates to healthcare-related assumptions which decreased plan liabilities by \$2,050.1 million. The discount rate increased from 2.06% as of December 31, 2021 to 3.72% as of December 31, 2022 based on the Bond Buyer GO 20-Bond Municipal Bond Index, which decreased liabilities by \$5.5 billion. The net effect of all assumption changes was a decrease of \$3,449.4 million as of December 31, 2022.

While the Chapter 56 Laws of 2022 reduced the vesting requirement from 10 years of service to 5 years of service for Tiers 5 and 6 members for pension purposes, 10 years of service is still required for OPEB benefits. Therefore, there is no impact for OPEB purposes.

Changes since Prior Valuation – The discount rate has been changed from 2.06% as of December 31, 2021 to 3.72% as of December 31, 2022 due to changes in the applicable municipal bond index.

Healthcare trend assumptions were updated to reflect current expectations and January 1, 2022 and 2023 premium rates.

Inflation Rate – 2.33% per annum compounded annually.

Development of Per Capita Claim Costs (“PCCC”) – For members that participate in NYSHIP, Empire PPO plan premium rates paid by Participating Agencies for 2021 were adjusted to reflect differences by age in accordance with Actuarial Standard of Practice No. 6. Premiums paid by Participating Agencies differ based on Medicare-eligible status whereas premiums paid by Participating Employers do not. The age/gender adjustments were based on manual rates developed from Milliman’s Commercial Rating Structures and Ages 65 and Over Health Cost Guidelines® (HCGs), Empire PPO plan design information, ERS retiree distribution from 2020 ACFR and actuarial judgment. Pre- and post-65 NYSHIP premium rates were adjusted separately to be consistent with the way in which demographic factors were developed. These per capita costs may be loaded to account for Agency specific coverage election assumptions. The Medicare Part B premium is not included. For spouses and beneficiaries under age 65, the age-adjusted premiums shown below are increased by 15% to reflect the additional cost of covered children.

Age Adjusted Monthly NYSHIP Empire PPO Premiums

Age Group	Males	Females	Age Group	Males	Females
<50	1,268.23	1,866.14	65 - 69	456.75	434.77
50 - 54	1,419.46	1,584.95	70 - 74	549.71	498.36
55 - 59	1,529.66	1,571.69	75 - 79	603.15	524.56
60 - 64	1,846.56	1,766.14	80 - 84	625.78	537.34
			85+	633.41	540.57

For the self-insured medical and pharmacy plan administered by MTA New York City Transit, PCCCs were determined for 2021 based upon a combination of MTA claim experience, MTA census data, MTA plan design information, manual rates from the Milliman Commercial Rating Structures and Ages 65 and Over Health Cost Guidelines® (“HCGs”), and actuarial judgment.

MTA and the carrier provided Milliman with summarized medical (Aetna Basic and Aetna Select plans) and pharmacy claim experience (Employer Group Waiver Plan (“EGWP”) and non-EGWP plans), split between those eligible and not eligible for Medicare, for covered retirees of MTA Bus Company, MTA New York City Transit, and MTA Staten Island Railway for 2021. In addition, the MTA provided associated premium rates for each of the plans. Enrollment data was based on covered members provided by MTA as of the valuation date. Milliman used the HCGs to develop PCCC relativity factors that varied by benefit, age and gender. Finally, per capita costs were adjusted by an administrative load. Administrative costs were provided on a per contract basis by MTA and were \$14.82 per month for Aetna Basic under 65, \$12.43 for Aetna Select and \$12.37 for Aetna Basic 65 and over.

For spouses and beneficiaries under age 65, the PCCCs shown below reflect a 20% increase to reflect the additional cost of covered children.

EGWP PCCCs are based on the premium equivalents provided reflecting the Medicare subsidies available to this plan. Relativity factors varying by age and gender are based on Medicare slopes developed by Milliman.

In addition, PCCCs were developed for the Aetna Medicare plans based on the premium equivalents provided and reflecting relativity factors by age and gender based on Medicare slopes developed by Milliman. The following charts detail the monthly 2021 PCCCs used in this valuation.

Monthly Medical Per Capita Claim Cost

<u>Age Group</u>	<u>Male Retirees</u>	<u>Female Retirees</u>	<u>Male Spouses</u>	<u>Female Spouses</u>
Aetna Basic				
Child	n/a	n/a	273.84	273.84
<50	893.83	1,362.77	616.54	816.85
50-54	1,038.79	1,199.23	756.74	929.14
55-59	1,153.60	1,224.03	874.32	988.19
60-64	1,347.58	1,345.71	1,070.69	1,102.07
65-69	181.80	193.56	181.80	193.56
70-74	222.22	221.37	222.22	221.37
75-79	259.71	245.48	259.71	245.48
80-84	294.65	281.53	294.65	281.53
85+	367.69	349.55	367.69	349.55
Aetna Select				
Child	n/a	n/a	264.96	264.96
<50	859.88	1,314.74	592.54	787.31
50-54	993.88	1,153.61	723.54	893.37
55-59	1,101.57	1,175.05	834.46	948.29
60-64	1,283.90	1,288.27	1,019.74	1,054.71
Aetna Medicare Option 1				
65-69	216.10	215.75	216.10	215.75
70-74	226.18	222.53	226.18	222.53
75-79	237.82	231.39	237.82	231.39
80-84	250.16	241.47	250.16	241.47
85+	268.41	257.11	268.41	257.11
Aetna Medicare Option 2				
65-69	187.82	187.52	187.52	187.52
70-74	196.52	193.37	196.52	193.37
75-79	206.57	201.02	206.57	201.02
80-84	217.22	209.72	217.22	209.72
85+	232.97	223.22	232.97	223.22

Monthly Pharmacy Per Capita Claim Cost

<u>Age Group</u>	<u>Male Retirees</u>	<u>Female Retirees</u>	<u>Male Spouses</u>	<u>Female Spouses</u>
Basic Rx Plan				
Child	n/a	n/a	45.99	45.99
<50	185.83	249.00	127.45	148.46
50-54	204.61	228.16	148.46	176.30
55-59	229.15	248.70	173.14	200.34
60-64	253.92	267.25	201.32	218.46
65-69	706.83	643.86	706.83	643.86
70-74	820.48	722.07	820.48	722.07
75-79	864.54	734.24	864.54	734.27
80-84	853.17	716.76	853.17	716.76
85+	765.68	617.36	765.68	617.36
EGWP Rx Plan				
65-69	210.43	194.09	210.43	194.09
70-74	208.99	187.78	208.99	187.78
75-79	204.12	182.33	204.12	182.33
80-84	200.11	173.16	200.11	173.16
85+	186.63	153.66	186.63	153.66

Monthly Medicare Part B premiums were assumed to be \$148.50 for 2022 and 2021.

Premium rates for dental and vision benefits were used as provided by the Agencies.

Health Cost Trend – The healthcare trend assumption is based on the Society of Actuaries-Getzen Model version 2021 utilizing the baseline assumptions included in the model, except inflation of 2.25% for medical and pharmacy benefits. Further adjustments apply based on percentage of costs associated with administrative expenses, inflation on administrative costs, and aging factors. For NYSHIP benefits, trends are multiplied by 90% to reflect that NYSHIP trends have been generally lower than trends projected by the Getzen model over the past 10 years. Separate long-term trends are used for Medicare Part B reimbursements and for dental and vision benefits (3.5% per year). The self-insured trend is applied directly for represented employees of NYC Transit, SIRTOA and MTA Bus Company. No self-insured post-65 trend is assumed during 2021 to reflect the approximately 90% reduction in the contracted Medicare Advantage plan premiums for 2022. The following lists illustrative rates for the NYSHIP and self-insured trend assumptions (amounts are in percentages).

Health Care Cost Trend Rates

Fiscal Year	NYSHIP		TBTA No Rx		Self-Insured		Medicare Part B
	< 65	>=65	< 65	>=65	< 65	>=65	
2021 to 2022	5.3	4.6	5.2	3.6	5.9	0.0	14.5
2022 to 2023	5.1	4.6	5.0	3.9	5.6	5.1	5.4
2023 to 2024	4.8	4.6	4.8	4.3	5.4	5.1	5.4
2024 to 2025	4.6	4.6	4.6	4.6	5.1	5.1	5.4
2025 to 2026	4.5	4.5	4.5	4.5	5.0	5.0	5.4
2026 to 2027	4.4	4.4	4.4	4.4	4.9	4.8	5.4
2027 to 2028	4.3	4.3	4.3	4.3	4.7	4.7	5.4
2028 to 2029	4.2	4.2	4.2	4.2	4.6	4.6	5.4
2029 to 2030	4.0	4.0	4.0	4.0	4.5	4.5	5.4
2030 to 2031	3.9	3.9	3.9	3.9	4.4	4.4	5.4
2040 to 2041	3.9	3.9	3.9	3.9	4.3	4.3	4.0
2050 to 2051	3.8	3.8	3.8	3.8	4.2	4.2	3.8
2060 to 2061	3.8	3.8	3.8	3.8	4.2	4.2	3.7
2070 to 2071	3.5	3.5	3.5	3.5	3.9	3.9	3.7
2080 to 2081	3.3	3.3	3.3	3.3	3.7	3.7	3.7
2090 to 2091	3.3	3.3	3.3	3.3	3.7	3.7	3.6
2100 to 2101	3.3	3.3	3.3	3.3	3.7	3.7	3.6

For purposes of applying the Entry Age Normal cost method, the healthcare trend prior to the valuation date are based on the ultimate rates, which are 3.3% for NYSHIP costs, 3.7% for self-insured medical and pharmacy costs, and 3.6% for Medicare Part B costs.

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 July 1, 2021

	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	47,633	7,335	6,291	1,176	2,043	N/A	332	3,862	68,672
Average Age	49.0	45.7	45.5	49.0	44.8	N/A	41.1	48.7	48.1
Average Service	13.0	13.8	12.3	16.1	11.2	N/A	9.6	11.9	13.0
<u>Retirees</u>									
Single Medical Coverage	14,971	785	532	578	311	96	44	1,050	18,367
Employee/Spouse Coverage	19,334	2,203	1,286	800	658	167	89	829	25,366
Employee/Child Coverage	1,288	115	98	48	29	16	3	32	1,629
No Medical Coverage	895	2,373	402	14	19	312	40	268	4,323
Total Number	<u>36,488</u>	<u>5,476</u>	<u>2,318</u>	<u>1,440</u>	<u>1,017</u>	<u>591</u>	<u>176</u>	<u>2,179</u>	<u>49,685</u>
Average Age of Retiree	72.1	70.8	66.7	70.4	66.2	71.5	67.3	71.5	71.5
Total Number with Dental	9,279	1,040	769	560	958	49	45	188	12,888
Total Number with Vision	32,784	1,040	769	560	958	49	135	1,890	38,185
Total No. with Supplement	23,972	1,909	656	813	-	446	129	1,528	29,453
Average Monthly Supplement Amount (Excluding Part B Premium)	\$ 33	\$ 246	\$ 100	\$ 215	\$ -	N/A	\$ 64	\$ 25	\$ 53
Total No. with Life Insurance	8,411	5,132	1,168	469	919	445	134	2,006	18,684
Average Life Insurance Amount	\$ 2,371	\$20,447	\$3,924	\$6,167	\$5,000	\$ 10,101	\$2,828	\$12,809	\$ 8,966

* MTA LI Bus had 79 vestees as of date of valuation

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 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 35% of female eligible members participating in NYSHIP are assumed to elect family coverage upon retirement and 65% of male and 25% 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. Under age 65 spouses of over age 65 retirees are assumed to have elected the Aetna Select plan if the retiree elected Aetna Option 1 or Option 2.

Demographic Assumptions:

Mortality — All mortality rates (except accidental death for active police members) are projected on a generational basis using the Society of Actuaries Mortality Improvement Scale MP-2021. As generational tables, they reflect mortality improvement both before and after the measurement date. The post-retirement mortality assumption is based on an experience analysis covering the period from January 1, 2015 to December 31, 2020 for the MTA-sponsored pension plans. The mortality rates vary by employee type:

- i) Headquarters Non-Police Members: PubG.H-2010 Mortality Table, headcount weighted for general employees for males and females with separate rates for employees, healthy annuitants and disabled annuitants.
- ii) Headquarters Police Members: Rates from the June 30, 2019 (Lag) Actuarial Valuation for NYCERS dated December 29, 2021 as follows: Service Retirees for Housing Police and Transit Police, Disabled Retirees for Housing Police and Transit Police and Active Members for Transit and TBTA Ordinary Death and Accidental Death. No adjustments were made to convert from lives-weighted to amounts-weighted. Base year is 2012 for mortality improvement purposes.
- iii) Rail Members (MTA Long Island Bus, LIRR, Metro-North, and SIRTOA): Pri.H-2012(BC) Mortality Table, headcount weighted with blue collar adjustments for males and females with separate rates for employees, healthy annuitants and disabled annuitants. Employee and healthy annuitant male rates are multiplied by 97%.
- iv) Transit Members (Bridges and Tunnels, MTA Bus, and Transit): Pri.H-2012(BC) Mortality Table, headcount weighted with blue collar adjustments for males and females with separate rates for employees, healthy annuitants and disabled annuitants. Employee and healthy annuitant male rates are multiplied by 92%.

Vestee Coverage — For members that participate in NYSHIP, Vestees (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. Vestees 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 45/75 Valuation report provided to Participating Employers of NYSHIP. These percentages were also applied to current vestees 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 Board of Managers 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 April 11, 2023 and May 2, 2023, \$1,000.347 and \$314.981, respectively, were transferred from available funds to the MTA Other Postemployment Benefits Plan (“OPEB” Plan) and the related Trust Fund to set aside funds to assist in providing health and other welfare benefits to eligible retirees and their beneficiaries. The investments will be managed with the aim to allocate within the maturity range from December 2025 through June 2028.

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REQUIRED SUPPLEMENTARY INFORMATION

**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)**

	2022	2021	2020	2019	2018	2017
Total OPEB liability:						
Service cost	\$ 1,240,342	1,250,950	1,097,051	928,573	1,011,981	876,723
Interest	530,983	535,642	610,160	840,532	758,494	757,860
Changes of benefit terms	-	-	-	-	8,543	24,446
Differences between expected and actual experience	14,299	292,154	(43,890)	247,871	(569,165)	(44,082)
Changes of assumptions	(3,449,438)	(738,829)	1,939,528	311,286	(1,964,746)	921,007
Benefit payments and withdrawals	(846,299)	(792,984)	(724,741)	(730,677)	(691,122)	(650,994)
Net change in total OPEB liability	(2,510,113)	546,933	2,878,108	1,597,585	(1,446,015)	1,884,960
Total OPEB liability – beginning	24,956,514	24,409,581	21,531,473	19,933,888	21,379,903	19,494,943
Total OPEB liability – ending (a)	22,446,401	24,956,514	24,409,581	21,531,473	19,933,888	21,379,903
Plan fiduciary net position:						
Employer contributions	846,299	792,984	387,371	730,677	691,122	650,994
Member contributions	-	-	-	-	-	-
Net investment income	11,828	-	(77,118)	63,647	(18,916)	47,370
Benefit payments and withdrawals	(846,299)	(792,984)	(724,741)	(730,677)	(691,122)	(650,994)
Administrative expenses & Transfer to investments	(176)	(47)	(209)	(200)	(56)	-
Net change in plan fiduciary net position	11,652	(47)	(414,697)	63,447	(18,972)	47,370
Plan fiduciary net position – beginning	83	130	414,827	351,380	370,352	322,982
Plan fiduciary net position – ending (b)	11,735	83	130	414,827	351,380	370,352
Employer's net OPEB liability – ending (a)-(b)	\$ 22,434,666	24,956,431	24,409,451	21,116,646	19,582,508	21,009,551
Plan fiduciary net position as a percentage of the total OPEB liability	0.05%	0.00%	0.00%	1.93%	1.76%	1.73%
Covered payroll	\$ 6,848,347	5,501,627	5,604,690	5,608,536	5,394,332	5,041,030
Employer's net OPEB liability as a percentage of covered payroll	327.59%	453.62%	435.52%	376.51%	363.02%	416.77%

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)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2013	N/A	\$ -	N/A	\$ -	N/A
2014	N/A	-	N/A	-	N/A
2015	N/A	-	N/A	-	N/A
2016	N/A	-	N/A	-	N/A
2017	N/A	650,994	N/A	** 5,041,030	12.91%
2018	N/A	691,122	N/A	5,394,332	12.81%
2019	N/A	730,677	N/A	5,608,536	13.03%
2020	N/A	387,371	N/A	5,604,690	6.91%
2021	N/A	792,984	N/A	5,501,627	14.41%
2022	N/A	846,299	N/A	6,848,347	12.36%

* Actual Employer Contribution includes the implicit rate of subsidy adjustment.

** 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
2013	N/A
2014	N/A
2015	N/A
2016	N/A
2017	14.67%
2018	-5.11%
2019	18.12%
2020	-32.92%
2021	0.03%
2022	22862.10%

In accordance with GASB No. 74, paragraph 39, such information was not readily available for periods prior to 2017.

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The Long Island Rail Road Company Plan for Additional Pensions

(A Fiduciary Component Unit of the Metropolitan Transportation
Authority)

Financial Statements as of and for the
Years Ended December 31, 2022 and 2021,
Supplemental Schedules and
Independent Auditor's Report

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR’S REPORT	1–3
MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)	4–9
FINANCIAL STATEMENTS AS OF DECEMBER 31, 2022 AND 2021:	
Statements of Fiduciary Net Position as of December 31, 2022 and 2021	10
Statements of Changes in Fiduciary Net Position for the Years Ended December 31, 2022 and 2021	11
Notes to Financial Statements	12–33
REQUIRED SUPPLEMENTAL INFORMATION (UNAUDITED)	34
Schedule of Changes in the Employers’ Net Pension Liability and Related Ratios—Schedule I	35
Schedule of Employer Contributions—Schedule II	36-38
Schedule of Investment Returns—Schedule III	39

INDEPENDENT AUDITOR'S REPORT

To the Board of Administration of
The Long Island Rail Road Company Plan
for Additional Pensions:

Opinion

We have audited the accompanying statements of fiduciary net position of The Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan") as of December 31, 2022 and 2021, and the related statement of changes in fiduciary 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood

that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

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 and the Schedule of Changes in the Employers' Net Pension Liability and Related Ratios—Schedule I on page 35; Schedule of Employer Contributions—Schedule II on pages 36 through 38; and Schedule of Investment Returns—Schedule III on page 39 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.

July 17, 2023

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THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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, 2022 and 2021, 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 are 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 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 are intended to serve as an introduction to the Additional Plan's financial statements. The basic financial statements are:

- **The Statements of Fiduciary 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 Fiduciary 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

Fiduciary Net Position

As of December 31, 2022, 2021 and 2020

(Amounts in thousands)

	2022	2021	2020	Increase / (Decrease)			
				2022-2021		2021-2020	
				\$	%	\$	%
Cash	\$ 697	\$ 2,956	\$ 1,480	\$ (2,259)	(76)%	\$ 1,476	100 %
Investments, at fair value	652,011	773,997	755,909	(121,986)	(16)%	18,089	2 %
Receivables	598	1,815	3,235	(1,217)	(67)%	(1,420)	(44)%
Total assets	653,306	778,768	760,623	(125,462)	-16%	18,145	2 %
Due to broker for securities purchased	611	984	542	(373)	(38)%	442	82 %
Forward Currency & Margin contracts	59	182	43	(123)	(68)%	139	323 %
Due to broker for investment fee	(19)	269	316	(288)	(107)%	(47)	(15)%
Due to broker for admin. fee	257	10	-	247	2,470 %	10	100%
Total liabilities	908	1,445	901	(537)	(37)%	544	60 %
Net position restricted for pensions	\$ 652,398	\$ 777,323	\$ 759,722	\$ (124,925)	(16)%	\$ 17,601	2 %

December 31, 2022 versus December 31, 2021

The assets of the Additional Plan exceeded its liabilities by \$652.4 million as of December 31, 2022. 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 decreased by \$124.9 million during 2022, representing a decrease of 16% over 2021. This decrease is a result of investment activity and plan contributions net of benefit payments and expenses during 2022.

Investments at December 31, 2022 were \$652.4 million representing a decrease of \$122.0 million from 2021. The decrease was a result of the changes noted above together with regards to the underperformance of investment markets in 2022.

Payables for investments purchased at December 31, 2022, amounted to \$0.6 million. Investments are purchased on a trade-date settlement basis and generate timing differences on settlement dates, like receivables for investments sold.

December 31, 2021 versus December 31, 2020

The assets of the Additional Plan exceeded its liabilities by \$777.3 million as of December 31, 2021. 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 \$17.6 million during 2021, representing an increase of 2% over 2020. This increase is a result of investment activity and plan contributions net of benefit payments and expenses during 2021.

Investments at December 31, 2021 were \$774.0 million representing an increase of \$18.1 million from 2020. The increase was a result of the changes noted above together with the improved investment performance in 2021.

Payables for investments purchased at December 31, 2021, amounted to \$1.0 million. Investments are purchased on a trade-date settlement basis and generate timing differences on settlement dates, like receivables for investments sold.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31, 2022, 2021 and 2020

(Amounts in thousands)

	2022	2021	2020	Increase / (Decrease)			
				2022-2021		2021-2020	
				\$	%	\$	%
Additions:							
Net investment income/(loss)	\$ (51,214)	\$ 96,215	\$ 3,808	\$ (147,429)	(153)%	\$ 92,407	2,427 %
Employer contributions	70,763	70,553	68,723	210	0 %	1,830	3 %
Employee contributions	51	73	141	(22)	(30)%	(68)	(48)%
Total additions	19,600	166,841	72,672	(147,241)	(88)%	94,169	130 %
Deductions:							
Benefits paid directly to participants	143,764	148,630	152,924	\$ (4,866)	(3)%	\$ (4,294)	(3)%
Transfers	-	-	(878)	-	0 %	878	(100)%
Administrative expenses	761	610	612	151	25%	(2)	(0)%
Total deductions	144,525	149,240	152,658	(4,715)	(3)%	(3,418)	(2)%
Net (decrease) / increase	(124,925)	17,601	(79,986)	(142,526)	(810)%	\$ 97,587	(122)%
Net position restricted for pensions							
Beginning of Year	777,323	759,722	839,708	17,601	2 %	(79,986)	(10)%
End of year	\$ 652,398	\$ 777,323	\$ 759,722	\$ (124,925)	(16)%	\$ 17,601	2 %

December 31, 2022 versus December 31, 2021

At the end of 2022, the net investment income decreased by \$147.4 million due to net investment losses of \$51.2 million in 2022 versus net gain of \$96.2 million experienced in 2021.

Employer and employee contributions for the year ended December 31, 2022 totaled \$70.8 million, which represents an increase of 0.3% from 2021. This increase was the result of higher employer contributions made by the Plan in 2022.

Benefit payments for the year ended December 31, 2022 totaled \$143.8 million, which was lower than benefit payments made in 2021 in the amount of \$148.6 million, due to less Plan benefits paid out to existing retirees attaining age sixty-five in 2022.

December 31, 2021 versus December 31, 2020

At the end of 2021, the net investment income increased by \$92.4 million¹ due to net investment gains of \$96.2 million in 2021 versus net gain of \$3.8 million experienced in 2020.

Employer and employee contributions for the year ended December 31, 2021 totaled \$70.6 million, which represents an increase of 3% from 2020. This increase was the result of higher employer contributions made by the Plan in 2021.

Benefit payments for the year ended December 31, 2021 totaled \$148.6 million, which was lower than benefit payments made in 2020 in the amount of \$152.9 million, due to less Plan benefits paid out to existing retirees attaining age sixty-five in 2021.

Economic Factors

Market Overview – 2022

The year 2022 was a tumultuous year for markets and was characterized by heightened inflation, tightened monetary policies, skyrocketing interest rates, and geopolitical tensions such as Russia's invasion of Ukraine and China's aggressive posturing towards Taiwan. Following the strong global economic recovery of the previous year, the economic conditions in 2022 brought with it historically volatile oil and gas prices, suppression of global economic growth rate forecasts, and tremendous uncertainty. Heightened interest rates and hawkish policy adopted by the Federal Reserve gave people far less access to money and reduced buying power. Personal income decreased, while personal consumption expenditures and the U.S. unemployment rate remained favorable. Global assets broadly declined, volatility metrics increased, home affordability fell materially, and a sharply inverted yield curve echoed the market's stagflation and recession concerns.

While initially expected to be transitory by the Federal Reserve, U.S. inflation reached a 40-year high in 2022, as large consumer demand was curbed by pandemic and geopolitical related supply constraints. The Federal Reserve raised the federal funds rate by a total of 425 bps throughout the year, such a pace has not been seen since the 1980s, leading to an unprecedented decline in bond prices. The European Central Bank, which was formed in 1998, hiked rates at such a pace that have never been seen in its history as well. Energy prices rose by over 35% for the year, driven by export sanctions on Russia as a result of the Russia-Ukraine war.

Except for commodities, global risk assets plummeted across the board. The strong shift upwards in correlations between equity and fixed income markets resulted in the one of the worst years for the 60/40 equity bond mix portfolio that we have ever seen. With few places to hide in 2022, investors may look to expand alternative asset allocations moving forward. In foreign exchange markets, the U.S. Dollar strengthened considerably, posting very significant gains against the Euro, the Yen, and most other currencies.

Macro Themes

- Stagflation Trends
- Recession Outlook
- European Energy Transition
- China's Reopening
- U.S. Dollar Trajectory

United States

The U.S. economy tumbled from a 5.9% increase in Real GDP in 2021 to a 2.1% increase in 2022. The unemployment rate continued to fall, finishing 2022 at 3.5% compared to 3.9% in 2021. Consumer Prices rose 6.5% in 2022 and CPI peaked at 9.1% in June 2022, while core inflation, excluding the volatile food and energy components, rose 5.7%.

U.S. equities were negative across the board, with the S&P 500 and Russell 1000 indices posting returns of (-18.1%) and (-19.1%), respectively. Across market caps, Large Cap, as measured by the S&P 500 (-18.1%), Mid Cap, as measured by the S&P 400 (-13.1%), and Small Cap, as measured by the Russell 2000 (-20.4%) all posted double digit negative returns. Across styles, Growth, as measured by the Russell 1000 Growth (-29.1%) significantly underperformed Value, as measured by the Russell 1000 Value (-7.5%).

U.S. Treasury yields drastically increased in 2022 and the yield curve inverted amid elevated inflation and the shift to a hawkish Federal Reserve policy. Credit spreads were volatile in 2022 and slightly widened for the year. Diversified fixed income returned -13.0% (Bloomberg U.S. Aggregate Index), with losses dominated by long U.S. Treasuries at -29.3% (Bloomberg Long Treasury Index) and Credit at -15.3% (Bloomberg Credit Index). Negative returns of -11.8% were realized in Treasury Inflation Protected Securities (Bloomberg TIPS Index) and of -11.2% in High Yield (Bloomberg High Yield Index).

International Developed

International developed equity markets posted weak results in 2022, but outperformed the U.S. equity markets, returning (-14.5%) as measured by the MSCI EAFE Index. Both European and Japanese equities had negative performance in 2022 with the MSCI Europe Index returning (-14.5%) and the MSCI Japan Index returning (-16.3%). The Small Cap portion of international developed markets posted far weaker returns in 2022 (-21.0%) as compared to 2021 (+10.5%).

Emerging Markets

Emerging markets posted weak returns in 2022, underperforming both the U.S. and international developed equity markets. The broad MSCI Emerging Market Index returned (-20.1%) for the year. The underperformance was led by Asian Markets and the removal of Russia from the Index, given that major index providers deemed Russia not investable following the Russian invasion of Ukraine. Geopolitical tensions, inflationary pressures, and a strong US dollar dampened sentiment in developing countries despite higher commodity prices.

The bond markets of emerging markets underperformed in 2022. Both hard currency and local currency bonds posted negative returns. Hard currency bonds, predominately issued in U.S. Dollars, as represented by the JPMorgan EMBI Global Diversified Index, returned (-17.8%) in 2022. Local currency bonds, represented by the JPMorgan GBI-EM Global Diversified Index, returned (-11.7%) for the year.

Commodities

The S&P Goldman Sachs Commodity Index (GSCI) jumped 26.0%, largely influenced by a 20% increase in natural gas prices. Commodity prices were extremely volatile in 2022 with the GSCI surging 52.1% from January through May and then cooling for the rest of the year. Industrial metals were the laggards in this category, with Aluminum being down over 16% for 2022.

Market Outlook -- 2023

Through the first quarter of 2023, equity markets were mostly higher with gains in the low to mid-single digits. Growth equities and Developed International equities have led the way, recovering some of their 2022 losses. Fixed income markets also had a good start to the year with most markets up low single digits. The Fed was still increasing rates, but at a slower pace. The only negative spot was in the commodities markets, with the GSCI down -4.9%. This year is expected to be less tumultuous than 2022, but an unfavorable macroeconomic backdrop still looms.

2023's macroeconomic backdrop will likely be dominated by recession risk, the Russia-Ukraine war, tight monetary policy, elevated inflation pressure and the regional bank failures, all of which are expected to impact economic growth negatively. With global central banks no longer accommodative, a "V" shaped recovery seems unlikely. Global growth expectations have a high degree of uncertainty as investors weigh the possibilities of more banking failures, the U.S raising its debt limit, China's re-opening with the abandonment of the "Zero-COVID" policy, and the escalation of the Russia-Ukraine war.

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 Metropolitan Transportation Authority, Deputy Chief, Controller's Office, 2 Broadway, 15th Floor, New York, NY 10004.

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THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

STATEMENTS OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2022 AND 2021

(Amounts in thousands)

	2022	2021
ASSETS:		
Cash	\$ 697	\$ 2,956
Investments at fair value (notes 2 and 3):		
Investments measured at readily determined fair value	200,019	194,633
Investments measured at net asset value	<u>451,992</u>	<u>579,364</u>
Total Investments	<u>652,011</u>	<u>773,997</u>
Receivables:		
Participant and union contributions	-	(20)
Other receivables	23	64
Due from the MTA DB Plan for employer contributions	-	1,295
Securities sold	175	138
Accrued interest and dividends	<u>400</u>	<u>338</u>
Total receivables	<u>598</u>	<u>1,815</u>
Total assets	<u>653,306</u>	<u>778,768</u>
LIABILITIES:		
Due to broker for securities purchased	611	984
Forward Currency & Margin contracts	59	182
Due to broker for investment fees	(19)	269
Due to broker for administrative expenses	<u>257</u>	<u>10</u>
Total liabilities	<u>908</u>	<u>1,445</u>
NET POSITION RESTRICTED FOR PENSIONS	<u>\$ 652,398</u>	<u>\$ 777,323</u>

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

(Amounts in thousands)

	2022	2021
ADDITIONS:		
Investment income:		
Net realized and unrealized (losses) / gains	\$ (56,789)	\$ 93,217
Interest income	8,067	8,132
Dividend income	<u>1,774</u>	<u>1,361</u>
Total investment (loss) / income	(46,948)	102,710
Less investment expenses	<u>(4,266)</u>	<u>(6,495)</u>
Total net investment (loss) / income	<u>(51,214)</u>	<u>96,215</u>
Contributions (Note 5):		
Employer	70,763	70,553
Participant and union	<u>51</u>	<u>73</u>
Total contributions	<u>70,814</u>	<u>70,626</u>
Total additions	<u>19,600</u>	<u>166,841</u>
DEDUCTIONS:		
Benefits paid to participants	143,764	148,630
Administrative expenses	<u>761</u>	<u>610</u>
Total deductions	<u>144,525</u>	<u>149,240</u>
NET (DECREASE) / INCREASE IN NET POSITION	(124,925)	17,601
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	<u>777,323</u>	<u>759,722</u>
End of year	<u>\$ 652,398</u>	<u>\$ 777,323</u>

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, 2022 AND 2021
(Dollars in thousands)

1. PLAN DESCRIPTION

The Long Island Rail Road Company Plan for Additional Pensions (the “Additional Plan”) is a single employer 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 2022 Master Trust is 90.45% for the Metropolitan Transportation Authority Defined Benefit Pension Plan and 9.55% for the Long Island Rail Road Company Plan for Additional Pensions for the year ended December 31, 2022.

The total asset allocation of the 2021 Master Trust is 89.23% for the Metropolitan Transportation Authority Defined Benefit Pension Plan and 10.77% for the Long Island Rail Road Company Plan for Additional Pensions for the year ended December 31, 2021.

Pension Benefits - All full-time employees who were hired before January 1, 1988, are eligible for Additional Plan membership. At January 1, 2022 and 2021, the most recent valuation date, the Additional Plan's membership consisted of the following:

	January 1 2022	January 1 2021
Active plan members	15	23
Terminated vested & other inactives	15	19
Retirees and beneficiaries receiving benefits	<u>5,122</u>	<u>5,298</u>
Total	<u>5,152</u>	<u>5,340</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 the following GASB Statement for the year ended December 31, 2022:

GASB Statement No.92, *Omnibus 2020*. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan
- The applicability of Statements 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, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements

- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

The adoption of this Statement has no material impact on the net position of the Plan.

Recent Accounting Pronouncements—Not yet adopted but currently being evaluated

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
96	<i>Subscription-based Information Technology Arrangements</i>	2023
99	<i>Omnibus 2022</i>	2023
100	<i>Accounting Changes and Error Corrections</i>	2024
101	<i>Compensated Absences</i>	2024

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 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 of December 31, 2022.

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 Depository 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.

LIRRD Additional Pension Plan
Investments measured by fair value level
(In thousands)

	2022			
	December 31, 2022	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	\$ 65,960	65,960	-	-
Separate account small-cap equity funds	36,035	36,035	-	-
Separate account small-Real Estate Investments Trusts	5,963	5,963	-	-
Separate account - International equity funds	20,084	20,084	-	-
Total equity investments	128,042	128,042	-	-
Debt Securities:				
Mutual fund	32,956	32,956	-	-
Separate account - opportunistic credit/Private debt	7,197	-	7,197	-
Separate account debt funds	31,824	-	31,824	-
Total debt investments	71,977	32,956	39,021	-
Total investments by fair value	\$ 200,019	160,998	39,021	-

LIRRD Additional Pension Plan
Investments measured at NAV
(In thousands)

	2022			
	December 31, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Comingled large cap equity funds	\$ 25,749	\$ -	Daily	None
Comingled international equity funds	50,368	-	Daily	None
Comingled emerging market equity funds	26,258	-	Daily, monthly	None
Total equity investments measured at the NAV	102,375	-		
Debt Securities:				
Comingled debt funds	63,031	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	63,031	-		
Absolute return:				
Direct lending	19,631	4,386	Bi-annually	60 plus days
Distressed securities	3,082	-	Not eligible	N/A
Credit long	5,932	-	Quarterly	3-30 days
Credit long/short	84	-	Quarterly	3-60 days
Hedge Funds of funds	45,245	-	Quarterly	3-60 days
Event driven	98	217	Quarterly, Bi-annually	60-120 days
Multistrategy	634	-	Quarterly	3-60 days
Risk parity	13,074	-	Monthly	3-30 days
Total absolute return measured at the NAV	87,780	4,603		
Private equity - private equity partnerships	43,957	27,884	Not eligible	N/A
Comingled real estate funds	111,846	-	Not eligible	N/A
Real assets:				
Energy	10,832	4,320	Not eligible	N/A
Infrastructure	2,029	508	Not eligible	N/A
Shipping	794	194	Not eligible	N/A
Total real assets measured at the NAV	13,655	5,022		
Short term investments measured at the NAV	29,348			
Total investments measured at the NAV	\$ 451,992	\$ 37,509		
Total investments	\$ 652,011			

LIRRD Additional Pension Plan
Investments measured by fair value level
(In thousands)

	2021			
	December 31, 2021	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	\$ 59,067	59,067	-	-
Separate account small-cap equity funds	44,634	44,634	-	-
Separate account small-Real Estate Investments Trusts	8,947	8,947	-	-
Total equity investments	112,648	112,648	-	-
Debt Securities				
Mutual fund	31,294	31,294	-	-
Separate account - opportunistic credit/Private debt	9,540	-	9,540	-
Separate account debt funds	41,151	-	41,151	-
Total debt investments	81,985	31,294	50,691	-
Total investments by fair value	\$ 194,633	143,942	50,691	-

LIRRD Additional Pension Plan
Investments measured at NAV
(In thousands)

	2021			
	December 31, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Comingled large cap equity funds	\$ 32,521	\$ -	Daily	None
Comingled international equity funds	94,642	-	Daily	None
Comingled emerging market equity funds	38,355	-	Daily, monthly	None
Total equity investments measured at the NAV	165,518	-		
Debt Securities				
Comingled debt funds	42,492	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	42,492	-		
Absolute return:				
Direct lending	21,326	3,944	Bi-annually	60 plus days
Distressed securities	4,132	-	Not eligible	N/A
Credit long	6,705	-	Quarterly	3-30 days
Credit long/short	139	-	Quarterly	3-60 days
Hedge Funds of funds	50,577	-	Quarterly	3-60 days
Event driven	379	244	Quarterly, Bi-annually	60-120 days
Multistrategy	1,146	-	Quarterly	3-60 days
Risk parity	18,892	-	Monthly	3-30 days
Total absolute return measured at the NAV	103,296	4,188		
Private equity - private equity partnerships	52,255	25,355	Not eligible	N/A
Comingled real estate funds	112,098	-	Not eligible	N/A
Real assets:				
Energy	15,310	4,703	Not eligible	N/A
Infrastructure	2,743	573	Not eligible	N/A
Shipping	2,349	219	Not eligible	N/A
Total real assets measured at the NAV	20,402	5,495		
Short term investments measured at the NAV	83,303			
Total investments measured at the NAV	\$ 579,364	\$ 35,038		
Total investments	\$ 773,997			

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, 2022 and 2021 is as follows:

(Amount in thousands)

	2022	2021
Investments at fair value as determined by quoted market prices:		
JPMCB Strategic Property Fund	\$ 85,195	\$ 81,418
JP Morgan Chase (STIF)	-	83,303
Robert W. Baird & Company	-	41,151
Blackrock Hedge Index	35,232	-
Rhumblin Core Bond	33,854	-
Rhumblin Large Cap Equity	42,145	-

Credit Risk - The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2022 and 2021:

(Amount in thousands)	2022	Percentage of	2021	Percentage of
Quality Rating—S&P	Fair Value	Fixed Income Portfolio	Fair Value	Fixed Income Portfolio
AAA	\$ 3,185	8.36 %	\$ 3,685	7.51 %
AA	8,353	21.94	8,481	17.29
A	2,455	6.44	3,953	8.06
BBB	9,697	25.47	12,284	25.05
BB	457	1.20	1,086	2.21
B	-	-	99	0.20
CCC	86	0.23	325	0.66
Not rated	<u>6,442</u>	<u>16.92</u>	<u>7,033</u>	<u>14.34</u>
Total credit risk debt securities	30,675	80.56	36,945	75.32
U.S. Government bonds*	<u>7,401</u>	<u>19.44</u>	<u>12,100</u>	<u>24.68</u>
Total fixed income securities	<u>\$ 38,076</u>	<u>100.00 %</u>	<u>\$ 49,046</u>	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>613,935</u>		<u>724,951</u>	
Total investments	<u>\$ 652,011</u>		<u>\$ 773,997</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 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. The lengths of investment maturities (in years), as of December 31, 2022 and 2021 is as follows:

Investment Fund (In thousands)	2022		2021	
	Fair Value	Duration	Fair Value	Duration
JP Morgan Chase	\$ 38,076	6.57	\$ 49,046	6.24
Total fixed income securities	38,076		49,046	
Portfolio modified duration		6.57		6.24
Investments with no duration reported	<u>613,935</u>		<u>724,951</u>	
Total investments	<u>\$ 652,011</u>		<u>\$ 773,997</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 Depository Receipts ("ADRs"), which are denominated in US dollars and accounted for at fair value.

The Plan did not have any foreign currency exposures as of December 31, 2022 and 2021.

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 year ended December 31, 2022 and 2021 was 9.55% and 10.77%, respectively.

(In thousands)	December 31, 2022		December 31, 2021	
	Master Trust Total	Additional Plan	Master Trust Total	Additional Plan
Total Investments:				
Investments measured at readily determined fair value	\$ 2,093,923	\$ 200,019	\$ 1,807,598	\$ 194,633
Investments measured at the net asset value	<u>3,839,843</u>	<u>366,797</u>	<u>4,624,540</u>	<u>497,947</u>
Total investments measured at fair value	<u>\$ 5,933,766</u>	<u>\$ 566,816</u>	<u>\$ 6,432,138</u>	<u>\$ 692,580</u>

There is an additional investment 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, 2022 and 2021 was as follows (in thousands):

	<u>2022</u>	<u>2021</u>
Total pension liability	\$ 1,258,877	\$ 1,322,471
Fiduciary net position	<u>652,398</u>	<u>777,323</u>
Net pension liability	<u>\$ 606,479</u>	<u>\$ 545,148</u>
Fiduciary net position as a percentage of the total pension liability	<u>51.82 %</u>	<u>58.78 %</u>

Actuarial Methods and Assumptions - The total pension liability as of December 31, 2022 and 2021 was determined by an actuarial valuation date of January 1, 2022 and 2021, that was updated to roll forward the total pension liability to 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, 2022 and 2021 was 6.50%. 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 in 2022 and 2021, calculated using the discount rate of 6.50%; 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 (5.50%) or 1-percentage point higher (7.50%) than the current rate:

2022 (In thousands)	Decrease 5.50%	Discount Rate 6.50%	Increase 7.50%
Net pension liability	<u>\$ 703,189</u>	<u>\$ 606,479</u>	<u>\$ 522,065</u>

2021 (In thousands)	Decrease 5.50%	Discount Rate 6.50%	Increase 7.50%
Net pension liability	<u>\$ 648,472</u>	<u>\$ 545,148</u>	<u>\$ 455,156</u>

Additional information of the latest actuarial valuation follows:

Valuation date	January 1, 2022
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.
Actuarial cost method	Entry age normal.
Amortization method	Period specified in current valuation report (closed 11-year period beginning January 1, 2022) 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.
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial assumptions:	
Investment rate of return	6.5%, net of investment expenses
Projected salary increases	3.0%
Inflation/Railroad Retirement wage base	2.25%; 3.25%

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Valuation date	January 1, 2021
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.
Actuarial cost method	Entry age normal.
Amortization method	Period specified in current valuation report (closed 12-year period beginning January 1, 2021) 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.
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial assumptions:	
Investment rate of return	6.5%, net of investment expenses
Projected salary increases	3.0%
Inflation/Railroad Retirement wage base	2.25%; 3.25%

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.

2022 - 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, 2022	\$ 777,323	12.00	1.00	\$ 722,879
Monthly net external cash flows:				
January	(12,040)	12.00	1.00	(11,196)
February	(6,115)	11.00	0.92	(5,719)
March	(6,115)	10.00	0.83	(5,757)
April	(6,115)	9.00	0.75	(5,790)
May	(6,115)	8.00	0.67	(5,824)
June	(6,115)	7.00	0.58	(5,862)
July	(6,115)	6.00	0.50	(5,896)
August	(6,115)	5.00	0.42	(5,931)
September	(6,115)	4.00	0.33	(5,970)
October	(6,115)	3.00	0.25	(6,005)
November	(6,115)	2.00	0.17	(6,040)
December	(526)	1.00	0.08	(491)
Ending Value—December 31, 2022				<u>\$ 652,398</u>
Money—Weighted Rate of Return				<u>(7.00)%</u>

2021 - 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, 2021	\$ 760,689	12.00	1.00	\$ 862,394
Monthly net external cash flows:				
January	(12,431)	12.00	1.00	(14,092)
February	(6,872)	11.00	0.92	(7,713)
March	(6,872)	10.00	0.83	(7,627)
April	(6,872)	9.00	0.75	(7,551)
May	(6,872)	8.00	0.67	(7,475)
June	(6,872)	7.00	0.58	(7,391)
July	(6,872)	6.00	0.50	(7,317)
August	(6,872)	5.00	0.42	(7,244)
September	(6,872)	4.00	0.33	(7,163)
October	(6,872)	3.00	0.25	(7,091)
November	(6,872)	2.00	0.17	(7,020)
December	2,538	2.71	0.23	<u>2,613</u>
Ending Value—December 31, 2021				<u>\$ 777,323</u>
Money—Weighted Rate of Return				<u>13.37 %</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 as of December 31, 2022 and 2021.

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2022

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	2.27%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	2.51%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	1.58%
US High Yield Bonds	ICE BofA US High Yield	3.00%	4.40%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.79%
Private Credit	CDL Index	7.00%	6.99%
Emerging Market Bonds	JPM EMBI Plus	2.00%	4.99%
US Large Cap Equity	S&P 500	18.00%	5.64%
US Small Cap Equity	Russell 2000	7.00%	7.25%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.90%
Emerging Market Equity	MSCI EM NR	4.50%	9.58%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	9.81%
US REITs	FTSE Nareit All Equity REITs	1.00%	6.71%
Private Real Estate Property	NCREIF Property	4.00%	4.86%
Private Equity	Cambridge Private Equity	7.00%	10.74%
Commodities	Bloomberg Commodity	4.00%	2.96%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	4.52%
Assumed Inflation - Mean			2.33%
Assumed Inflation - Standard Deviation			1.41%
Portfolio Nominal Mean Return			8.08%
Portfolio Standard Deviation			12.42%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2021

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	1.39%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	1.16%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	0.60%
US High Yield Bonds	ICE BofA US High Yield	3.00%	3.92%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.49%
Private Credit	CDL Index	7.00%	6.93%
Emerging Market Bonds	JPM EMBI Plus	2.00%	3.98%
US Large Caps	S&P 500	18.00%	4.94%
US Small Caps	Russell 2000	7.00%	6.73%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.27%
Emerging Market Equity	MSCI EM NR	4.50%	8.82%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	8.89%
US REITs	FTSE Nareit All Equity REITs	1.00%	5.60%
Private Real Estate Property	NCREIF Property	4.00%	4.61%
Private Equity	Cambridge Private Equity	7.00%	10.36%
Commodities	Bloomberg Commodity	4.00%	1.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	3.73%
Assumed Inflation - Mean			2.30%
Assumed Inflation - Standard Deviation			1.23%
Portfolio Nominal Mean Return			7.39%
Portfolio Standard Deviation			12.15%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 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 (1.5% in 2022 and 2021), 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 (1.5% in 2022 and 2021).

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 Plan's actuarial cost method is the Entry Age Normal method. Under this method, a projected benefit is determined at each active participant's assumed retirement age assuming future compensation increases. The plan's normal cost is the sum of each active participant's annual cost for the current year of service determined such that, if it were calculated as a level percentage of compensation each year, it would accumulate at the valuation interest rate over his total prior and future years of service to the assumed retirement date into an amount sufficient to fund the projected benefit. The plan's accrued liability is the (a) present value of each active participant's benefits plus (b) the present value of each inactive participant's future benefits, less (c) the present value of each active participant's normal costs attributable to all future years of service.

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:

$$\text{Actuarial Value of Assets} = MV_t - 0.8*UR_1 - 0.6*UR_2 - 0.4*UR_3 - 0.2*UR_4$$

Where:

MV_t = 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

The assumptions described below were primarily determined based on an experience analysis covering the period from January 1, 2006 to December 31, 2011, with certain economic assumptions modified subsequently based on an experience analysis covering the period from

January 1, 2012 to December 31, 2017. The postretirement mortality assumption is based on an experience analysis covering the period from January 1, 2015 to December 31, 2020.

Interest - 6.50% per annum, compounded annually, net of investment expenses.

Salary Scale - Salaries are assumed to increase 3.00% per year.

Valuation Compensation - The valuation compensation is equal to the annualized base salary as of December 31, 2021 as provided by MTA, adjusted for wage increases granted after the valuation date but retroactive to earlier periods, projected six months at the assumed rate of salary increase. Retroactive wage adjustments are 2.5% for all union members.

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 - 3.25% per year.

Consumer Price Index - 2.25% per year.

Provision for Expenses - Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years 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

Terminated vested participants are assumed to retire upon first eligibility or attained age, if later.

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 - Preretirement and postretirement annuitant rates are projected on a generational basis using Scale MP-2021. As a generational table, it reflects mortality improvements both before and after the measurement date.

- **Preretirement:** Pri-2012 Employee mortality table with blue collar adjustments multiplied by 97% for males and 100% for females.
- **Postretirement:** Pri-2012 Retiree mortality table with blue collar adjustments multiplied by 97% for males and 100% for females.

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.

Railroad Offset - The Railroad offset at retirement is based on the sum of Tier 1 and Tier 2 Railroad benefits and is estimated for active members, current retirees under age 65, and current beneficiaries of members under age 65. The offsets for Railroad Retirement benefits are assumed to occur at the member's age of 65. The estimated benefits are based on a member's compensation at retirement. For inactive participants, compensation is estimated based on the benefit provided and estimated service at retirement. For the Tier 1 offset, the Primary Insurance Amount assumes that an individual would continue to earn compensation at the level in effect at his date of termination until attaining eligibility for Railroad benefits and is further increased by 2% per year from the date of termination to age 65. In addition, the estimated Tier 1 offset for inactive members currently less than age 65 is reduced by 10% to reflect, on average, the adjustment for Social Security benefits.

Benefits Not Valued - Disability benefits since all active plan participants are eligible for retirement. COVID-19 Accidental Death Benefit is assumed to have an insignificant cost.

D. CHANGES IN ACTUARIAL ASSUMPTIONS

This valuation reflects the adoption of updated mortality assumptions based on an experience analysis covering the period from January 1, 2015 to December 31, 2020.

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 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

Subsequent events have been evaluated through July 17, 2023.

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REQUIRED SUPPLEMENTAL SCHEDULES

**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND
RELATED RATIOS**

(In thousands)	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:									
Service cost	\$ 146	\$ 260	\$ 453	\$ 621	\$ 1,057	\$ 1,874	\$ 2,752	\$ 3,441	\$ 3,813
Interest	81,371	83,489	86,918	93,413	97,611	101,477	104,093	106,987	110,036
Changes of benefit terms	(1,347)	3,729	10,428	13,455	213	1,890	15,801	6,735	-
Differences between expected and actual experience	-	26,300	-	50,191	-	-	-	-	-
Changes of assumptions	-	(148,630)	-	(157,254)	(159,565)	(159,717)	(158,593)	(157,071)	-
Benefit payments and withdrawals	(143,764)	-	(152,046)	-	-	-	-	-	(156,974)
Net change in total pension liability	(63,594)	(34,852)	(54,247)	426	(60,684)	(54,476)	(35,947)	(39,908)	(43,125)
Total pension liability—beginning	1,322,471	1,357,323	1,411,570	1,411,144	1,471,828	1,526,304	1,562,251	1,602,159	1,645,284
Total pension liability—ending (a)	1,258,877	1,322,471	1,357,323	1,411,570	1,411,144	1,471,828	1,526,304	1,562,251	1,602,159
Plan fiduciary net position:									
Employer contributions	70,763	70,553	68,724	62,774	59,500	76,523	81,100	100,000	407,513
Non-Employer contributions	-	-	-	-	-	145,000	70,000	-	-
Member contributions	51	73	140	249	333	760	884	1,108	1,304
Net investment income	(51,214)	95,247	3,056	116,092	(31,098)	112,614	58,239	527	21,231
Benefit payments and withdrawals	(143,764)	(148,630)	(152,046)	(157,254)	(159,565)	(159,717)	(158,593)	(157,071)	(156,974)
Administrative expenses	(761)	(610)	(612)	(718)	(1,180)	(1,070)	(611)	(1,218)	(975)
Net change in plan fiduciary net position	(124,925)	16,633	(80,739)	21,143	(132,010)	174,110	51,019	(56,654)	272,099
Plan fiduciary net position—beginning (*)	777,323	760,690	840,460	819,317	951,327	777,217	726,198	782,852	510,753
Plan fiduciary net position—ending (b)	652,398	777,323	759,721	840,460	819,317	951,327	777,217	726,198	782,852
Employer's net pension liability—ending (a)(b)	\$ 606,479	\$ 545,148	\$ 597,602	\$ 571,110	\$ 591,827	\$ 520,501	\$ 749,087	\$ 836,053	\$ 819,307
Plan fiduciary net position as a percentage of the total pension liability	51.82 %	58.78 %	55.97 %	59.54 %	58.06 %	64.64 %	50.92 %	46.48 %	48.86 %
Covered-employee payroll	\$ 2,043	\$ 1,995	\$ 3,509	\$ 5,210	\$ 7,894	\$ 11,046	\$ 18,216	\$ 25,712	\$ 29,334
Employer's net pension liability as a percentage of covered-employee payroll	29,685.69 %	27,330.07 %	17,029.25 %	10,961.80 %	7,496.90 %	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.

(*) 2021 Plan fiduciary net position - beginning is adjusted for the Plan's 2020 Q4 Private Markets values

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
2013	\$ 119,325	\$ 199,336	\$ (80,011)	\$ 33,043	603.26 %
2014	\$ 112,513	\$ 407,513	\$ (295,000)	\$ 37,886	1,075.63 %
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 %
2018	\$ 59,196	\$ 59,500	\$ (304)	\$ 7,894	753.71 %
2019	\$ 62,774	\$ 62,774	\$ -	\$ 5,210	1,204.87 %
2020	\$ 68,723	\$ 68,724	\$ (1)	\$ 3,509	1,958.35 %
2021	\$ 70,553	\$ 70,553	\$ -	\$ 1,995	3,537.06 %
2022	\$ 70,764	\$ 70,764	\$ -	\$ 2,043	3,463.73 %

* 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

SCHEDULE II

Note to Schedule II:
The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan are as follows:

	January 1, 2022	January 1, 2021	January 1, 2020	January 1, 2019
Valuation Dates	Entry Age Cost Method			
Actuarial cost method	Period specified in current valuation report (closed 11-year period from January 1, 2021) with level dollar payments.	Period specified in current valuation report (closed 12-year period from January 1, 2021) with level dollar payments.	Period specified in current valuation report (closed 13-year period from January 1, 2020) with level dollar payments.	Period specified in current valuation report (closed 14-year period from January 1, 2019) with level dollar payments.
Amortization 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.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Actuarial asset valuation method	Net rate of 6.5% for 2022, per annum, net of investment expenses	Net rate of 6.5% for 2021, per annum, net of investment expenses	Net rate of 6.5% for 2020, per annum, net of investment expenses	Net rate of 6.5% for 2019, per annum, net of investment expenses
Interest rate	2.25% per annum	2.25% per annum	2.25% per annum	2.25% per annum
Inflation	3.25% per year	3.25% per year	3.25% per year	3.25% per year
Railroad retirement wage base	Based on experience of all MTA-sponsored pension members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.	Based on experience of all MTA-sponsored pension members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.	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
Mortality	Tables based on recent experience			
Separations other than for 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.	Tables based on recent experience. Rates vary by age, years of service at retirement.
Rates of normal retirement	3.0% per year	3.0% per year	3.0% per year	3.0% per year
Salary increases	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.	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.
Overtime	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years' reported administrative expenses and are assumed payable in the middle of the plan year.	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years' reported administrative expenses and are assumed payable in the middle of the plan year.	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years' reported administrative expenses and are assumed payable in the middle of the plan year.	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior three years, modified to equal an average of the prior three years.
Provision for expenses				

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 are as follows:

Valuation Dates	January 1, 2018	January 1, 2017	January 1, 2016	January 1, 2015	January 1, 2014
Actuarial cost method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method
Amortization method	Period specified in current valuation report (closed 15-year period from January 1, 2018) with level dollar payments.	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.	Period specified in current valuation report (closed 19-year period from January 1, 2014) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 3-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 3-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 3-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 3-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 3-year period. Gains/losses are based on market value of assets.
Interest rate	Net rate of 7.0% for 2018, per annum, net of investment expenses	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	Net rate of 7.0% for 2014, per annum, net of investment expenses
Inflation	2.5% per annum				
Railroad retirement wage base	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	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				
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.	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				
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.	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.	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.	\$500,000 is added to the normal cost to account for administrative expenses paid by plan assets throughout the year.

SCHEDULE III

**THE LONG ISLAND RAIL ROAD COMPANY PLAN
FOR ADDITIONAL PENSIONS**

**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
2013	N/A
2014	3.73 %
2015	0.07 %
2016	8.11 %
2017	13.38 %
2018	(3.49)%
2019	15.23 %
2020	0.39 %
2021	13.37 %
2022	(7.00)%

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

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Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Financial Statements as of and for the
Years Ended December 31, 2022 and 2021,
Supplemental Schedules, and
Independent Auditor's Report

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR’S REPORT	1–3
MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)	4–9
FINANCIAL STATEMENT AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021:	
Statements of Fiduciary Net Position	10
Statements of Changes in Fiduciary Net Position	11
Notes to Financial Statements	12–53
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED):	54
Schedule of Changes in Employers’ Net Pension Liability and Related Ratios—Schedule I	55
Schedule of Employer Contributions and Notes to Schedule—Schedule II	56–58
Schedule of Investment Returns—Schedule III	59

INDEPENDENT AUDITOR'S REPORT

To the Board of Administration of
The Manhattan and Bronx Surface Transit Operating Authority Pension Plan:

Opinion

We have audited the accompanying statement of fiduciary net position of The Manhattan and Bronx Surface Transit Operating Authority Pension Plan (the "Plan") as of December 31, 2022 and 2021, and the related statement of changes in fiduciary 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not

a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

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 and the Changes in the Employers' Net Pension Liability and Related Ratios-Schedule I on page 55; Employer Contributions and Notes to Schedule-Schedule II on pages 56-58; and the Investment Returns-Schedule III on page 59 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

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assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

July 17, 2023

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2022 and 2021 (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, 2022 and 2021. 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, as well as a comparison with the prior year's 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 10.

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 Statement 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 Statement of Changes in Fiduciary 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, 2022 and 2021 (Unaudited)

CONDENSED FINANCIAL INFORMATION AND ANALYSIS

FINANCIAL ANALYSIS

Fiduciary Net Position
As of December 31, 2022, 2021 and 2020
(Dollars in thousands)

	2022	2021	2020	Increase/Decrease			
				2022-2021		2021-2020	
				\$	%	\$	%
Cash and investments	\$ 3,293,020	\$ 3,642,774	\$ 3,281,332	\$ (349,754)	(9.6)%	\$ 361,442	11.0 %
Receivables and other assets	29,943	33,360	33,997	(3,417)	(10.2)	(637)	(1.9)
Total assets	\$ 3,322,963	\$ 3,676,134	\$ 3,315,329	\$ (353,171)	(9.6)	\$ 360,805	10.9
Payable for investment securities purchased	3,592	5,620	4,317	(2,028)	(36.1)	1,303	30.2
Other liabilities	9,261	12,163	8,920	(2,902)	(23.9)	3,243	36.4
Total liabilities	12,853	17,783	13,237	(4,930)	(27.7)	4,546	34.3
Net position restricted for pensions	\$ 3,310,110	\$ 3,658,351	\$ 3,302,092	\$ (348,241)	(9.5)%	\$ 356,259	10.8 %

December 31, 2022 versus December 31, 2021

Cash and investments at December 31, 2022, were \$3,293.0 million, a decrease of \$349.8 million or 9.6% from 2021. This decrease is a result of an underperformance of financial markets in 2022 and plan contributions net of benefit payments and expenses during 2022.

Receivables and other assets less plan liabilities at December 31, 2022 increased by \$1.5 million or 9.7%. The increase for 2022 compared with 2021 is a result of payable for investment securities purchased, continued payments on 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 decreased by \$348.2 million or 9.5% in 2022 as a result of the various changes noted above.

December 31, 2021 versus December 31, 2020

Cash and investments at December 31, 2021, were \$3,642.8 million, an increase of \$361.4 million or 11.0% from 2020. This increase is a result of investment activity in 2021 and plan contributions net of benefit payments and expenses during 2021.

Receivables and other assets less plan liabilities at December 31, 2021 decreased by \$5.2 million or 25.0%. The decrease for 2021 compared with 2020 is a result of refunds owed for Tier 6 contribution overpayments

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2022 and 2021 (Unaudited)

and continued payments on 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 by \$356.3 million or 10.8% in 2021 as a result of the various changes noted above.

Changes in Fiduciary Net Position

For the Years Ended December 31, 2022, 2021 and 2020

(Dollars in thousands)

	2022	2021	2020	Increase/Decrease			
				2022-2021		2021-2020	
				\$	%	\$	%
Additions:							
Net investment income	\$ (273,627)	\$ 420,811	\$ 59,341	\$ (694,438)	(165.0)%	\$ 361,470	609.1 %
Transfers and contributions	184,166	181,139	184,195	3,027	1.7	(3,056)	(1.7)
Total net additions	(89,461)	601,950	243,536	(691,411)	(114.9)	358,414	147.2
Deductions:							
Benefit payments	257,974	243,252	237,930	\$ 14,722	6.1	\$ 5,322	2.2
Tier 6 remediation (Refund of employee contributions)	-	2,175	-	(2,175)	(100.0)	2,175	100.0
Administrative expenses	806	264	244	542	205.3	20	8.2
Total deductions	258,780	245,691	238,174	13,089	5.3	7,517	3.2
Net increase	(348,241)	356,259	5,362	(704,500)	(197.7)	350,897	6,544.1
Net position restricted for pensions:							
Beginning of year	3,658,351	3,302,092	3,296,730	356,259	10.8	5,362	0.2
End of year	\$ 3,310,110	\$ 3,658,351	\$ 3,302,092	\$ (348,241)	(9.5)%	\$ 356,259	10.8 %

December 31, 2022 versus December 31, 2021

Net investment income decreased by \$694.4 million in 2022 due to net investment losses of \$273.6 million in 2022 versus net investment gains of \$420.8 million in 2021.

Contributions increased by \$3.0 million or 1.7% in 2022 compared to 2021, as a result of the Actuarial Determined Contributions (“ADC”) and member contributions.

Benefit payments increased by \$14.7 million or 6.1% over the prior year due to a continuing trend of an increase in the number of retirees and cost-of-living adjustments provided to retirees and beneficiaries.

In 2021, the Plan accrued \$2.2 million as part of the Tier 6 – refund of employee contributions which includes statutory interest of 5% due to a business process coding error relating to overtime cap limit for 2021 and prior years. No payment was done in 2022.

Administrative expenses increased by \$542 thousand or 205.3% compared to 2021. This increase was due to an increase in fees on the new custodial contract for services provided to the Plan.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis

As of and For the Years Ended December 31, 2022 and 2021 (Unaudited)

December 31, 2021 versus December 31, 2020

Net investment income increased by \$361.5 million in 2021 due to higher net investment gains of \$420.8 million in 2021 versus net investment gains of \$59.3 million in 2020.

Contributions decreased by \$3.1 million or 1.7% in 2021 compared to 2020, as a result of the Actuarial Determined Contributions ("ADC") and member contributions.

Benefit payments increased by \$5.3 million or 2.2% over the prior year due to a continuing trend of an increase in the number of retirees and cost-of-living adjustments provided to retirees and beneficiaries.

In 2021, the Plan accrued \$2.2 million as part of the Tier 6 – refund of employee contributions which includes statutory interest of 5% due to a business process coding error relating to overtime cap limit for 2021 and prior years.

Administrative expenses increased by \$20 thousand or 8.2% compared to 2020. This increase was due to an increase in fees for services provided to the Plan.

Economic Factors

Market Overview – 2022

The year 2022 was a tumultuous year for markets and was characterized by heightened inflation, tightened monetary policies, skyrocketing interest rates, and geopolitical tensions such as Russia's invasion of Ukraine and China's aggressive posturing towards Taiwan. Following the strong global economic recovery of the previous year, the economic conditions in 2022 brought with it historically volatile oil and gas prices, suppression of global economic growth rate forecasts, and tremendous uncertainty. Heightened interest rates and hawkish policy adopted by the Federal Reserve gave people far less access to money and reduced buying power. Personal income decreased, while personal consumption expenditures and the U.S. unemployment rate remained favorable. Global assets broadly declined, volatility metrics increased, home affordability fell materially, and a sharply inverted yield curve echoed the market's stagflation and recession concerns.

While initially expected to be transitory by the Federal Reserve, U.S. inflation reached a 40-year high in 2022, as large consumer demand was curbed by pandemic and geopolitical related supply constraints. The Federal Reserve raised the federal funds rate by a total of 425 bps throughout the year, such a pace has not been seen since the 1980s, leading to an unprecedented decline in bond prices. The European Central Bank, which was formed in 1998, hiked rates at such a pace that have never been seen in its history as well. Energy prices rose by over 35% for the year, driven by export sanctions on Russia as a result of the Russia-Ukraine war.

Except for commodities, global risk assets plummeted across the board. The strong shift upwards in correlations between equity and fixed income markets resulted in the one of the worst years for the 60/40 equity bond mix portfolio that we have ever seen. With few places to hide in 2022, investors may look to expand alternative asset allocations moving forward. In foreign exchange markets, the U.S. Dollar strengthened considerably, posting very significant gains against the Euro, the Yen, and most other currencies.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis As of and For the Years Ended December 31, 2022 and 2021 (Unaudited)

Macro Themes

- Stagflation Trends
- Recession Outlook
- European Energy Transition
- China's Reopening
- U.S. Dollar Trajectory

United States

The U.S. economy tumbled from a 5.9% increase in Real GDP in 2021 to a 2.1% increase in 2022. The unemployment rate continued to fall, finishing 2022 at 3.5% compared to 3.9% in 2021. Consumer Prices rose 6.5% in 2022 and CPI peaked at 9.1% in June 2022, while core inflation, excluding the volatile food and energy components, rose 5.7%.

U.S. equities were negative across the board, with the S&P 500 and Russell 1000 indices posting returns of (-18.1%) and (-19.1%), respectively. Across market caps, Large Cap, as measured by the S&P 500 (-18.1%), Mid Cap, as measured by the S&P 400 (-13.1%), and Small Cap, as measured by the Russell 2000 (-20.4%) all posted double digit negative returns. Across styles, Growth, as measured by the Russell 1000 Growth (-29.1%) significantly underperformed Value, as measured by the Russell 1000 Value (-7.5%).

U.S. Treasury yields drastically increased in 2022 and the yield curve inverted amid elevated inflation and the shift to a hawkish Federal Reserve policy. Credit spreads were volatile in 2022 and slightly widened for the year. Diversified fixed income returned -13.0% (Bloomberg U.S. Aggregate Index), with losses dominated by long U.S. Treasuries at -29.3% (Bloomberg Long Treasury Index) and Credit at -15.3% (Bloomberg Credit Index). Negative returns of -11.8% were realized in Treasury Inflation Protected Securities (Bloomberg TIPS Index) and of -11.2% in High Yield (Bloomberg High Yield Index).

International Developed

International developed equity markets posted weak results in 2022, but outperformed the U.S. equity markets, returning (-14.5%) as measured by the MSCI EAFE Index. Both European and Japanese equities had negative performance in 2022 with the MSCI Europe Index returning (-14.5%) and the MSCI Japan Index returning (-16.3%). The Small Cap portion of international developed markets posted far weaker returns in 2022 (-21.0%) as compared to 2021 (+10.5%).

Emerging Markets

Emerging markets posted weak returns in 2022, underperforming both the U.S. and international developed equity markets. The broad MSCI Emerging Market Index returned (-20.1%) for the year. The underperformance was led by Asian Markets and the removal of Russia from the Index, given that major index providers deemed Russia not investable following the Russian invasion of Ukraine. Geopolitical tensions, inflationary pressures, and a strong US dollar dampened sentiment in developing countries despite higher commodity prices.

Manhattan and Bronx Surface Transit Operating Authority Pension Plan

Management's Discussion and Analysis As of and For the Years Ended December 31, 2022 and 2021 (Unaudited)

The bond markets of emerging markets underperformed in 2022. Both hard currency and local currency bonds posted negative returns. Hard currency bonds, predominately issued in U.S. Dollars, as represented by the JPMorgan EMBI Global Diversified Index, returned (-17.8%) in 2022. Local currency bonds, represented by the JPMorgan GBI-EM Global Diversified Index, returned (-11.7%) for the year.

Commodities

The S&P Goldman Sachs Commodity Index (GSCI) jumped 26.0%, largely influenced by a 20% increase in natural gas prices. Commodity prices were extremely volatile in 2022 with the GSCI surging 52.1% from January through May and then cooling for the rest of the year. Industrial metals were the laggards in this category, with Aluminum being down over 16% for 2022.

Market Outlook – 2023

Through the first quarter of 2023, equity markets were mostly higher with gains in the low to mid-single digits. Growth equities and Developed International equities have led the way, recovering some of their 2022 losses. Fixed income markets also had a good start to the year with most markets up low single digits. The Fed was still increasing rates, but at a slower pace. The only negative spot was in the commodities markets, with the GSCI down -4.9%. This year is expected to be less tumultuous than 2022, but an unfavorable macroeconomic backdrop still looms.

2023's macroeconomic backdrop will likely be dominated by recession risk, the Russia-Ukraine war, tight monetary policy, elevated inflation pressure and the regional bank failures, all of which are expected to impact economic growth negatively. With global central banks no longer accommodative, a "V" shaped recovery seems unlikely. Global growth expectations have a high degree of uncertainty as investors weigh the possibilities of more banking failures, the U.S raising its debt limit, China's re-opening with the abandonment of the "Zero-COVID" policy, and the escalation of the Russia-Ukraine war.

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 Metropolitan Transportation Authority, Deputy Chief, Controller's Office, 2 Broadway, 15th Floor, New York, NY 10004.

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MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

STATEMENTS OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2022 AND 2021 (In thousands)

	2022	2021
ASSETS:		
Cash	\$ 3,694	\$ 11,821
Receivables:		
Investment securities sold	1,634	5,532
Interest and dividends	1,787	1,746
Employee loans	<u>26,522</u>	<u>26,082</u>
Total receivables	<u>29,943</u>	<u>33,360</u>
Investments at fair market value (Notes 2 and 3):		
Investments measured at readily determinable fair value	753,868	871,835
Investments measured at net asset value	<u>2,535,458</u>	<u>2,759,118</u>
Total investments	<u>3,289,326</u>	<u>3,630,953</u>
Total assets	<u>3,322,963</u>	<u>3,676,134</u>
LIABILITIES:		
Accounts payable	474	1,565
Payable for investment securities purchased	3,592	5,620
Accrued benefits payable	75	50
Tier 6 remediation (Refund of employee contributions) payable	466	1,296
Accrued Post Retirement Death Benefits (PRDB) payable	5,719	5,405
Accrued 55/25 Additional Members Contribution (AMC) payable	<u>2,527</u>	<u>3,847</u>
Total liabilities	<u>12,853</u>	<u>17,783</u>
NET POSITION		
RESTRICTED FOR PENSIONS	<u>\$ 3,310,110</u>	<u>\$ 3,658,351</u>

See notes to financial statements.

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (In thousands)

	2022	2021
ADDITIONS:		
Investment income:		
Interest income	\$ 10,719	\$ 8,197
Dividend income	45,924	42,762
Net (depreciation) / appreciation in fair value of investments	<u>(307,355)</u>	<u>401,057</u>
Total investment (loss) / income	(250,712)	452,016
Less investment expenses	<u>22,915</u>	<u>31,205</u>
Net investment (loss) / income	<u>(273,627)</u>	<u>420,811</u>
Contributions (Note 4):		
Employer contributions	158,618	156,204
Employee contributions	<u>25,548</u>	<u>24,935</u>
Total contributions	<u>25,548</u>	<u>24,935</u>
Total (subtractions) / additions	<u>(248,079)</u>	<u>445,746</u>
DEDUCTIONS:		
Benefit payments and withdrawals	257,974	243,251
Tier 6 remediation (Refund of employee contributions)	-	2,175
Administrative expenses	<u>806</u>	<u>265</u>
Total deductions	<u>258,780</u>	<u>245,691</u>
NET (DECREASE) / INCREASE IN NET POSITION	<u>(506,859)</u>	<u>200,055</u>
NET POSITION RESTRICTED FOR PENSIONS:		
Beginning of year	<u>3,658,351</u>	<u>3,302,092</u>
End of year	<u>\$ 3,151,492</u>	<u>\$ 3,502,147</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, 2022 AND 2021

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.

As of January 1, 2022, The Plan is a multi-employer cost sharing public employee retirement system. The Plan now have employees who are on Metropolitan Transportation Authority Head Quarter’s (“MTAHQ”) payroll. MaBSTOA and MTAHQ 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, 2022 and 2021, the date of the latest actuarial valuation:

	2022	2021
Active and inactive members	8,363	8,533
Retirees and beneficiaries currently receiving benefits	6,192	6,020
Vested formerly active members not yet receiving benefits	<u>1,172</u>	<u>1,125</u>
Total members	<u>15,727</u>	<u>15,678</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, 2022 and 2021, the Plan paid \$19.5 million and \$17.4 million in post-retirement benefits and accrued an additional \$5.7 million and \$5.4 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 pensionable 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 (\$18,233 for 2022 and \$17,301 for 2021).
- 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 \$290,000 for 2021 and \$305,000 for 2022. In addition, the government plan limit applies to members hired prior to January 1, 1996 and is \$430,000 for 2021 and \$450,000 for 2022.
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 conforms to those legislated by the Tax Reform Act of 1986. For 2021, the maximum benefit is \$230,000 and for 2022 it is \$245,000.

8. Changes in Plan Provisions Since Prior Valuation

On July 22, 2020, the MTA Board adopted temporary COVID-19 Accidental Death Benefits, providing eligible surviving beneficiaries with the option to elect a pension in lieu of an ordinary death benefit.

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).

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- (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

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.

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- (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

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% at age 70 or later. 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.

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- (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

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% at age 70 or later. 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 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% at age 70 or later. 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 final 1-year 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 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.
4. Member Contributions 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

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 \$18,233 for 2022. 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% at age 70 or later. 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 pensionable 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 \$17,301 for 2021. 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% at age 70 or later. 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 pensionable 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 None

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).

GASB Statement No. 72, *Fair Value Measurement and Application* ("GASB 72"), requires the Funds to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach, or an income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or

liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management’s estimates of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that were used for the fair value measurements.

New Accounting Standards Adopted - The Plan adopted the following GASB Statement for the year ended December 31, 2022:

GASB Statement No.92, *Omnibus 2020*.The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan
- The applicability of Statements 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, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

The adoption of this Statement has no material impact on the net position of the Plan.

Recent Accounting Pronouncements - Not yet adopted but currently being reviewed

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
96	<i>Subscription-based Information Technology Arrangements</i>	2023
99	<i>Omnibus 2022</i>	2023
100	<i>Accounting Changes and Error Corrections</i>	2024
101	<i>Compensated Absences</i>	2024

Methods Used to Value Investments—Investments are stated at fair value or Net Asset Value (“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 of December 31, 2022.

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 Plan is to achieve the actuarial return target with an appropriate risk position.

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.

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; therefore, the Board, with assistance of the investment advisor, will assess and monitor the investments 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.

Impact of COVID-19 - In March 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. As a result, global financial markets have experienced, and may continue to experience, significant volatility resulting from the spread of COVID-19. The values of the Plan's individual investments have and will fluctuate in response to changing market conditions and therefore, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined. The extent of the impact of COVID-19 on the Plan's net assets available for benefits and contributions will depend on future developments, including the duration and continued spread of the outbreak. The full impact of the COVID-19 outbreak continues to evolve as of the date of this report.

GASB Statement No. 72 - In year 2015, the Plan adopted GASB Statement No. 72 ("GASB 72"), *Fair Value Measurement and Application*. 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 have the following recurring fair value measurements as of December 31, 2022 and 2021:

Investments measured at readily determined fair value (FV)

(In thousands)

	December 31, 2022	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	\$ 142,100	\$ 142,100	\$ -	\$ -
Separate account small-cap equity funds	218,754	218,754	-	-
Separate account small-Real Estate Investments Trusts	31,674	31,674	-	-
Total equity investments	392,528	392,528	-	-
Debt Securities				
Mutual funds	136,105	136,105	-	-
Separate account - opportunistic credit/Private debt	37,341	-	37,341	-
Separate account debt funds	187,894	-	187,894	-
Total debt investments	361,340	136,105	225,235	-
Total investments by fair value	\$ 753,868	\$ 528,633	\$ 225,235	\$ -

Investments measured at the net asset value (NAV)

(In thousands)

	December 31, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 391,249	\$ -	Daily	None
Commingled international equity funds	409,274	-	Daily	None
Commingled emerging market equity funds	145,115	-	Daily, monthly	None
Total equity investments measured at the NAV	945,638	-		
Debt Securities				
Commingled debt funds	319,165	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	319,165	-		
Absolute return:				
Direct lending	102,112	45,652	Bi-annually	60 plus days
Distressed securities	19,358	-	Not eligible	N/A
Credit long	33,193	-	Quarterly	3-30 days
Credit long/short	568	-	Quarterly	3-60 days
Hedge funds of funds	268,611	-	Quarterly	3-60 days
Event driven	943	2,094	Quarterly	60-120 days
Global tactical asset allocation	59,909	-	Daily, monthly	3-30 days
Multistrategy	3,114	-	Quarterly	3-60 days
Risk parity	80,136	-	Monthly	3-30 days
Total absolute return measured at the NAV	567,944	47,746		
Private equity - private equity partnerships	295,856	186,849	Not eligible	N/A
Commingled real estate funds	106,412	-	Not eligible	N/A
Real assets:				
Commingled commodities fund	76,303	-	Not eligible	N/A
Energy	90,813	27,228	Not eligible	N/A
Infrastructure	12,295	3,082	Not eligible	N/A
Shipping	5,540	1,356	Not eligible	N/A
Total real assets measured at the NAV	184,951	31,666		
Short term investments measured at the NAV	115,492	-		
Total investments measured at the NAV	2,535,458	\$ 266,261		
Total investments at fair value	\$ 3,289,326			

Investments measured at readily determined fair value (FV)

(In thousands)

	December 31, 2021	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	\$ 174,438	\$ 174,438	\$ -	\$ -
Separate account small-cap equity funds	240,548	240,548	-	-
Separate account small-Real Estate Investments Trusts	42,161	42,161	-	-
Total equity investments	457,147	457,147	-	-
Debt Securities				
Mutual funds	155,122	155,122	-	-
Separate account - opportunistic credit/Private debt	43,921	-	43,921	-
Separate account debt funds	215,645	-	215,645	-
Total debt investments	414,688	155,122	259,566	-
Total investments by fair value	\$ 871,835	\$ 612,269	\$ 259,566	\$ -

Investments measured at the net asset value (NAV)

(In thousands)

	December 31, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 338,686	\$ -	Daily	None
Commingled international equity funds	511,245	-	Daily	None
Commingled emerging market equity funds	187,871	-	Daily, monthly	None
Total equity investments measured at the NAV	1,037,802	-		
Debt Securities				
Commingled debt funds	159,687	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	159,687	-		
Absolute return:				
Direct lending	126,001	23,384	Bi-annually	60 plus days
Distressed securities	23,025	-	Not eligible	N/A
Credit long	33,286	-	Quarterly	3-30 days
Credit long/short	805	-	Quarterly	3-60 days
Hedge funds of funds	261,982	-	Quarterly	3-60 days
Event driven	2,616	2,094	Quarterly	60-120 days
Global tactical asset allocation	66,591	-	Daily, monthly	3-30 days
Multistrategy	6,227	-	Quarterly	3-60 days
Risk parity	102,732	-	Monthly	3-30 days
Total absolute return measured at the NAV	623,265	25,478		
Private equity - private equity partnerships	303,928	150,793	Not eligible	N/A
Commingled real estate funds	83,863	-	Not eligible	N/A
Real assets:				
Commingled commodities fund	73,789	-	Not eligible	N/A
Energy	87,955	26,387	Not eligible	N/A
Infrastructure	14,749	3,082	Not eligible	N/A
Shipping	14,546	1,355	Not eligible	N/A
Total real assets measured at the NAV	191,039	30,824		
Short term investments measured at the NAV	359,534	-		
Total investments measured at the NAV	2,759,118	\$ 207,095		
Total investments at fair value	\$ 3,630,953			

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, 2022 and 2021 is as follows:

(In thousands)	<u>2022</u>	<u>2021</u>
Investments at fair value as determined by quoted market prices:		
Johnston International	\$ -	\$ 226,448
Independent Franchise Partners	164,212	183,997
Robert W. Baird and Company	187,894	215,645
JPM - Short Term Investment Fund	-	297,390
Blackrock Hedge Index Fund	210,534	-
Rhumblin S & P 500 Index Fund	227,037	-

Credit Risk — At December 31, 2022 and 2021, the following credit quality rating has been assigned by a nationally recognized rating organization:

(In thousands)	Percentage of		Percentage of	
Quality Rating	2022	Fixed Income	2021	Fixed Income
	Fair Value	Portfolio	Fair Value	Portfolio
AAA	\$ 19,114	8.69 %	\$ 19,309	7.67 %
AA	47,759	21.70	42,655	16.93
A	16,943	7.70	22,488	8.93
BBB	59,355	26.98	74,508	29.58
BB	4,956	2.25	8,173	3.24
B	-	-	453	0.18
CCC	448	0.20	1,497	0.60
Not Rated	<u>35,114</u>	<u>15.96</u>	<u>32,378</u>	<u>12.85</u>
Credit risk debt securities	183,689	83.48	201,461	79.98
U.S. Government bonds	<u>36,353</u>	<u>16.52</u>	<u>50,435</u>	<u>20.02</u>
Total fixed income securities	220,042	<u>100.00 %</u>	251,896	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>3,069,284</u>		<u>3,379,057</u>	
Total investments	<u>\$ 3,289,326</u>		<u>\$ 3,630,953</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 sensitivity to 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. Modified duration is an indicator of bond price’s sensitivity to a parallel 100 basis point change in interest rates.

Investment Fund (In Thousands)	2022		2021	
	Fair Value	Duration	Fair Value	Duration
Chase	\$ 220,042	7.20	\$ 251,896	6.21
Total fixed income securities	220,042		251,896	
Portfolio modified duration		7.20		6.21
Investments with no duration reported	\$ 3,069,284		\$ 3,379,057	
Total investments	\$ 3,289,326		\$ 3,630,953	

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. Some of the Plan’s investment managers will have foreign currency exposure through holdings of foreign securities, currency derivatives or private investments whose revenue will be non-USD based. The Plan also holds investments in American Depository Receipts (“ADRs”) which are denominated in U.S. dollars and accounted for at fair value.

The Plan did not have any foreign currency exposures as of December 31, 2022 and 2021.

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 \$158.6 and \$156.2 million for the years ended December 31, 2022 and 2021, respectively. Employee contributions amounted to \$25.5 million and \$24.9 million for the years ended December 31, 2022 and 2021, 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. In addition, the maximum allowable outstanding loan amount for a vested employee cannot exceed 50% of the present value of the Accrued Vested Benefit (AVB) less the highest outstanding balances of any pension loan (s) within the previous one-year period from the day a new loan is issued. 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 \$7.4 million and \$6.9 million in loans to members during 2022 and 2021, respectively. Loan repayments by members amounted to \$9.3 and \$10.9 million in 2022 and 2021, respectively.

Upon termination of employment before retirement, certain participants are entitled to refunds of their own contributions including accumulated interest less any loans outstanding.

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5. NET PENSION LIABILITY

The components of the net pension liability of the Plan at December 31, 2022 and 2021 was as follows (in thousands):

	December 31, 2022	December 31, 2021
Total pension liability	\$ 4,526,353	\$ 4,422,018
Fiduciary net position	<u>3,310,110</u>	<u>3,658,351</u>
Net pension liability	<u>\$ 1,216,243</u>	<u>\$ 763,667</u>
Fiduciary net position as a percentage of the total pension liability	73.13 %	82.73 %

Actuarial Methods and Assumptions - The total pension liability as of December 31, 2022 and 2021 was determined by an actuarial valuation date of January 1, 2021, that was updated to roll forward the total pension liability to year-end. Actuarial valuations are performed annually as of January 1.

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Valuation date	January 1, 2022
Actuarial cost method	Frozen initial liability (FIL) ⁽¹⁾
Amortization method	For FIL bases, 15 years for Fresh Start base as of January 1, mortality change and recognition of Chapter 56 laws of 2022. 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
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial Assumptions:	
Investment rate of return	6.50%, net of investment related expenses
Projected salary increases	Reflecting general wage, merit and promotion increases for operating and nonoperating members. Varies by years of employment.
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
Cost-of-living adjustments	60% of inflation assumption or 1.35% per annum, if applicable
Inflation	2.25% per annum

Additional information of the latest actuarial valuation follows:

Valuation date	January 1, 2021
Actuarial cost method	Frozen initial liability (FIL) ⁽¹⁾
Amortization method	For FIL bases, 15 years for Fresh Start base as of January 1, 2020 and period specified in current val report for specific assumption changes. Future gain amortized through the calculation of the normal cos 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
Mortality	Based on experience of all MTA-sponsored pensio members from January 1, 2015 - December 31, 202 mortality improvement on a generational basis usin Scale MP-2021.
Actuarial Assumptions:	
Investment rate of return	6.50%, net of investment related expenses
Projected salary increases	Reflecting general wage, merit and promotion increases for operating and nonoperating members. Varies by years of employment.
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
Cost-of-living adjustments	60% of inflation assumption or 1.35% per annum, if applicable
Inflation	2.25% 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 rates 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. The MaBSTOA Board additionally adopted legislative provisions of Chapter 428 of 2016, 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. AMC refunds amounted to approximately \$1.3 million and \$796 thousand for the years ended December 31, 2022 and 2021.

At December 31, 2022 and 2021, assets were available to fund 73.1% and 82.7%, 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

DRAFT

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

(In thousands)	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - January 1, 2022	\$3,658,351	12.00	1.00	\$3,381,696
Monthly net external cash flows:				
January	(6,596)	11.50	0.96	(6,116)
February	(6,596)	10.50	0.88	(6,155)
March	(6,596)	9.50	0.79	(6,198)
April	(6,596)	8.50	0.71	(6,238)
May	(6,596)	7.50	0.63	(6,277)
June	(6,596)	6.50	0.54	(6,322)
July	(6,596)	5.50	0.46	(6,361)
August	(6,596)	4.50	0.38	(6,402)
September	(6,596)	3.50	0.29	(6,447)
October	(6,596)	2.50	0.21	(6,488)
November	(6,596)	1.50	0.13	(6,529)
December	(2,059)	0.50	0.04	(2,053)
Ending Value - December 31, 2022				\$3,310,110
Money-Weighted Rate of Return				-7.56%

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, 2021	\$3,306,615	12.00	1.00	\$3,726,915
Monthly net external cash flows:				
January	(6,991)	11.50	0.96	(7,843)
February	(5,014)	10.50	0.88	(5,571)
March	(5,014)	9.50	0.79	(5,511)
April	(5,014)	8.50	0.71	(5,459)
May	(5,014)	7.50	0.63	(5,406)
June	(5,014)	6.50	0.54	(5,349)
July	(5,014)	5.50	0.46	(5,298)
August	(5,014)	4.50	0.38	(5,247)
September	(5,014)	3.50	0.29	(5,191)
October	(5,014)	2.50	0.21	(5,141)
November	(5,014)	1.50	0.13	(5,092)
December	(7,421)	0.50	0.04	(7,456)
Ending Value - December 31, 2021				\$3,658,351
Money-Weighted Rate of Return				12.71%

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, 2022 and 2021 actuarial valuations are summarized in the following table:

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2022

Asset Class	Index	Target Allocation*	Long-Term Expected Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	2.27%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	2.51%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	1.58%
US High Yield Bonds	ICE BofA US High Yield	3.00%	4.40%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.79%
Private Credit	CDL Index	7.00%	6.99%
Emerging Market Bonds	JPM EMBI Plus	2.00%	4.99%
US Large Caps	S&P 500	18.00%	5.64%
US Small Caps	Russell 2000	7.00%	7.25%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.90%
Emerging Market Equity	MSCI EM NR	4.50%	9.58%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	9.81%
US REITs	FTSE Nareit All Equity REITs	1.00%	6.71%
Private Real Estate Property	NCREIF Property	4.00%	4.86%
Private Equity	Cambridge Associates US Private Equity	7.00%	10.74%
Commodities	Bloomberg Commodity	4.00%	2.96%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	4.52%
Total		100.00%	
Assumed Inflation - Mean			2.33%
Assumed Inflation - Standard Deviation			1.41%
Portfolio Nominal Mean Return			8.08%
Portfolio Standard Deviation			12.42%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2021

Asset Class	Index	Target Allocation*	Long-Term Expected Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	1.39%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	1.16%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	0.60%
US High Yield Bonds	ICE BofA US High Yield	3.00%	3.92%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.49%
Private Credit	CDL Index	7.00%	6.93%
Emerging Market Bonds	JPM EMBI Plus	2.00%	3.98%
US Large Caps	S&P 500	18.00%	4.94%
US Small Caps	Russell 2000	7.00%	6.73%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.27%
Emerging Market Equity	MSCI EM NR	4.50%	8.82%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	8.89%
US REITs	FTSE Nareit All Equity REITs	1.00%	5.60%
Private Real Estate Property	NCREIF Property	4.00%	4.61%
Private Equity	Cambridge Associates US Private Equity	7.00%	10.36%
Commodities	Bloomberg Commodity	4.00%	1.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	3.73%
Total		100.00%	
Assumed Inflation - Mean			2.30%
Assumed Inflation - Standard Deviation			1.23%
Portfolio Nominal Mean Return			7.39%
Portfolio Standard Deviation			12.15%
Long-Term Expected Rate of Return selected by MTA			6.50%

Discount Rate—The discount rate used to measure the total liability as of December 31, 2022 and 2021 was 6.5%. 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 as of 2022 and 2021; 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 or 1-percentage point higher than the current rate for 2022 and 2021:

2022 (in thousands)	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Net pension liability	<u>\$ 1,729,790</u>	<u>\$ 1,216,243</u>	<u>\$ 781,314</u>

2021 (in thousands)	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Net pension liability	<u>\$ 1,269,778</u>	<u>\$ 763,667</u>	<u>\$ 335,355</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

Subsequent events have been evaluated through July 17, 2023.

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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)**

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:									
Service cost	\$ 96	\$ 94	\$ 96	\$ 90	\$ 87	\$ 85	\$ 82	\$ 77	\$ 72
Interest	285	274	267	265	256	246	237	232	224
Changes of benefit terms	2	-	-	-	-	6	-	-	-
Differences between expected and actual experience	(21)	(19)	(1)	9	6	12	14	(69)	(2)
Changes of assumptions	-	72	-	169	-	-	-	-	-
Benefit payments and withdrawals	(258)	(246)	(238)	(221)	(214)	(209)	(188)	(180)	(175)
Net change in total pension liability	104	175	124	312	135	140	145	60	119
Total pension liability—beginning	4,422	4,246	4,123	3,811	3,676	3,536	3,391	3,331	3,212
Total pension liability—ending (a)	4,526	4,422	4,247	4,123	3,811	3,676	3,536	3,391	3,331
Plan fiduciary net position:									
Employer contributions	159	156	159	206	205	203	221	215	226
Employee contributions	26	25	25	24	22	20	18	16	15
Net investment income	(274)	416	56	447	(88)	350	212	(24)	105
Benefit payments and withdrawals	(258)	(246)	(238)	(221)	(214)	(209)	(188)	(180)	(175)
Administrative expenses	(1)	-	-	-	-	-	-	-	-
Net change in plan fiduciary net position	(348)	351	2	456	(75)	364	263	27	171
Plan fiduciary net position—beginning	3,658	3,307	3,300	2,844	2,919	2,555	2,292	2,265	2,094
Plan fiduciary net position—ending (b)	3,310	3,658	3,302	3,300	2,844	2,919	2,555	2,292	2,265
Employer's net pension liability—ending (a)-(b)	\$ 1,216	\$ 764	\$ 945	\$ 823	\$ 967	\$ 757	\$ 981	\$ 1,099	\$ 1,066
Plan fiduciary net position as a percentage of the total pension liability	73.13 %	82.73 %	77.76 %	80.05 %	74.63 %	79.40 %	72.26 %	67.58 %	68.00 %
Covered payroll	776	808	814	771	767	748	713	686	672
Employer's net pension liability as a percentage of covered payroll	156.83 %	94.54 %	116.01 %	106.67 %	126.11 %	101.32 %	137.54 %	160.30 %	158.74 %

Note: Information for periods prior to 2014 was not readily available.
2021 Plan fiduciary net position - beginning is adjusted for the Plan's 2020 Q4 Private Markets values

SCHEDULE II

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 Payroll	Contributions as a Percentage of Covered Payroll
2022	\$ 158,618	\$ 158,618	\$ -	\$ 775,512	20.45 %
2021	156,204	156,204	-	807,756	19.34
2020	159,486	159,486	-	813,994	19.59
2019	209,314	206,390	2,924	771,201	26.76
2018	202,509	205,433	(2,924)	766,562	26.80
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

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS

SCHEDULE II

Note to Schedule II: The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan are as follows:

Table with 3 columns: Valuation Dates (January 1, 2022, January 1, 2021, January 1, 2020), Actuarial cost method, and Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Rows include Amortization method, Actuarial asset valuation method, Interest rate, Inflation, Deaths after retirement, Separations other than for normal retirement, Rates of normal retirement, Salary increases, Overtime, and Cost-of-living adjustments.

MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS

SCHEDULE II (continued)

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, 2018	January 1, 2017	January 1, 2016	January 1, 2015	January 1, 2014
Actuarial cost method	Frozen initial liability (FILA)				
Amortization method	For FILA bases, periods specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FILA cost method amortized based on expected working lifetime, weighted by salary, of the projected population.	For FILA bases, periods specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FILA cost method amortized based on expected working lifetime, weighted by salary, of the projected population.	For FILA bases, periods specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FILA cost method amortized based on expected working lifetime, weighted by salary, of the projected population.	For FILA bases, periods specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FILA cost method amortized based on expected working lifetime, weighted by salary, of the projected population.	For FILA bases, periods specified in current valuation report. Future gains/losses are amortized through the calculation of the normal cost in accordance with the FILA 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.	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 2018, per annum, net of investment expenses	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	Net rate of 7.0% for 2014, per annum, net of investment expenses
Inflation	2.5% per annum				
Deaths after retirement	Tables based on recent experience				
Separations other than for normal retirement	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.	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.	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.	Reflecting general, merit and promotion increases of 3.5% to 4.0% per year for operating employees and 4.0% to 7.0% for non-operating employees per year, depending on years of service.	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 5.0% for operating employees and 4.0% to 7.0% for non-operating employees per year, depending on years of service.	In general, merit and promotion increases plus assumed general wage increases of 3.5% to 5.0% for operating employees and 4.0% to 7.0% for non-operating employees per year, depending on years of service.
Overtime	Except for managerial employees, 8.5% of base salary for nonoperating 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 nonoperating 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 nonoperating 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 nonoperating 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 nonoperating 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 as assumption or 1.375% per annum if applicable (2)	55% of inflation as assumption or 1.375% per annum if applicable (2)	55% of inflation as assumption or 1.375% per annum if applicable (2)	55% of inflation as assumption or 1.375% per annum if applicable (2)	55% of inflation as 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	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
2022	(7.56)%
2021	12.71
2020	1.84
2019	15.71
2018	(3.01)
2017	13.67
2016	9.16
2015	(1.05)
2014	4.95
2013	N/A

Note: Information for periods prior to 2014 was not readily available.

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Metropolitan Transportation Authority Defined Benefit Pension Plan

(A Fiduciary Component Unit of the Metropolitan
Transportation Authority)

Financial Statements as of and for the
Years Ended December 31, 2022 and 2021,
Supplemental Schedules, and
Independent Auditor's Report

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR’S REPORT	1-3
MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)	4-9
FINANCIAL STATEMENTS:	
Statements of Fiduciary Net Position as of December 31, 2022 and 2021	10
Statements of Changes in Fiduciary Net Position for the Years Ended December 31, 2022 and 2021	11
Notes to Financial Statements	12-48
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED):	
Schedule of Changes in the Employers' Net Pension Liability and Related Ratios — Schedule I	49
Schedule of Employer Contributions — Schedule II	50-52
Schedule of Investment Returns — Schedule III	53

INDEPENDENT AUDITOR'S REPORT

To the Board of Managers of Pensions
Metropolitan Transportation Authority Defined Benefit Pension Plan

Opinion

We have audited the accompanying statements of fiduciary net position of the Metropolitan Transportation Authority Defined Benefit Pension Plan (the "Plan") as of December 31, 2022 and 2021, and the related statements of changes in fiduciary 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

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 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 50-52; and Schedule of Investment Returns-Schedule III on page 53 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

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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.

July 17, 2023

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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, 2022 and 2021. 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 10.

Overview of Basic Financial Statements

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

- **The Statement 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 Statement 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** - 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

Fiduciary Net Position

December 31, 2022, 2021 and 2020

(Dollars in thousands)

	2022	2021	2020	Increase / (Decrease)			
				2022-2021		2021-2020	
				\$	%	\$	%
Cash and investments	\$ 5,373,544	\$ 5,764,053	\$ 4,991,058	\$ (390,509)	(6.8)%	\$ 772,995	15.5%
Receivables and other assets	6,443	5,210	24,398	1,233	23.7	(19,188)	(78.6)
Total assets	\$ 5,379,987	\$ 5,769,263	\$ 5,015,456	\$ (389,276)	(6.7)	\$ 753,807	15.0
Due to broker for securities							
purchased	5,789	8,154	3,921	(2,365)	(29.0)	4,233	108.0
Other liabilities	6,164	7,980	5,771	(1,816)	(22.8)	2,209	38.3
Total liabilities	11,953	16,134	9,692	(4,181)	(25.9)	6,442	66.5
Net position restricted for pensions	\$ 5,368,034	\$ 5,753,129	\$ 5,005,764	\$ (385,095)	(6.7)%	\$ 747,365	14.9%

December 31, 2022 versus December 31, 2021

Cash and investments at December 31, 2022 were \$5,373.5 million representing an decrease of \$390.5 million or -6.8% from 2021. This decrease is a result of the underperformance of the Plan's investment and plan contributions net of benefit payments and expenses during 2022.

Receivables and other assets net of liabilities at December 31, 2022 increased by \$5.4 million or 21.1% from 2021. This is due primarily to a increase in an amount of \$1.2 million due from broker from the sale of investments, plus an increase in liabilities of \$4.2 million related to variation margin and due to broker for securities purchased.

The net position restricted for pensions decreased by \$385.1 million or -6.7% in 2022 as a result of the changes noted above.

December 31, 2021 versus December 31, 2020

Cash and investments at December 31, 2021 were \$5,764.1 million representing an increase of \$773.0 million or 15.5% from 2020. This increase is a result of investment activity and plan contributions net of benefit payments and expenses during 2021.

Receivables and other assets net of liabilities at December 31, 2021 decreased by \$25.6 million or 144.1% from 2020. This is due primarily to a decrease in an amount of \$19.2 million due from broker from the sale of investments, plus an increase in liabilities of \$6.4 million related to variation margin and due to broker for securities purchased.

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The net position restricted for pensions increased by \$747.4 million or 14.9% in 2021 as a result of the changes noted above.

Changes in Fiduciary Net Position

For the Years Ended December 31, 2022, 2021 and 2020

(Dollars in thousands)

	2022	2021	2020	Increase / (Decrease)			
				2022-2021		2021-2020	
				\$	%	\$	%
Additions:							
Net investment income	\$ (464,022)	\$ 646,375	\$ 96,699	\$ (1,110,397)	(171.8)%	\$ 549,676	568.4%
Contributions	435,118	429,976	426,992	5,142	1.2	2,984	0.7
Total net additions	(28,904)	1,076,351	523,691	(1,105,255)	(102.7)	552,660	105.5
Deductions:							
Benefit payments	351,857	324,999	293,603	\$ 26,858	8.3	\$ 31,396	10.7
Transfer to NYSLERs	-	474	233	(474)	(100.0)	241	103.4
Administrative expenses	4,334	3,513	3,660	821	23.4	(147)	(4.0)
Total deductions	356,191	328,986	297,496	27,205	8.3	31,490	10.6
Net increase / (decrease) in net position	(385,095)	747,365	226,195	(1,132,460)	(151.5)	521,170	230.4
Net position restricted for pensions:							
Beginning of year	5,753,129	5,005,764	4,779,569	747,365	14.9	226,195	4.7
End of year	\$ 5,368,034	\$ 5,753,129	\$ 5,005,764	\$ (385,095)	(6.7)%	\$ 747,365	14.9%

December 31, 2022 versus December 31, 2021

Net investment income decreased by \$1,110.4 million in 2022 due to net investment loss of \$464.0 million in 2022 versus net gain of \$646.4 million experienced in 2021.

Contributions increased by \$5.1 million or 1.2% in 2022 compared to 2021 as required by the Actuarial Determined Contributions (“ADC”) and member contributions from 2021 to 2022.

Benefit payments increased by \$26.9 million or 8.3% 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 \$0.80 million, or 23.4% over 2021. This increase is due primarily to expenses charged in 2022 for various services provided to the Plan.

December 31, 2021 versus December 31, 2020

Net investment income increased by \$549.7 million in 2021 due to net investment gains of \$646.4 million in 2021 versus net gain of \$96.7 million experienced in 2020.

Contributions increased by \$3.0 million or 0.7% in 2021 compared to 2020 as required by the Actuarial Determined Contributions (“ADC”) and member contributions from 2020 to 2021.

Benefit payments increased by \$31.4 million or 10.7% 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 decreased by \$0.15 million, or 4.0% over 2020. This decrease is due primarily to expenses charged in 2021 for various services provided to the Plan.

In 2021, the Plan transferred \$0.5 million to New York State and Local Police and Fire Retirement System as required by New York State law due to transfers of membership.

Economic Factors

Market Overview - 2022

The year 2022 was a tumultuous year for markets and was characterized by heightened inflation, tightened monetary policies, skyrocketing interest rates, and geopolitical tensions such as Russia’s invasion of Ukraine and China’s aggressive posturing towards Taiwan. Following the strong global economic recovery of the previous year, the economic conditions in 2022 brought with it historically volatile oil and gas prices, suppression of global economic growth rate forecasts, and tremendous uncertainty. Heightened interest rates and hawkish policy adopted by the Federal Reserve gave people far less access to money and reduced buying power. Personal income decreased, while personal consumption expenditures and the U.S unemployment rate remained favorable. Global assets broadly declined, volatility metrics increased, home affordability fell materially, and a sharply inverted yield curve echoed the market’s stagflation and recession concerns.

While initially expected to be transitory by the Federal Reserve, U.S. inflation reached a 40-year high in 2022, as large consumer demand was curbed by pandemic and geopolitical related supply constraints. The Federal Reserve raised the federal funds rate by a total of 425 bps throughout the year, such a pace has not been seen since the 1980s, leading to an unprecedented decline in bond prices. The European Central Bank, which was formed in 1998, hiked rates at such a pace that have never been seen in its history as well. Energy prices rose by over 35% for the year, driven by export sanctions on Russia as a result of the Russia-Ukraine war.

Except for commodities, global risk assets plummeted across the board. The strong shift upwards in correlations between equity and fixed income markets resulted in the one of the worst years for the 60/40 equity bond mix portfolio that we have ever seen. With few places to hide in 2022, investors may look to expand alternative asset allocations moving forward. In foreign exchange markets, the U.S. Dollar strengthened considerably, posting very significant gains against the Euro, the Yen, and most other currencies.

Macro Themes

- Stagflation Trends
- Recession Outlook
- European Energy Transition
- China’s Reopening
- U.S. Dollar Trajectory

United States

The U.S. economy tumbled from a 5.9% increase in Real GDP in 2021 to a 2.1% increase in 2022. The unemployment rate continued to fall, finishing 2022 at 3.5% compared to 3.9% in 2021. Consumer Prices rose 6.5% in 2022 and CPI peaked at 9.1% in June 2022, while core inflation, excluding the volatile food and energy components, rose 5.7%.

U.S. equities were negative across the board, with the S&P 500 and Russell 1000 indices posting returns of (-18.1%) and (-19.1%), respectively. Across market caps, Large Cap, as measured by the S&P 500 (-18.1%), Mid Cap, as measured by the S&P 400 (-13.1%), and Small Cap, as measured by the Russell 2000 (-20.4%) all posted double digit negative returns. Across styles, Growth, as measured by the Russell 1000 Growth (-29.1%) significantly underperformed Value, as measured by the Russell 1000 Value (-7.5%).

U.S. Treasury yields drastically increased in 2022 and the yield curve inverted amid elevated inflation and the shift to a hawkish Federal Reserve policy. Credit spreads were volatile in 2022 and slightly widened for the year. Diversified fixed income returned -13.0% (Bloomberg U.S. Aggregate Index), with losses dominated by long U.S. Treasuries at -29.3% (Bloomberg Long Treasury Index) and Credit at -15.3% (Bloomberg Credit Index). Negative returns of -11.8% were realized in Treasury Inflation Protected Securities (Bloomberg TIPS Index) and of -11.2% in High Yield (Bloomberg High Yield Index).

International Developed

International developed equity markets posted weak results in 2022, but outperformed the U.S. equity markets, returning (-14.5%) as measured by the MSCI EAFE Index. Both European and Japanese equities had negative performance in 2022 with the MSCI Europe Index returning (-14.5%) and the MSCI Japan Index returning (-16.3%). The Small Cap portion of international developed markets posted far weaker returns in 2022 (-21.0%) as compared to 2021 (+10.5%).

Emerging Markets

Emerging markets posted weak returns in 2022, underperforming both the U.S. and international developed equity markets. The broad MSCI Emerging Market Index returned (-20.1%) for the year. The underperformance was led by Asian Markets and the removal of Russia from the Index, given that major index providers deemed Russia not investable following the Russian invasion of Ukraine. Geopolitical tensions, inflationary pressures, and a strong US dollar dampened sentiment in developing countries despite higher commodity prices.

The bond markets of emerging markets underperformed in 2022. Both hard currency and local currency bonds posted negative returns. Hard currency bonds, predominately issued in U.S. Dollars, as represented by the JPMorgan EMBI Global Diversified Index, returned (-17.8%) in 2022. Local currency bonds, represented by the JPMorgan GBI-EM Global Diversified Index, returned (-11.7%) for the year.

Commodities

The S&P Goldman Sachs Commodity Index (GSCI) jumped 26.0%, largely influenced by a 20% increase in natural gas prices. Commodity prices were extremely volatile in 2022 with the GSCI surging 52.1% from January through May and then cooling for the rest of the year. Industrial metals were the laggards in this category, with Aluminum being down over 16% for 2022.

Market Outlook -- 2023

Through the first quarter of 2023, equity markets were mostly higher with gains in the low to mid-single digits. Growth equities and Developed International equities have led the way, recovering some of their 2022 losses. Fixed income markets also had a good start to the year with most markets up low single digits. The Fed was still increasing rates, but at a slower pace. The only negative spot was in the commodities markets, with the GSCI down -4.9%. This year is expected to be less tumultuous than 2022, but an unfavorable macroeconomic backdrop still looms.

2023's macroeconomic backdrop will likely be dominated by recession risk, the Russia-Ukraine war, tight monetary policy, elevated inflation pressure and the regional bank failures, all of which are expected to impact economic growth negatively. With global central banks no longer accommodative, a "V" shaped recovery seems unlikely. Global growth expectations have a high degree of uncertainty as investors weigh the possibilities of more banking failures, the U.S raising its debt limit, China's re-opening with the abandonment of the "Zero-COVID" policy, and the escalation of the Russia-Ukraine war.

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 Metropolitan Transportation Authority, Deputy Chief, Controller's Office, 2 Broadway, 15th Floor, New York, NY 10004.

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METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

STATEMENTS OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2022 and 2021 (In thousands)

	2022	2021
ASSETS:		
Cash	\$ 6,594	\$ 24,495
Investments at fair value (Notes 2 and 3):		
Investments measured at readily determined fair value	1,893,903	1,612,965
Investments measured at net asset value	<u>3,473,047</u>	<u>4,126,593</u>
Total investments	<u>5,366,950</u>	<u>5,739,558</u>
Receivables:		
Accrued interest and dividends	3,786	2,798
Other receivable	<u>2,657</u>	<u>2,412</u>
Total receivables	<u>6,443</u>	<u>5,210</u>
Total assets	<u>5,379,987</u>	<u>5,769,263</u>
LIABILITIES:		
Due to broker for securities purchased	5,789	8,154
Due to broker for investment fee	2,240	2,066
Due to Long Island Additional Plan	-	1,295
Due to broker for administrative expenses	291	129
Due to MTA for administrative expenses	3,076	2,981
Other liabilities	<u>557</u>	<u>1,509</u>
Total liabilities	<u>11,953</u>	<u>16,134</u>
NET POSITION RESTRICTED FOR PENSIONS	<u>\$ 5,368,034</u>	<u>\$ 5,753,129</u>

See notes to financial statements.

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (In thousands)

	2022	2021
ADDITIONS:		
Investment income:		
Net realized and unrealized (losses) / gains	\$ (520,371)	\$ 618,496
Dividends	72,744	64,476
Interest	<u>16,505</u>	<u>10,895</u>
Total investment (loss) / income	(431,122)	693,867
Less:		
Investment expenses	<u>(32,900)</u>	<u>(47,492)</u>
Net investment (loss) / income	(464,022)	646,375
Contributions:		
Employer:		
Metro-North Commuter Railroad Company	131,865	137,242
Long Island Rail Road Company	151,551	148,242
Metropolitan Transportation Authority Headquarters	48,550	43,144
MTA Bus Company	60,879	59,629
Staten Island Rapid Transit Operating Authority	7,802	7,887
Employee	<u>34,471</u>	<u>33,832</u>
Total contributions	<u>435,118</u>	<u>429,976</u>
Total (subtractions) / additions	<u>(28,904)</u>	<u>1,076,351</u>
DEDUCTIONS:		
Benefits paid to participants	351,857	324,999
Transfer of MTA Police Employer & Employee Contributions to NYSLERS	-	474
Administrative expenses	<u>4,334</u>	<u>3,513</u>
Total deductions	<u>356,191</u>	<u>328,986</u>
NET (DECREASE) / INCREASE IN NET POSITION	<u>(385,095)</u>	<u>747,365</u>
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	<u>5,753,129</u>	<u>5,005,764</u>
End of year	<u>\$ 5,368,034</u>	<u>\$ 5,753,129</u>

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, 2022 AND 2021

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, 2022 and 2021, respectively, the date of the latest actuarial valuations:

	2022	2021
Active Plan Members	18,394	18,556
Retirees and beneficiaries receiving benefits	11,931	11,678
Vested formerly active members not yet receiving benefits	<u>1,670</u>	<u>1,541</u>
Total	<u>31,995</u>	<u>31,775</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 (“The Board of Managers”) which is 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. TWU Local 100 has been certified as the collective bargaining representative for certain titles previously not represented at MTA Bus. Affected employees will participate in these programs, as set forth in the relevant collective bargaining agreement.

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 for civilian members includes an overtime ceiling which limits overtime compensation for pension purposes to no more than \$18,233 and \$17,301 for 2022 and 2021, 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.

Certain MTA Bus employees represented by TWU Local 100 were granted pension service credit for periods of employment at Liberty Lines Express, Inc. prior to January 3, 2005, with the increase in the Plan benefit offset by the benefit accrued under the TWU-Westchester Private Bus Lines Pension Plan.

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 ½ 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 ¾ 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).

On July 22, 2020, the MTA Board adopted temporary a COVID-19 Accidental Death Benefits, providing eligible surviving beneficiaries with the option to elect a monthly annuity in lieu of an ordinary death benefit, in certain programs of the Plan. On July 21, 2021, the MTA Board adopted amendments to extend the COVID-19 Accidental Death Benefits for active members of the Plan whose death was caused by COVID-19 from March 1, 2020 through December 31, 2022.

MTA Bus employees represented by TWU 100, ATU 1181, ATU 1179, and TSO 106 participate in Article 14 of the Plan. Unlike other Articles of the Plan, Article 14 provides a monthly survivor benefit (a Qualified Preretirement Survivor Annuity ("QPSA")) to the spouse of an employee who dies while in active service. The MTA Bus COVID-19 Accidental Death Benefit follows the current benefit structure and enhances the existing QPSA benefit. The MTA Board approved this arrangement, subject to collective bargaining, on July 22, 2020. On July 21, 2021, the MTA Board extended the MTA Bus COVID-19 Accidental Death Benefit for active employees whose death was caused by COVID-19 until December 31, 2022.

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).

GASB Statement No. 72, *Fair Value Measurement and Application* (“GASB 72”), requires the Funds to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach, or an income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management’s estimates of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that were used for the fair value measurements.

New Accounting Standards Adopted – The Plan adopted the following GASB Statement for the year ended December 31, 2022:

GASB Statement No.92, *Omnibus 2020*.The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan
- The applicability of Statements 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, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

The adoption of this Statement has no material impact on the net position of the Plan.

Recent Accounting Pronouncements — Not yet adopted but currently being evaluated

GASB Statement No.	GASB Accounting Standard	MTA Pension Plan Required Year of Adoption
96	<i>Subscription-based Information Technology Arrangements</i>	2023
99	<i>Omnibus 2022</i>	2023
100	<i>Accounting Changes and Error Corrections</i>	2024
101	<i>Compensated Absences</i>	2024

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 year 2022.

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 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, 2022.

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 Plan is to achieve the actuarial return target with an appropriate risk position.

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. 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 Depository 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; therefore, the Board, with the assistance of the investment advisor, will assess and monitor the investments 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 Consultants (“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 (“NAV”), which is determined to be a practical expedient for measuring fair value. Many factors are considered in arriving at that value. 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 fiduciary 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.

Impact of COVID-19 - In March 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. As a result, global financial markets have experienced, and may continue to experience, significant volatility resulting from the spread of COVID-19. The values of the Plan's individual investments have and will fluctuate in response to changing market conditions and therefore, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined. The extent of the impact of COVID-19 on the Plan's net assets available for benefits and contributions will depend on future developments, including the duration and continued spread of the outbreak. The full impact of the COVID-19 outbreak continues to evolve as of the date of this report.

GASB Statement No. 72 - In year 2015, the Plan adopted GASB Statement No. 72 (“GASB 72”), *Fair Value Measurement and Application*. 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 have the following recurring fair value measurements as of December 31, 2022 and 2021:

Investments measured at readily determined fair value (FV)

(In thousands)

	December 31, 2022	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	\$ 624,547	\$ 624,547	\$ -	\$ -
Separate account small-cap equity funds	341,203	341,203	-	-
Separate account small-Real Estate Investments Trusts	56,459	56,459	-	-
Separate account - International equity funds	190,169	190,169	-	-
Total equity investments	1,212,378	1,212,378	-	-
Debt Securities				
Mutual funds	312,052	312,052	-	-
Separate account - opportunistic credit/Private debt	68,141	-	68,141	-
Separate account debt funds	301,332	-	301,332	-
Total debt investments	681,525	312,052	369,473	-
Total investments by fair value	\$ 1,893,903	\$ 1,524,430	\$ 369,473	\$ -

Investments measured at the net asset value (NAV)

(In thousands)

	December 31, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 243,804	-	Daily	None
Commingled international equity funds	476,918	-	Daily	None
Commingled emerging market equity funds	248,625	-	Daily, monthly	None
Total equity investments measured at the NAV	969,347	-		
Debt Securities				
Commingled debt funds	596,813	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	596,813	-		
Absolute return:				
Direct lending	185,882	41,533	Bi-annually	60 plus days
Distressed securities	29,182	-	Not eligible	N/A
Credit long	56,164	-	Quarterly	3-30 days
Credit long/short	794	-	Quarterly	3-60 days
Event driven	924	2,051	Quarterly, Bi-annually	60-120 days
Hedge Funds of funds	428,403	-	Quarterly	3-60 days
Multistrategy	6,007	-	Monthly	3-30 days
Risk parity	123,791	-	Not eligible	N/A
Total absolute return measured at the NAV	831,147	43,584	Not eligible	N/A
Private equity - private equity partnerships	416,216	264,019	Varies	N/A
Commingled real estate funds	252,345	-	Not eligible	N/A
Real assets				
Energy	102,567	40,903	Not eligible	N/A
Infrastructure	19,208	4,815	Not eligible	N/A
Shipping	7,516	1,839	Not eligible	N/A
Total real assets measured at the NAV	129,291	47,557		
Short term investments measured at the NAV	277,888	-		
Total investments measured at the NAV	3,473,047	\$ 355,160		
Total investments at fair value	\$ 5,366,950			

Investments measured at readily determined fair value (FV)

(In thousands)

	December 31, 2021	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	\$ 489,497	\$ 489,497	\$ -	\$ -
Separate account small-cap equity funds	369,895	369,895	-	-
Separate account small-Real Estate Investments Trust	74,145	74,145	-	-
Total equity investments	933,537	933,537	-	-
Debt Securities				
Mutual funds	259,343	259,343	-	-
Separate account - opportunistic credit/Private debt	79,058	-	79,058	-
Separate account debt funds	341,027	-	341,027	-
Total debt investments	679,428	259,343	420,085	-
Total investments by fair value	\$ 1,612,965	\$ 1,192,880	\$ 420,085	\$ -

Investments measured at the net asset value (NAV)

(In thousands)

	December 31, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Commingled large cap equity funds	\$ 269,508	-	Daily	None
Commingled international equity funds	784,322	-	Daily	None
Commingled emerging market equity funds	317,851	-	Daily, monthly	None
Total equity investments measured at the NAV	1,371,681	-		
Debt Securities				
Commingled debt funds	352,142	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	352,142	-		
Absolute return:				
Direct lending	237,599	32,685	Bi-annually	60 plus days
Distressed securities	34,243	-	Not eligible	N/A
Credit long	55,565	-	Quarterly	3-30 days
Credit long/short	1,149	-	Quarterly	3-60 days
Event driven	3,142	2,024	Quarterly, Bi-annually	60-120 days
Market neutral	-	-	Quarterly	3-60 days
Multistrategy	9,502	-	Monthly	3-30 days
Risk parity	156,566	-	Not eligible	N/A
Total absolute return measured at the NAV	916,907	34,709	Not eligible	N/A
Private equity - private equity partnerships	401,417	210,118	Varies	N/A
Commingled real estate funds	254,257	-	Not eligible	N/A
Real assets				
Energy	97,641	38,975	Not eligible	N/A
Infrastructure	22,732	4,750	Not eligible	N/A
Shipping	19,469	1,815	Not eligible	N/A
Total real assets measured at the NAV	139,842	45,540		
Short term investments measured at the NAV	690,347	-		
Total investments measured at the NAV	4,126,593	\$ 290,367		
Total investments at fair value	\$ 5,739,558			

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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, 2022 and 2021 is as follows:

(In Thousands)	2022	2021
Investments at fair value as determined by quoted market prices:		
Robert W. Baird and Company	\$ 301,332	\$ 341,027
Johnston International	-	290,009
JP Morgan Chase Short Term Investment Fund (STIF)	281,705	715,548
Blackrock Hedge Index	333,598	-
Rhumblin Core Bond	320,550	-
Rhumblin Large Cap Equity	399,054	-

Credit Risk - At December 31, 2022 and 2021, the following credit quality rating has been assigned by a nationally recognized rating organization:

(In Thousands)	2022	Percentage of	2021	Percentage of
Quality Rating	Fair Value	Fixed Income	Fair Value	Fixed Income
		Portfolio		Portfolio
AAA	\$ 30,153	8.36 %	\$ 30,539	7.51 %
AA	79,088	21.94	70,285	17.29
A	23,243	6.44	32,760	8.06
BBB	91,817	25.47	101,797	25.05
BB	4,330	1.20	9,002	2.22
B			818	0.20
CCC	817	0.23	2,694	0.66
Not Rated	<u>61,000</u>	<u>16.92</u>	<u>58,283</u>	<u>14.34</u>
Credit risk debt securities	290,448	80.56	306,178	75.33
U.S. Government bonds	<u>70,077</u>	<u>19.44</u>	<u>100,274</u>	<u>24.67</u>
Total fixed income securities	360,525	<u>100.00 %</u>	406,452	<u>100.00 %</u>
Other securities not rated — equity, international funds and foreign corporate bonds	<u>5,006,425</u>		<u>5,333,106</u>	
Total investments	<u>\$ 5,366,950</u>		<u>\$ 5,739,558</u>	

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Interest Rate Risk Exceptions - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration is a measure of sensitivity to 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. Modified duration is an indicator of bond price's sensitivity to a parallel 100 basis point change in interest rates.

Investment Fund (In Thousands)	2022		2021	
	Fair Value	Duration	Fair Value	Duration
JP Morgan Chase	\$ 360,525	6.57	\$ 406,452	6.24
Total fixed income securities	360,525		406,452	
Portfolio modified duration		6.57		6.24
Investments with no duration reported	<u>5,006,425</u>		<u>5,333,106</u>	
Total investments	<u>\$ 5,366,950</u>		<u>\$ 5,739,558</u>	

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. Some of the Plan's investment managers will have foreign currency exposure through holdings of foreign securities, currency derivatives or private investments whose revenue will be non-USD based. The Plan also holds investments in American Depository Receipts ("ADRs") which are denominated in U.S. dollars and accounted for at fair market value.

The Plan did not have any foreign currency exposures as of December 31, 2022.

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, 2022 and 2021 was 90.45% and 89.23% respectively.

	Master Trust	MTA Defined	Master Trust	MTA Defined
	Total Plan	Benefit Plan	Total Plan	Benefit Plan
	December 31, 2022		December 31, 2021	
Total Investments:				
Investments measured at readily determined fair value	\$ 2,093,923	\$ 1,893,903	\$ 1,807,598	\$ 1,612,965
Investments measured at the NAV	<u>3,839,843</u>	<u>3,473,047</u>	<u>4,624,540</u>	<u>4,126,593</u>
Total investments measured at fair value	<u>\$ 5,933,766</u>	<u>\$ 5,366,950</u>	<u>\$ 6,432,138</u>	<u>\$ 5,739,558</u>

4. NET PENSION LIABILITY

The components of the net pension liability of the Plan at December 31, 2022 and 2021 were as follows (in thousands):

	December 31, 2022	December 31, 2021
Total pension liability	\$ 7,877,401	\$ 7,427,785
Fiduciary net position	5,368,034	5,753,129
Net pension liability	<u>\$ 2,509,367</u>	<u>\$ 1,674,656</u>
Fiduciary net position as a percentage of the total pension liability	68.14%	77.45%

Actuarial Methods and Assumptions

The total pension liability as of December 31, 2022 was determined by an actuarial valuation date of January 1, 2022, that was updated to roll forward the total pension liability to 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, 2022 and 2021 was 6.50%. 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 2022 net pension liability of the Plan, calculated using the discount rate of 6.50%; 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 (5.50%) or 1-percentage point higher (7.50%) than the current rate:

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Net pension liability	\$3,499,092	\$2,509,367	\$1,678,112

2021 (in thousands)

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Net pension liability	\$2,615,168	\$1,674,656	\$884,831

Additional Important Actuarial Valuation Information

Valuation date	January 1, 2022
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.
Actuarial cost method	Frozen Initial Liability cost method
Amortization method	For FIL bases, 16 years for the Fresh start base of January 1, 2022, 15 years for the mortality change and the period specified in current valuation report for specific plan change bases. All bases are determined on a closed basis. 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 or service of the projected population for each group and further weighted by total present value of benefits 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-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial assumptions:	
Investment rate of return	6.50%, net of investment expenses
Projected salary increases	Varies by years of employment, and employee group; 2.75% GWI increases for MTA Bus hourly employees
COLAs	60% of inflation assumption or 1.35%, if applicable
Inflation/Railroad Retirement wage base	2.25%; 3.25%

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Valuation date	January 1, 2021
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.
Actuarial cost method	Frozen Initial Liability and Entry Age Normal cost methods .
Amortization method	For FIL bases, 18 years for the Fresh start base of January 1, 2020 and period specified in current valuation report for specific plan changes. 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 or service of the projected population for each group and further weighted by total present value of benefits 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-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial assumptions:	
Investment rate of return	6.50%, net of investment expenses
Projected salary increases	Varies by years of employment, and employee group; 2.75% GWI increases for TWU Local 100 MTA Bus hourly employees
COLAs	60% of inflation assumption or 1.35%, if applicable
Inflation/Railroad Retirement wage base	2.25%; 3.25%

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 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 as of December 31, 2022 and 2021 are as follows:

2022 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, 2022	\$5,753,129	12.00	1.00	\$5,292,309
Monthly net external cash flows:				
January	3,335	12.00	1.00	3,068
February	6,933	11.00	0.92	6,420
March	6,933	10.00	0.83	6,469
April	6,933	9.00	0.75	6,512
May	6,933	8.00	0.67	6,555
June	7,655	7.00	0.58	7,293
July	7,125	6.00	0.50	6,834
August	7,125	5.00	0.42	6,880
September	7,125	4.00	0.33	6,932
October	7,125	3.00	0.25	6,978
November	7,125	2.00	0.17	7,025
December	4,580	1.00	0.08	4,759
Ending Value - December 31, 2022				\$5,368,034
Money-Weighted Rate of Return	-8.01%			

2021 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, 2021	\$5,012,765	12.00	1.00	\$5,647,685
Monthly net external cash flows:				
January	(585)	12.00	1.00	(659)
February	(4,387)	11.00	0.92	(4,895)
March	8,903	10.00	0.83	9,830
April	8,522	9.00	0.75	9,319
May	9,020	8.00	0.67	9,771
June	9,624	7.00	0.58	9,666
July	9,020	6.00	0.50	9,575
August	9,020	5.00	0.42	9,484
September	9,020	4.00	0.33	9,382
October	8,547	3.00	0.25	8,805
November	9,020	2.00	0.17	9,205
December	25,868	0.35	0.03	25,961
Ending Value - December 31, 2021				\$5,753,129
Money-Weighted Rate of Return	12.67%			

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 as of December 31, 2022 and 2021 and are as follows:

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2022

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	2.27%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	2.51%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	1.58%
US High Yield Bonds	ICE BofA US High Yield	3.00%	4.40%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.79%
Private Credit	CDL Index	7.00%	6.99%
Emerging Market Bonds	JPM EMBI Plus	2.00%	4.99%
US Large Cap Equity	S&P 500	18.00%	5.64%
US Small Cap Equity	Russell 2000	7.00%	7.25%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.90%
Emerging Market Equity	MSCI EM NR	4.50%	9.58%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	9.81%
US REITs	FTSE Nareit All Equity REITs	1.00%	6.71%
Private Real Estate Property	NCREIF Property	4.00%	4.86%
Private Equity	Cambridge Private Equity	7.00%	10.74%
Commodities	Bloomberg Commodity	4.00%	2.96%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	4.52%
Assumed Inflation - Mean			2.33%
Assumed Inflation - Standard Deviation			1.41%
Portfolio Nominal Mean Return			8.08%
Portfolio Standard Deviation			12.42%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2021

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	1.39%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treas	2.00%	1.16%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	0.60%
US High Yield Bonds	ICE BofA US High Yield	3.00%	3.92%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.49%
Private Credit	CDL Index	7.00%	6.93%
Emerging Market Bonds	JPM EMBI Plus	2.00%	3.98%
US Large Caps	S&P 500	18.00%	4.94%
US Small Caps	Russell 2000	7.00%	6.73%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.27%
Emerging Market Equity	MSCI EM NR	4.50%	8.82%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	8.89%
US REITs	FTSE Nareit All Equity REITs	1.00%	5.60%
Private Real Estate Property	NCREIF Property	4.00%	4.61%
Private Equity	Cambridge Private Equity	7.00%	10.36%
Commodities	Bloomberg Commodity	4.00%	1.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	3.73%
Assumed Inflation - Mean			2.30%
Assumed Inflation - Standard Deviation			1.23%
Portfolio Nominal Mean Return			7.39%
Portfolio Standard Deviation			12.15%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 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 assessed 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. As of December 31, 2022 and 2021, total transfer in the amounts of \$2.7 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. MTA Bus is required to make significant annual contributions to the MTA Plan on a current basis. Pursuant to the January 1, 2021 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 \$60.9 and \$59.6 for the calendar years ended December 31, 2022 and 2021. 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 the actuarial determined contribution comprising the normal cost-plus amortization payments of the frozen 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 for MTA Bus represented members, present value of future general wage increases divided by current compensation or the member count weighted by general wage increases (less certain retirements) and weighted by the present value of benefits for each membership group.

The Entry Age Normal (EAN) method is used for determining changes in the frozen unfunded actuarial accrued liability due to plan provisions and assumption changes. For MTA Bus members with benefits indexed to general wage increases, the entry age normal cost uses assumed general wage increases rather than payroll, which conforms to a method compliant for GASB 67 purposes. For MTA Bus non-represented members where benefits are bifurcated into a past service level dollar component and a future service MaBSTOA benefit component, the EAN normal cost assumes that the MaBSTOA style benefits were in effect for the member's entire career.

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.

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.

The market value of assets is adjusted for any contributions made in the current year attributable to a prior year less any contributions made in a prior year and attributable to a future year, determined for each Agency independently.

C. Actuarial Assumptions Universal to all Groups

The assumptions described below were primarily determined based on an experience analysis covering the period from January 1, 2012 to December 31, 2017, with certain assumptions modified subsequently. The mortality assumption is based on an experience analysis covering the period from January 1, 2015 to December 31, 2020.

Interest - 6.50% per annum, compounded annually, net of investment expenses.

Railroad Retirement Wage Base - 3.25% per year.

Consumer Price Index - 2.25% per year.

Cost of Living Increases - 60% of inflation assumption or 1.35% per annum, compounded annually for Police and MTA Bus members eligible for a cost of living adjustment.

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.

Valuation Compensation - The valuation compensation is equal to the annualized base salary as of December 31, 2021 as provided by the MTA adjusted for wage increases granted after the valuation date but retroactive to earlier periods, multiplied by the assumed salary increases for the year. Salary increases are assumed to occur on average at mid-year. Retroactive wage adjustments are as follows:

- MTA Metro-North represented employees: 6.902% (union codes 2, 8, 11, 15, 26, 29, 39, 69, 79), 7.689% (union code 7) or 12.314% (union code 3) for certain groups and 2.50% for all others
- Long Island Railroad represented employees: (union code 21A) or 6.902% (union codes 02A, 02B, 06H, TCA, TCI) for certain groups and 2.50% for all others

- MTA Staten Island Railway represented employees: 6.902% for ATDA, 12.314% for UTU, and 2.50% for all others
- Police: 6.902% plus an additional \$5,000 in 2023

Vacation Pay Retirement Load - Earnings in a member's last year of employment is increased for accrued vacation time. A maximum of 240 hours may be accrued increasing a member's final year's pensionable earnings by at most approximately 11.5% of base compensation. The adjustment represents the percentage of the 240 hour accrued vacation maximum, varies by years of service, and is applied upon retirement. This load is applied to all members, except MTA Bus Company.

Mortality - Preretirement and postretirement healthy annuitant rates are projected on a generational basis using the Society of Actuaries Mortality Improvement Scale MP-2021. As a generational table, it reflects mortality improvements both before and after the measurement date.

Preretirement: Pri-2012 Employee mortality table with blue collar adjustments multiplied by 97% for rail males, 92% for MTA Bus males and 100% for females. For Police, the Mortality Rates for NYC Active Members of Transit and TBTA Ordinary and Accidental Death (no projection scale is applied to the Accidental Death table).

Postretirement Healthy Lives: Pri-2012 Retiree mortality table with blue collar adjustments multiplied by 97% for rail males, 92% for MTA Bus males and 100% for females. For Police, the Mortality Rates for NYC Service Retirees for Housing Police and Transit Police.

Postretirement Disabled Lives: PRI-2012 Disabled Annuitant mortality table for males and females. For Police, the Mortality Rates for NYC Disabled Retirees for Housing Police and Transit Police.

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.

Benefit Adjustments for Retirees: For members that retired in the past two years, a 2% load was applied to benefits to account for potential increases when the benefits are finalized (3% for management members of Long Island Rail Road or Metro-North Railroad).

In addition, the following loads were applied to recent retirees to account for wage increases that are effective retroactively but have not yet been reflected in the benefit calculation.

Participant Data – Benefits were estimated for vested members who terminated during the past year and prior years if no benefit was provided. If transferred to another agency within MTA, but no longer receiving service accruals, wrap around benefit was estimated by increasing vested benefit by 3.5% per year until date first eligible for unreduced retirement reflecting all service and if applicable, adjusted benefit percentage from 1.67% to 2.0%.

Service for MTA Police, MTA Metro-North Railroad and MTA Long Island Rail Road represented and management members is based on the sum of credited service, purchased service and military service provided by MTA.

For inactive MTA Police, MTA Metro-North and MTA Long Island Rail Road represented and management participants, future offsets for Railroad Retirement benefits are estimated and assumed to occur at age 62 or age 60 if the member had accrued 30 years of service, unless disabled or it appears the

offset has occurred. For inactive Long Island Rail Road Pension participants, offsets for Railroad Retirement benefits are estimated and assumed to occur at the member's age 65. Benefits, net of any Railroad Retirement benefits, are estimated for vested members who terminated during the past year if not provided by the Authority.

If not provided, the maximum retirement allowance was estimated for police and MTA Bus retirees eligible for COLA adjustments.

Benefits Not Valued: COVID-19 Accidental Death Benefit is assumed to have an insignificant cost.

D. Changes in Actuarial Assumptions Universal to all Groups

This valuation reflects the adoption of updated mortality assumptions based on an experience analysis covering the period from January 1, 2015 to December 31, 2020. It also includes load adjustments for retiree benefits for retroactive wage increases granted and for members who retired in the past two years to account for potential increases when benefits are finalized.

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	Years of Service	Rate of Increase
0	8.00 %	8	4.70 %
1	8.00	9	4.60
2	7.00	10	4.50
3	6.50	11	4.25
4	5.50	12	4.00
5	5.00	13	3.75
6	4.90	14	3.50
7	4.80	15+	3.25

Overtime - None

Termination - Withdrawal rates vary by years of service. Illustrative rates are shown below:

Years of Service	Termination Rate	Years of Service	Termination Rate
0 - 1	6.00 %	7	2.00 %
2	5.50	8	1.75
3	5.00	9	1.50
4	4.50	10 - 14	1.25
5	3.00	15 - 19	1.00
6	2.50	20+	0.50

Retirement - Rates vary by age and type of retirement. Rates apply upon benefit eligibility from ages 55 to 79. Certain retirement age is 80. Illustrative rates are shown below:

Years of Service	Reduced Early Retirement	Unreduced Early Retirement
<10	2.00 %	5.00 %
10-19	2.00	10.00
20	5.00	30.00
21-29	5.00	20.00
30	N/A	50.00
31+	N/A	30.00

1 At age 55, rate is 50.00%

Disability - Rates vary and apply at 10 or more years of service until age 64. For Staten Island Railway, rates apply until eligible for normal retirement and completion of 20 years of service. No rates of accidental disability are assumed. Illustrative rates are shown below:

Age	Disability Rate
25	0.045 %
30	0.049
35	0.052
40	0.073
45	0.113
50	0.138
55	0.191
60	0.259
64	0.323

Employee Contributions - No employee contributions have been anticipated for future years.

Changes in Actuarial Assumptions - Except as noted in Universal Assumption section, there are no further changes.

F. Actuarial Assumptions - MTA Defined Benefit Pension Plan — Rail Agencies Represented Employees

Salary Scale - Salaries are assumed to increase in accordance with the following schedule:

Years of Service	Termination Rate	Years of Service	Termination Rate
0 - 1	12.50 %	6	4.25 %
2	11.50	7	4.00
3	10.00	8	3.75
4	10.00	9	3.50
5	6.00	10+	3.25

Overtime - Rates of overtime vary by years of service and Agency. They are applied to base salary in accordance with the following schedule for Long Island Rail Road and Metro-North Railroad. For Staten Island Railway, assumed overtime is 15% of base pay regardless of the years of service. No

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overtime is applied to members receiving benefits upon death or disability.

Long Island Rail Road			
Years of Service	Overtime Rate	Years of Service	Overtime Rate
<4	21.00 %	13	31.00 %
4	22.00	14	32.00
5	23.00	15	33.00
6	24.00	16	34.00
7	25.00	17	35.00
8	26.00	18	36.00
9	27.00	19	37.00
10	28.00	20	38.00
11	29.00	21	39.00
12	30.00	22+	40.00

Metro-North Railroad			
Years of Service	Overtime Rate	Years of Service	Overtime Rate
<4	20.00 %	17	27.75 %
4	21.00	18	28.00
5	22.00	19	28.25
6	23.00	20	28.50
7	24.00	21	28.75
8	25.00	22	29.00
9	25.50	23	29.50
10	26.00	24	30.00
11	26.25	25	30.50
12	26.50	26	31.00
13	26.75	27	32.00
14	27.00	28	33.00
15	27.25	29	34.00
16	27.50	30+	35.00

Termination - Withdrawal rates vary by years of service. Illustrative rates are shown below:

Years of Service	Termination Rate	Years of Service	Termination Rate
0 - 1	3.50 %	7	1.20 %
2	2.00	8	1.10
3	1.75	9	1.00
4	1.50	10-14	0.75
5	1.40	15 - 19	0.50
6	1.30	20+	0.50

Retirement - Rates vary by age and type of retirement. Rates apply upon benefit eligibility from ages 55 to 79. Certain retirement age is 80. Illustrative rates are shown below:

Years of Service	Reduced Early Retirement	Unreduced Early Retirement
<10	2.00 %	5.00 %
10-19	2.00	10.00
20	5.00	30.00
21-29	5.00	20.00
30	N/A	50.00
31+	N/A	30.00 *

* At age 55, rate is 50.00%

Metro-North Non-ACRE represented members hired after the New Participant Date are not eligible for unreduced early retirement therefore the rates for 30 or more years of service are not applied.

Disability - Rates vary by age and gender and apply at 10 or more years of service until age 64. For Staten Island Railway, rates apply until eligible for normal retirement and completion of 20 years of service. Prior to 10 years of service, a rate of 0.025% for accidental disability is assumed for all ages. Illustrative rates are shown below:

Age	Rates of Disability					
	M	F	Age	M	F	
20	0.151 %	0.227 %	45	0.246 %	0.372 %	
25	0.151	0.227	50	0.447	0.674	
30	0.151	0.227	55	0.857	1.285	
35	0.164	0.239	60	1.739	2.608	
40	0.183	0.277	64	2.366	3.549	

Changes in Actuarial Assumptions - Except as noted in Universal Assumption section, there are no further changes.

G. Actuarial Assumptions - MTA 20-Year Police Retirement Program

Salary Scale - Salary increases vary by year and reflect longevity increases. Illustrative rates are shown below.

Years of Service	Rate of Increase	Years of Service	Rate of Increase
0 - 1	12.5 %	9	8.75 %
2	15.5	10 - 13	3.25
3	13.0	14	8.75
4	20.5	15 - 18	3.25
5	13.0	19	8.75
6	8.0	20 - 23	3.25
7	6.0	24	8.75
8	4.0	25+	3.25

Overtime - Rates of overtime vary by years of service. They are applied to base salary in accordance with the following schedule. No overtime is applied to members receiving benefits upon death or disability.

Years of Service	Overtime Rate	Years of Service	Overtime Rate
<4	20.00 %	9	26.00 %
4	21.00	10	27.00
5	22.00	11	28.00
6	23.00	12	29.00
7	24.00	13	30.00
8	25.00	14+	30.00

Termination - Withdrawal rates vary by length of service. Illustrative rates are shown below:

Years of Service	Termination Rate
<5	2.50 %
5- 9	0.25
10+	0.00

Retirement - Rates vary by age and years of service. Rates apply upon benefit eligibility from up to age 61. Certain retirement age is 62. Illustrative rates are shown below:

Age	Years of Service at Retirement		
	20	21 - 28	29+
<50	20.00 %	7.50 %	20.00 %
50 - 54	30.00	15.00	20.00
55 - 61	30.00	20.00	25.00

Disability - Ordinary rates vary by age and apply between 10 and 20 years of service. A rate of 0.025% for accidental disability is assumed for all ages and service periods. Illustrative rates are shown below:

Age	Ordinary	Age	Ordinary
25	0.1132 %	45	0.7311 %
30	0.1318	50	1.0608
35	0.1856	55	1.3329
40	0.4283	60	1.4149

Benefits Not Valued – Railroad benefit offset.

Changes in Actuarial Assumptions — Except as noted in Universal Assumption section, there are no further changes.

H. 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. No railroad offset is assumed.

Overtime – Members are assumed to earn overtime equal to the following percentage of their rates of pay:

Years of Service	Rate
Under 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 Except as noted in Universal Assumption section, there are no further changes.

I. Actuarial Assumptions - MTA Long Island Rail Road Pension Plan/Plan for Additional Pensions

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	65	0.00

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.

Interest on Employee Contributions - Assumed to be 3.5% per year for future years.

Participant Data - Benefits under the Plan are frozen and based on information provided by MTA Headquarters, Consolidated Pensions.

Benefits Not Valued - Disability benefits since all active plan participants are eligible for retirement.

Changes in Actuarial Assumptions - Except as noted in Universal Assumption section, there are no further changes.

J. Actuarial Assumptions - MTA Bus

Salary Scale for Non-represented Employees - Salaries are assumed to increase at 3.25% for Article 18 members and in accordance with the following schedule for other non-represented employees:

Years of Service	Rate of Increase	Years of Service	Rate of Increase
0	6.00 %	12	3.90 %
1	7.00	13	3.80
2	6.50	14	3.70
3	6.25	15	3.60
4	6.00	16	3.50
5 - 9	4.50	17	3.40
10	4.30	18	3.30
11	4.10	19+	3.25

Overtime - None

General Wage Increase (GWI) - The benefit level and contribution rate are assumed to increase 2.75% each year based on the anniversary of the last actual or assumed scheduled increase for TWU Local 100, ATU 1179, ATU 1181 and TSO represented employees. The benefit level for ATU 1179, ATU 1181, and TSO represented employees are assumed to follow the same increase pattern as TWU Local 100.

Termination - Withdrawal rates vary by years of service, employee type and operating/non-operating distinction. Illustrative rates are shown below:

For represented employees:

Year of Service	Termination Rate	Year of Service	Termination Rate
0	14.00 %	5 - 9	2.25 %
1	6.00	10 - 14	1.75
2	3.00	15 - 19	1.25
3	2.75	20+	1.00
4	2.50		

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For non-represented employees:

Year of Service	Operating	Non - Operating
0	13.00 %	8.50 %
1	6.00	8.50
2	3.50	7.50
3	3.00	6.50
4	2.50	5.00
5 - 9	2.25	3.00
10 - 14	1.75	2.00
15 - 19	1.25	1.00
20+	1.00	1.00/0.50 *

* 1% applies if less than age 50 and 0.5% applies if age 50 and older

Retirement - Rates vary by age, service, employee type, Tier, Operating/Non-operating distinction, and retirement eligibility. Rates apply upon benefit eligibility until age 79. Certain retirement age is 80. Terminated vested members are assumed to retire at first eligibility for an unreduced benefit. Illustrative rates are shown below:

For represented members:

Age	Years of Service at Retirement		
	<10	10-19	20+
57	N/A	N/A	25.00 %
58-61	N/A	N/A	20.00
62-64	N/A	N/A	30.00
65 - 79	5.00	30.00	30.00

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

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For non-grandfathered non-represented employees:

Tier	Operating/Non-operating	Age	<10	10-19	20	21-24	25	26+
4	Operating	55 - 56	N/A	N/A	N/A	N/A	40 %	30 %
4	Operating	57 - 61	N/A	N/A	N/A	N/A	40	25
4	Operating	62 - 79	5 %	15 %	30 %	20 %	40	30
4	Non-operating	57-79	5	10	25	25	25	25
6	Operating	55 - 56	N/A	N/A	N/A	N/A	40	30
6	Operating	57 - 62	N/A	N/A	N/A	N/A	40	25
6	Operating	63 - 79	N/A	15	30	20	40	30
6	Non-operating	55-59	N/A	0.5	1	1	1	1
6	Non-operating	60-61	N/A	1	2	2	2	2
6	Non-operating	62	N/A	3	6	6	6	6
6	Non-operating	63-79	N/A	10	25	25	25	25

For grandfathered non-represented employees:

For employees hired prior to January 1, 2017, retirement conditions are modified to reflect a single commencement date at the earliest eligible retirement date among former MTA Bus Article 14,15,16,17, and 19 provisions and MaBSTOA-style provisions. Retirement rates for these members reflect a phase-in of retirement rates used as of January 1, 2017 under the prior benefit structure and the retirement rates used under the current benefit structure.

Disability - Rates vary by age, employee type and apply at 10 or more years of service until eligibility for retirement for represented employees and until eligible for unreduced retirement and completion of 20 years of service for non-represented employees. Illustrative rates are shown below:

For represented employees:

Age	Disability Rate	Age	Disability Rate
20	0.250 %	45	0.678 %
25	0.270	50	0.827
30	0.292	55	1.145
35	0.314	60	1.552
40	0.440	64	1.938

For non-represented employees:

Age	Disability Rate	Age	Disability Rate
20	0.042 %	45	0.113 %
25	0.045	50	0.138
30	0.049	55	0.191
35	0.052	60	0.259
40	0.073	64	0.323

Marriage - 80% of members are assumed to be married with wives 3 years younger than males.

Interest on Employee Contributions - Future years assumed to be 0.25% greater than inflation or 2.5% per year for represented employees and for the accumulated balances as of December 31, 2016 for non-represented employees.

Benefits Not Valued - Former Article 15 represented members who may be eligible for reduced retirement at attainment of age 55 and completion of 20 years of service is expected to have an insignificant cost.

The \$2,500 post-retirement death benefit for 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 (former 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 (former Article 15) is not valued as the costs are paid outside of the Plan Trust.

Form of payment - Normal Form, except that all former Liberty Lines Bus non-represented employees (former Article 13) members are assumed to elect the lump sum payment option. Lump sums valued using lump sum mortality table published by the IRS and a 4.5% assumed interest rate.

Changes in Actuarial Assumptions - Except as noted in Universal Assumption section, there are no further changes.

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 Board of Managers 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 events have been evaluated through July 17, 2023.

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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)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:									
Service cost	\$ 220,423	213,674	213,495	173,095	162,273	148,051	138,215	124,354	121,079
Interest	485,878	455,230	427,672	387,193	358,118	335,679	308,009	288,820	274,411
Changes of benefit terms	-	-	-	-	61,890	76,511	73,521	6,230	-
Differences between expected and actual experience	95,172	20,656	92,019	35,935	75,744	(27,059)	86,809	121,556	2,322
Changes of assumptions	-	113,662	-	690,958	-	10,731	-	(76,180)	-
Benefit payments and withdrawals	(351,857)	(325,473)	(293,836)	(264,985)	(242,349)	(232,976)	(209,623)	(199,572)	(191,057)
Net change in total pension liability	449,616	477,749	439,350	1,022,196	415,676	310,937	396,931	265,208	206,755
Total pension liability – beginning	7,427,785	6,950,036	6,510,686	5,488,490	5,072,814	4,761,877	4,364,946	4,099,738	3,892,983
Total pension liability – ending (a)	7,877,401	7,427,785	6,950,036	6,510,686	5,488,490	5,072,814	4,761,877	4,364,946	4,099,738
Plan fiduciary net position:									
Employer contributions	400,648	396,144	394,986	344,714	338,967	321,861	280,768	221,694	331,259
Member contributions	34,471	33,832	32,006	31,504	29,902	31,027	29,392	34,519	26,006
Net investment income	(464,023)	639,374	92,044	647,264	(150,422)	516,153	247,708	(45,122)	102,245
Benefit payments and withdrawals	(351,857)	(325,473)	(293,836)	(264,985)	(242,349)	(232,976)	(209,623)	(199,572)	(191,057)
Administrative expenses & Transfer to investments	(4,334)	(3,513)	(3,660)	(3,408)	(3,152)	(4,502)	(3,051)	(1,962)	(9,600)
Net change in plan fiduciary net position	(385,095)	740,364	221,540	755,089	(27,054)	631,563	345,194	9,557	258,853
Plan fiduciary net position – beginning	5,753,129	5,012,765	4,784,224	4,024,480	4,051,534	3,419,971	3,074,777	3,065,220	2,806,367
Plan fiduciary net position – ending (b)	5,368,034	5,753,129	5,005,764	4,779,569	4,024,480	4,051,534	3,419,971	3,074,777	3,065,220
Employer's net pension liability – ending (a)-(b)	\$ 2,509,367	1,674,656	1,944,272	1,731,117	1,464,010	1,021,280	1,341,906	1,290,169	1,034,518
Plan fiduciary net position as a percentage of the total pension liability	68.12%	77.45%	72.03%	73.41%	73.33%	79.87%	71.82%	70.44%	74.77%
Covered payroll	\$ 2,113,336	1,970,242	1,996,960	1,996,090	1,984,629	1,805,156	1,724,219	1,603,924	1,544,050
Employer's net pension liability as a percentage of covered payroll	118.85%	85.00%	97.36%	86.73%	73.77%	56.58%	77.83%	80.44%	67.00%

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.

2021 Plan fiduciary net position - beginning is adjusted for the Plan's 2020 Q4 Private Markets values.

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
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%
2018	331,566	338,967	(7,401)	1,984,629	17.08%
2019	349,928	344,714	5,214	1,996,090	17.27%
2020	392,921	394,986	(2,065)	1,996,960	19.78%
2021	394,366	396,144	(1,778)	1,970,242	20.11%
2022	404,245	400,648	3,597	2,113,336	18.96%

* Excess for 2014 reflects a prepaid contribution toward the 2015 Actuarially Determined Contribution.

**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, 2022	January 1, 2021	January 1, 2020	January 1, 2019
Actuarial cost method	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)	Frozen initial liability (FIL) (1)
Amortization method	For FIL bases, 16 years for the Fresh start base of January 1, 2022, 15 years for the mortality change and the period specified in current valuation report for specific plan change bases. All bases are determined on a closed basis. 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 or service of the projected population for each group and further weighted by total present value of benefits for each group.	For FIL bases, 18 years for the Fresh start base of January 1, 2020 and period specified in current valuation report for specific plan change bases. 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 or service, of the projected population for each group and further weighted by total present value of benefits for each group.	For FIL bases, 18 years for the Fresh start base of January 1, 2020 and period specified in current valuation report for specific plan change bases. 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 or service, of the projected population for each group and further weighted by total present value of benefits for each group.	For FIL bases, period specified in current valuation report for specific plan change bases. Fresh start base as of January 1, 2020 will be determined based on the Plan's unfunded Entry Age Normal liability less amortization balances remaining plan change bases. 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.	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 6.50% for 2022, per annum, net of investment expenses	Net rate of 6.50% for 2021, per annum, net of investment expenses	Net rate of 6.50% for 2020, per annum, net of investment expenses	Net rate of 6.50% for 2019, per annum, net of investment expenses
Inflation	2.25% per annum	2.25% per annum	2.25% per annum	2.25% per annum
Railroad retirement wage base	3.25% per year	3.25% per year	3.25% per year	3.25% per year
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.	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	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.	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; 2.75% General Wage Increases ("GWI") for MTA Bus hourly employees	Varies by years of employment, and employee group; 2.75% General Wage Increases ("GWI") for T-WU MTA Bus hourly employees	Varies by years of employment, and employee group; 2.75% General Wage Increases ("GWI") for T-WU MTA Bus hourly employees	Varies by years of employment, and employee group; 2.75% General Wage Increases ("GWI") for T-WU MTA Bus hourly employees
Overtime	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Cost-of-living adjustments	1.35% per annum (2)	1.35% per annum (2)	1.35% per annum (2)	1.35% 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	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**

**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, 2018	January 1, 2017	January 1, 2016	January 1, 2015	January 1, 2014
Actuarial cost method	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	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.	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 2018, per annum, net of investment expenses	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	Net rate of 7.0% for 2015, per annum, net of investment expenses
Inflation	2.5% per annum				
Railroad retirement wage base	3.5% per year	3.5% per year	3.5% per year	3.0% 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	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				
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.	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; 3.0% 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	Varies by years of employment, and employee group; 3.5% for MTA Bus hourly employees
Overtime	Tables based on recent experience				
Cost-of-living adjustments	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	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 Liability (UAL) 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
2013	N/A
2014	3.58%
2015	(1.47%)
2016	7.97%
2017	14.94%
2018	(3.67%)
2019	16.06%
2020	1.91%
2021	12.67%
2022	(8.01%)

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, 2022.

**MTA
EMPLOYEE BENEFIT PLANS
FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2022 AND 2021**

**MANAGEMENT'S REVIEW
AUDIT COMMITTEE MEETING**

JULY 17, 2023



MTA BENEFIT PLANS FINANCIAL STATEMENTS

December 31, 2022

(\$'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.	\$5,368,034	31,995
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.	\$3,310,110	15,727
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.	\$652,398	5,152
4	METRO NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN	Defined Benefit Pension Plan	Metro North Railroad employees hired prior to June, 1983	\$279	27
5	MTA DEFERRED COMPENSATION PROGRAM	Defined Contribution Plans - (401K & 457)	All MTA non-represented employees and most represented employees.	\$8,481,371	401K = 63,230 457 = 47,849
6	MTA RETIREE WELFARE BENEFITS PLAN (OPEB PLAN)	Retiree Benefits Welfare Plan	The MTA Group's retired employees and their eligible spouses and dependents.	\$11,735	117,691

* Note: MTA employees are also participants in NYCERS (New York City Employees' Retirement System) with approximately 38,151 active members and NYSLERS (New York State and Local Retirement System) with approximately 1,328 active members.

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 Fiduciary Net Position
 - The Statement of Changes in Fiduciary Net Position
 3. The Notes to the Financial Statements
 4. Required Supplementary Information (RSI)



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

		Balances as of December 31, 2022			
PENSION PLAN	Pension Liability	Plan Net Assets	Net Pension Liability	Funded Ratio	FY22 Contributions
Single Employer					
1 MTADB PLAN (MTA Group)	(7,877,401)	5,368,034	(2,509,367)	68.1%	400,647
2 MABSTOA Plan	(4,526,353)	3,310,110	(1,216,243)	73.1%	158,618
3 LIRR Additional Plan	(1,258,877)	652,398	(606,479)	51.8%	70,763
4 MNCRR Cash Balance Plan	(310)	279	(31)	90.0%	4
Total Single Employer Plans	\$ (13,662,941)	\$ 9,330,821	\$ (4,332,120)	68.3%	\$ 630,032
Multi-Employer- Cost Sharing					
5 NYSLERS - MTA % = 0.32%	(708,099)	733,955	25,856	103.7%	16,284
6 NYCERS - MTA % = 21.90%	(21,175,970)	17,210,974	(3,964,996)	81.3%	797,299
Total Multi-Employer Plans	\$ (21,884,069)	\$ 17,944,929	\$ (3,939,140)	82.0%	\$ 813,583
TOTAL CONSOLIDATED PENSIONS	\$ (35,547,010)	\$ 27,275,750	\$ (8,271,260)	76.7%	\$ 1,443,615
OPEB PLAN					
MTA Retiree Welfare Benefits Plan	\$ (22,446,401)	\$ 11,735	\$ (22,434,666)	0.1%	\$ 788,310

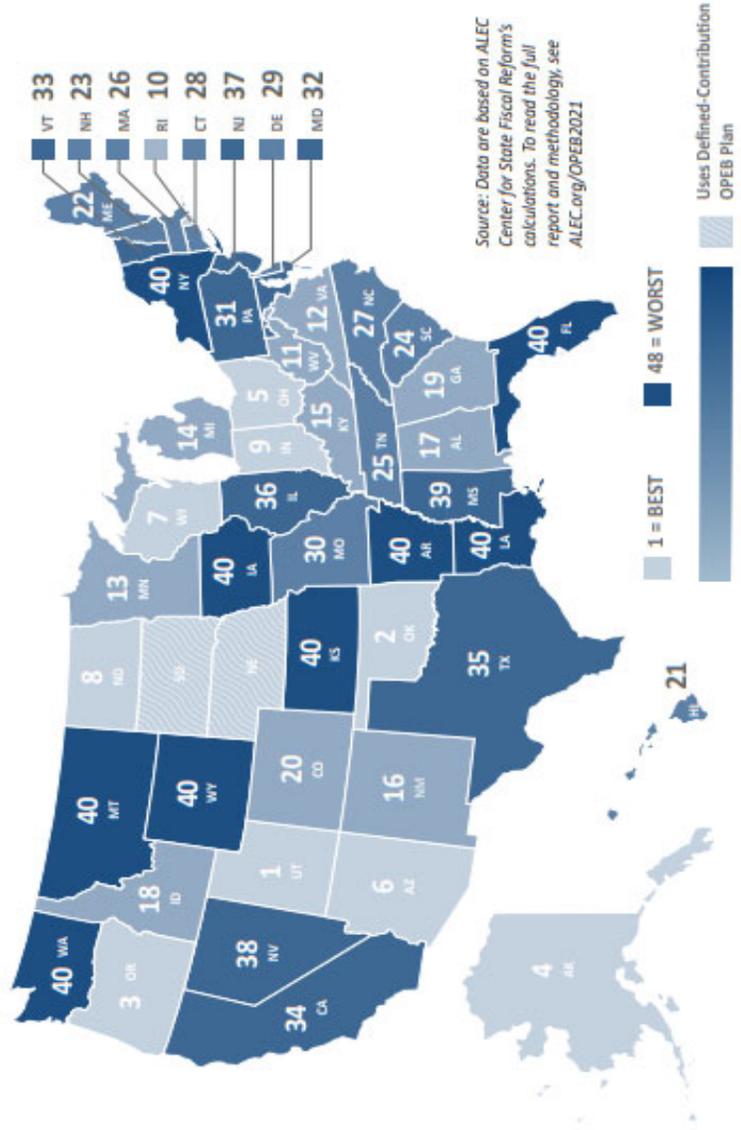
STATE OPEB PLAN FUNDING RATIOS



AMERICAN LEGISLATIVE EXCHANGE COUNCIL

**FIGURE 3 TABLE 3
Funding Ratios**

This metric shows the ratio of assets to liabilities. A higher funding ratio enables an OPEB plan to better withstand economic shocks.



STATE OPEB PLAN FUNDING RATIOS (cont'd)

Ranking	State	Funding Ratio	Ranking	State	Funding Ratio
1	Utah	71.69%	28	Connecticut	4.34%
1	Oklahoma	54.00%	29	Delaware	3.98%
3	Oregon	52.94%	30	Missouri	3.66%
4	Alaska	50.76%	31	Pennsylvania	2.68%
5	Ohio	47.43%	32	Maryland	2.04%
6	Arizona	38.02%	33	Vermont	1.89%
7	Wisconsin	34.94%	34	California	1.42%
8	North Dakota	34.73%	35	Texas	1.15%
9	Indiana	33.65%	36	Illinois	0.14%
10	Rhode Island	27.88%	37	New Jersey	0.11%
11	West Virginia	21.37%	38	Nevada	0.102%
12	Virginia	20.46%	39	Mississippi	0.099%
13	Minnesota	20.10%	40	Arkansas	0.00%
14	Michigan	19.36%	40	Florida	0.00%
15	Kentucky	17.83%	40	Iowa	0.00%
16	New Mexico	17.54%	40	Kansas	0.00%
17	Alabama	15.47%	40	Louisiana	0.00%
18	Idaho	14.09%	40	Montana	0.00%
19	Georgia	13.99%	40	New York	0.00%
20	Colorado	10.59%	40	Washington	0.00%
21	Hawaii	8.36%	40	Wyoming	0.00%
22	Maine	7.60%	N/A	Nebraska	N/A
23	New Hampshire	7.43%	N/A	South Dakota	N/A
24	South Carolina	7.25%			
25	Tennessee	6.94%			
26	Massachusetts	5.77%			
27	North Carolina	4.62%			

*Note: Nebraska and South Dakota have defined-contribution OPEB. This means that each individual Health Savings Account (HSA) has its own ratio of assets and liabilities depending on employee medical expense needs.

**Metropolitan Transportation Authority
(A Component Unit of the State of New York)**

Financial Statements as of and for the Years Ended
December 31, 2022 and 2021,
Required Supplementary Information, Supplementary Information,
Independent Auditor's Reports, Schedule of Expenditures of
Federal Awards, Schedule of State of New York Department of
Transportation Assistance Expended, and Schedule of Findings
and Questioned Costs

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

TABLE OF CONTENTS

	Page
INDEPENDENT AUDITOR’S REPORT	3
MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)	6
BUSINESS-TYPE ACTIVITIES CONSOLIDATED FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021	
Consolidated Statements of Net Position	25
Consolidated Statements of Revenues, Expenses, and Changes in Net Position	27
Consolidated Statements of Cash Flows	29
FIDUCIARY ACTIVITIES FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021	
Statements of Fiduciary Net Position	31
Statements of Changes in Fiduciary Net Position	32
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS	33
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)	
Schedule of Changes in the MTA’s Net Pension Liability and Related Ratios for Single Employer Pension Plans	109
Schedule of the MTA’s Proportionate Share of the Net Pension Liabilities of Cost-Sharing Multiple-Employer Pension Plans	113
Schedule of the MTA’s Contributions for All Pension Plans	114
Notes to Schedule of the MTA’s Contributions for All Pension Plans	116
Schedule of Changes in the MTA’s Net OPEB Liability and Related Ratios and Notes to Schedule	131
Schedule of the MTA’s Contributions to the OPEB Plan	132
Notes to Schedule of the MTA’s Contributions to the OPEB Plan	133
SUPPLEMENTARY INFORMATION: COMBINING FIDUCIARY FUNDS FINANCIAL STATEMENTS	
Pension and Other Employee Benefit Trust Funds - Combining Statement of Fiduciary Net Position for the Year- Ended December 31, 2022	134
Pension and Other Employee Benefit Trust Funds - Combining Statement of Fiduciary Net Position for the Year- Ended December 31, 2021	135
Pension and Other Employee Benefit Trust Funds - Combining Statement of Changes in Fiduciary Net Position for the Year-Ended December 31, 2022	136
Pension and Other Employee Benefit Trust Funds - Combining Statement of Changes in Fiduciary Net Position for the Year-Ended December 31, 2021	137
SUPPLEMENTARY INFORMATION	
Schedule of Consolidated Reconciliation Between Financial Plan and Financial Statements for the Year Ended December 31, 2022	138
Schedule of Consolidated Subsidy Accrual Reconciliation Between Financial Plan and Financial Statements for the Year Ended December 31, 2022	139
Schedule of Financial Plan to Financial Statements Reconciliation for the Year Ended December 31, 2022	140

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

TABLE OF CONTENTS (CONTINUED)

FEDERAL AWARDS:	Page
REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH <i>GOVERNMENT AUDITING STANDARDS</i>	141
REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS REQUIRED BY UNIFORM GUIDANCE	143
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS	146
NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS	149
SCHEDULE OF FINDINGS AND QUESTIONED COSTS	151
SCHEDULE OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS-FEDERAL AWARDS	154
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION:	
REPORT ON COMPLIANCE FOR EACH MAJOR STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED REQUIRED BY PART 43 OF THE NEW YORK STATE CODIFICATION OF RULES AND REGULATIONS	155
SCHEDULE OF STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED	158
NOTES TO SCHEDULE OF STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED	159
SCHEDULE OF FINDINGS AND QUESTIONED COSTS - STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED	160
SCHEDULE OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS — STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED	161



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INDEPENDENT AUDITOR'S REPORT

To the Members of the Board of
Metropolitan Transportation Authority

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and fiduciary activities of the Metropolitan Transportation Authority (the "MTA"), a component unit of the State of New York, as of and for the years ended December 31, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the MTA's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and fiduciary activities of the MTA as of December 31, 2022 and 2021, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards (Government Auditing Standards)*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the MTA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

As discussed in Note 1 to the financial statements, 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. Our opinions are not modified with respect to this matter.

As discussed in Note 2 to the financial statements, the MTA adopted Governmental Accounting Standards Board ("GASB") Statement No. 87, *Leases*, as of January 1, 2021. The adoption of GASB Statement No. 87 resulted in the restatement of the 2021 financial statements. Our opinions are not modified with respect to this matter

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the MTA's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit 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 MTA's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the MTA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information on pages 6-24 and 109-133, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 audits 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.

Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the MTA's basic financial statements. The supplementary information on pages 134-140, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information on pages 134-140 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 6, 2023, on our consideration of the MTA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the MTA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the MTA's internal control over financial reporting and compliance.

June 6, 2023

**[INSERT FINANCIAL STATEMENT –
PAGES 6-140]**

The MTA Consolidated financial statements were intentionally omitted in this draft document. In the final version of the single audit report the MTA Consolidated financial statements will be included. The Audit Committee reviewed the MTA Consolidated financial statements at the May 22, 2023 Audit Committee meeting.



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REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Members of the Board of
Metropolitan Transportation Authority

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities and fiduciary activities of the Metropolitan Transportation Authority (the “MTA”), a component unit of the State of New York, as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the MTA’s basic financial statements, and have issued our report thereon dated June 6, 2023, which contains an emphasis of matter paragraph regarding the MTA requiring significant subsidies from other governmental entities and MTA’s adoption of GASB Statement No. 87 *Leases*, as of January 1, 2021.

Report on Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered MTA’s internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of MTA’s internal control. Accordingly, we do not express an opinion on the effectiveness of MTA’s internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity’s financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audits we did not identify any deficiencies in internal control that we consider to be material weaknesses. We identified a certain deficiency in internal control, described in the accompanying schedule of findings and questioned costs as item 2022-1 that we consider to be a significant deficiency.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the MTA’s financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audits, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

MTA's Response to Finding

Government Auditing Standards requires the auditor to perform limited procedures on the MTA's response to the finding identified in our audits and described in the accompanying schedule of findings and questioned costs. The MTA's response was not subjected to the other auditing procedures applied in the audits of the financial statements and, accordingly, we express no opinion on the response.

Purpose of this Report.

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the MTA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the MTA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

June 6, 2023



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REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS REQUIRED BY THE UNIFORM GUIDANCE

To the Members of the Board of
Metropolitan Transportation Authority

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited the Metropolitan Transportation Authority's (the "MTA"), a component unit of the State of New York, compliance with the types of compliance requirements identified as subject to audit in the *OMB Compliance Supplement* that could have a direct and material effect on each of the MTA's major federal programs for the year ended December 31, 2022. The MTA's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

In our opinion, the MTA complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended December 31, 2022.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*); and the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditor's Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the MTA and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the MTA's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to Example Entity's federal programs.

Auditor's Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the MTA's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material, if there is a substantial likelihood that, individually or in the aggregate, it would

influence the judgment made by a reasonable user of the report on compliance about the MTA's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the MTA's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- obtain an understanding of the MTS's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the MTA's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditor's Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the business-type activities and fiduciary activities of the MTA as of and for the year ended December 31, 2022, and have issued our report thereon dated June 6, 2023, which contained unmodified opinions on those financial statements which included an emphasis of matter paragraph regarding the MTA requiring significant subsidies from other governmental entities and MTA's adoption of GASB Statement No. 87 *Leases*, as of January 1, 2021. Our audit was performed for the purpose of forming opinions on the financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with

auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the financial statements as a whole.

July 24, 2023

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

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED DECEMBER 31, 2022**

Federal ALN Number	Federal Agency/Program Description/Grant Title	Pass-through Identifying Number	Grant Agreement Date	Pass-through to subrecipient	Federal Expenditures
U.S. Department of Transportation/Federal Transit Administration					
20.500	Federal Transit—Capital Investment Grants—Section 3 Discretionary Grants				
	Direct - U.S. Department of Transportation/Federal Transit Administration:				
	Federal Transit Cluster:				
	Second Avenue Subway Final Design	NY-03-0408	8/4/2006	\$ -	\$ 6,902,379
	MTA NYCT Bus Radio & Command Center	NY-04-0086	9/12/2012	-	4,667,491
	MTA FY12 FGM LIRR/MNR/NYCT Projects	NY-05-0116	11/6/2012	-	4,772,163
	COVID-19- ARP Act MTA FY21 ESA	NY-2021-037	8/23/2021	-	20,436,339
	Subtotal Federal Transit—Capital Investment Grants—Section 3 Discretionary Grants			-	36,778,372
20.507	Federal Transit—Formula Grants (Urbanized Area Formula Program)—Section 9 and 9A				
	Formula Grants and Operating Assistance Grants				
	Direct - U.S. Department of Transportation/Federal Transit Administration:				
	MTA Bus Sec 5307 FFY06 and 07/Security Projects	NY-90-X594	9/24/2008	-	12,891
	MTA Bus 5307 FFY08 and FFY 09	NY-90-X620	9/1/2010	-	56,458
	MTA FY10 §5307 LIRR/MNR/NYCT Projects	NY-90-X663	9/13/2011	-	(613,972)
	MTA Bus FY13 Formula	NY-90-X703	7/10/2013	-	2,783,060
	MTA FY 12 5307 LIRR/MN/NYCT Projects	NY-90-X722	9/19/2013	-	4,467,989
	MTA FY 12 5307 LIRR/MN/NYCT Projects	NY-90-X727	7/31/2014	-	4,226,206
	MTA Bus Radio Cmd Ctr (Cont'd)	NY-90-X738	9/19/2014	-	587,201
	MTA FY14 §5307 LIRR/MNR/NYCT Projects	NY-90-X749	3/13/2015	-	9,520,447
	MTA FLEX FFY 2013	NY-95-X042	11/1/2013	-	926,539
	MTA BUS §5307 FY10-FY14 Projects	NY-2016-025	8/24/2016	-	1,665,793
	MTA BUS - Bus Radio System Funding	NY-2016-029	8/24/2016	-	2,051,427
	MTA BUS §5307 FY10-FY14 Projects	NY-2016-046	8/24/2016	-	6,120,466
	MTA NYCT and MNR (Sixth Capital Program) 5307	NY-2017-044	9/18/2017	-	941,186
	MTA FY16-17 5307 NYCT/MNR/LIRR	NY-2017-047	9/18/2017	-	19,745,070
	MTA FLEX Second Avenue Subway, Phase 1	NY-2017-053	9/22/2017	-	1,912,268
	MTA NYCT Section 5307 R211 Subway Car	NY-2018-059	9/10/2018	-	12,054,874
	MTA FY17 / FY18 § 5307 NYCT/MNR/LIRR	NY-2018-071	9/22/2017	-	27,776,735
	MTA NYCT/MNR (Flex)	NY-2019-052	9/3/2019	-	19,555,155
	MTA MNR Croton Falls Parking - CMAQ	NY-2019-055	8/26/2019	-	892,201
	MTA Bus Section 5307- 2017/2018	NY-2019-057	8/23/2019	-	7,792,237
	MTA Bus Section 5307 - 2018	NY-2019-058	8/22/2019	-	374,542
	MTA FY18 / FY19 § 5307 NYCT/MNR/LIRR	NY-2019-067	1/15/2020	-	20,780,024
	MTA Section 5307 CARES ACT Operating Assistance	NY-2020-011	6/25/2020	-	(10,141)
	MTA FY19 / FY20 § 5307 NYCT/MNR/LIRR	NY-2020-069	9/2/2020	-	26,444,125
	MTA FY 2020 Flex	NY-2020-073	9/2/2020	-	78,471,645
	MTA FY20 Section 5307 NYCT/MNR/LIRR - Stations/ADA	NY-2020-074	7/2/2021	-	10,282,764
	MTA FY19 / FY20 § 5307 NYCT/LIRR	NY-2020-077	8/26/2020	-	37,293,980
	MTA FY21 Section 5307 NYCT/MNR/LIRR	NY-2021-018	6/15/2021	-	50,591,038
	MTA Bus Section 5307 - 2021 - 110 Standard Bus Buy Remaining Funding	NY-2021-038	8/12/2021	-	1,441
	MTA FY21 Section 5307 NYCT - Stations	NY-2021-041	8/18/2021	-	24,593,985
	MTA FY21 Section 5307 NYCT/MNR/LIRR - Stations/ADA	NY-2021-043	8/18/2021	-	25,673,866
	MTA FY21 § 5307 NYCT/MNR/LIRR 2	NY-2021-045	8/18/2021	-	27,472,107
	MTA FY 2021 CMAQ (Flex 2)	NY-2021-054	9/3/2021	-	8,266,664
	MTA FY 2021 Flex	NY-2021-055	9/3/2021	-	7,573,005
	MTA FY21 Section 5307 NYCT/MNR/LIRR	NY-2021-056	9/3/2021	-	16,843,876
	COVID-19-MTA Section 5307 CRRSAA Operating Assistance	NY-2022-001	12/8/2021	-	3,520,283,121
	COVID-19-MTA Section 5307 ARP Operating Assistance	NY-2022-002	1/4/2022	-	6,196,247,434
	COVID-19-MTA 5307 ARP Additional Assistance Discretionary (90) Operating Assistar	NY-2022-042	9/9/2022	-	769,197,264
	MTA FY21 § 5307 NYCT/MNR/LIRR	NY-2022-048	9/14/2022	-	472,628
	MTA FY22 § 5307 NYCT/LIRR/MNR	NY-2022-065	9/16/2022	-	1,022,464
	Subtotal Federal Transit—Formula Grants (Urbanized Area Formula Program)—Section 9 and 9A Formula Grants and Operating Assistance Grants			-	10,944,350,063

(Continued)

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

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED DECEMBER 31, 2022**

Federal ALN Number	Federal Agency/Program Description/Grant Title	Pass-through Identifying Number	Grant Agreement Date	Pass-through to subrecipient	Federal Expenditures
20.525	Federal Transit Administration—State of Good Repair Grants Program				
	Direct - U.S. Department of Transportation/Federal Transit Administration:				
	MTA FY 13 SGR LIRR/MNR/NYCT §5337	NY-54-0001	5/7/2014	\$ -	\$ 1,234,327
	MTA FY14 SGR LIRR/MNR/NYCT §5337	NY-54-0004	3/3/2015	-	2,942,235
	MTA FY16-17 SGR LIRR/MNR/NYCT §5337	NY-2017-043	9/12/2017	-	5,802,648
	MTA FY15 SGR LIRR/MNR/NYCT §5337	NY-2017-046	8/24/2015	-	5,197,798
	MTA NYCT Section 5337 R211 Subway Car	NY-2018-060	9/11/2018	-	48,284,296
	MTA FY15 SGR LIRR/MNR/NYCT §5337	NY-2018-072	9/20/2018	-	10,329,291
	MTA § 5337 NYCT ADA and Reconstruction Times Square Shuttle	NY-2019-014	7/24/2019	-	28,756,827
	MNR - Locomotive Purchase	NY-2019-047	8/26/2019	-	21,401,228
	MTA FY18/FY19 § 5337 NYCT/LIRR	NY-2019-050	8/27/2019	-	48,381,398
	MTA FY18 / FY19 § 5337 NYCT/MNR/LIRR II	NY-2019-065	9/23/2019	-	61,329,496
	MTA FY20 § 5337 NYCT/MNR/LIRR	NY-2020-083	8/26/2020	-	47,625,714
	MTA FY21 § 5337 NYCT/MNR/LIRR	NY-2021-016	8/26/2020	-	50,983,279
	MTA FY21 § 5337 NYCT/MNR/LIRR 2	NY-2021-042	8/26/2020	-	1,926,793
	MTA FY21 Section 5337 NYCT/LIRR - Stations/ADA	NY-2021-046	8/26/2020	-	11,001,272
	MTA FY21 § 5337 NYCT/LIRR 2	NY-2022-012	7/7/2022	-	585,100
	MTA FY22 § 5337 NYCT - Rolling Stock R211	NY-2022-014	8/2/2022	-	164,105,339
	MTA FY22 § 5337 LIRR	NY-2022-045	9/14/2022	-	56,522,443
	Sub-total Federal Transit Administration—State of Good Repair Grants Program			-	566,409,484
	Federal Transit Administration - Bus and Bus Facilities Formula & Discretionary Programs (Bus Program)				
	Direct - U.S. Department of Transportation/Federal Transit Administration:				
20.526	MTA BUS SEC.5339	NY-2016-040	9/16/2016	-	1,779,184
	MTA BUS SEC.5339	NY-2016-042	9/20/2016	-	10,801,543
	MTA NYCT SEC.5339	NY-2017-045	8/29/2017	-	3,793,943
	MTA BUS SEC.5339	NY-2019-056	9/24/2019	-	42,753,944
	MTA NYCT SEC.5339	NY-2021-036	8/10/2021	-	677,988
	Sub-Total - Bus and Bus Facilities Formula & Discretionary Programs (Bus Program)			-	59,806,602
	Total Federal Transit Cluster			\$ -	\$ 11,607,344,521

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

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED DECEMBER 31, 2022**

Federal ALN Number	Federal Agency/Program Description/Grant Title	Pass-through Identifying Number	Grant Agreement Date	Pass-through to Subrecipients	Federal Expenditures
U.S. Department of Transportation/Federal Railroad Administration (Continued)					
Pass-Through - State of New York Department of Transportation:					
20.301	Railroad Safety (Infrastructure Improvement Grant Program ("RSIIG"))	FRA-D036246	1/1/2019	\$ -	\$ 408,481
20.326	Federal-State Partnership For Intercity Passenger Rail	FR-FSP-0008-21-01	9/23/2021	-	50,157
Direct - U.S. Department of Transportation/Federal Transit Administration:					
20.321	Railroad Safety Technology Grants-MNR CRISI Program PTC Grant	NY-2019-049	8/20/2019	-	221,593
20.514	Public Transportation Research, Technical Assistance, and Training - MTA NYCT Bus Mirror Configuration Safety Research & Demonstration (SRD) Program	NY-2017-050	9/18/2017	-	89,184
20.521	New Freedom Program - GCT Elevator	NY-57-X018	9/10/2010	-	26,157
20.527	Public Transportation Emergency Relief Program				
	NY MTA Hurricane Sandy Relief 5324	NY-44-X007	1/28/2014	-	9,462,809
	NY MTA Hurricane Sandy Relief 5324	NY-44-X008	9/23/2014	-	9,821,040
	NY MTA Hurricane Sandy Relief 5324	NY-44-X012	2/12/2015	-	41,795,344
	MNR Power&Signals Resiliency Improvement	NY-44-X015	8/18/2015	-	2,075,756
	Emergency Communications Enhancements	NY-44-X016	9/2/2015	-	9,136,123
	MTA NYCT CR Protection of Street Level Openings in Flood Prone Areas	NY-2017-032	8/22/2017	-	7,565,250
	MTA LIRR Flood Resiliency for Long Island City Yard	NY-2017-034	8/24/2017	-	2,950,386
	NY MTA Hurricane Sandy Relief 5324	NY-2017-052	8/31/2017	-	127,369,404
	MTA NYCT CR Sec. 5324 Internal Station Hardening	NY-2018-017	6/20/2018	-	142,513
	MTA NYCT CR Sec. 5324 Pumping Capacity Improvements	NY-2018-019	7/13/2018	-	4,872,086
	MTA NYCT Rockaway Line Protection CR - (Part 1: Hammels Wye)	NY-2018-025	7/17/2018	-	93,491
	MTA NYCT CR Sec. 5324 Protection of Tunnel Portals and Internal Sealing Part 1 (Resiliency)	NY-2018-028	7/17/2018	-	429,941
	MTA NYCT CR Sec. 5324 Right-of-Way (ROW) Equipment Hardening in Flood-Prone Areas	NY-2018-038	8/16/2019	-	235,312
	MTA LIRR CR Sec. 5324 New York-New Jersey River to River Rail Resiliency (R4) Project	NY-2018-039	9/5/2018	-	127,786
	MTA NYCT CR Sec. 5324 Flood Mitigation in Yards	NY-2018-052	8/17/2018	-	72,920,885
	MTA NYCT CR Sec. 5324 Flood Resiliency for Critical Bus Depots	NY-2019-020	7/23/2019	-	1,003,131
	MTA NYCT CR Sec. 5324 Flood Resiliency for Critical Support Facilities	NY-2019-028	7/29/2019	-	6,038,494
	MTA NYCT CR Sec. 5324 Hardening of Substations	NY-2019-044	8/14/2019	-	584,262
	MTA FY 2019 5324 Recovery & LPR -Part 7	NY-2019-066	8/26/2019	-	12,666,458
	Total Public Transportation Emergency Relief Program			-	309,290,471
20.530	Public Transportation Innovation Program				
	FY20 SRD - Designed for Impact - Safety & Collision Fatality Reduction	NY-2021-009	8/25/2021	-	676,694
	MTA FFY 21 Section 5312 Transit's Path Forward in a Pandemic	NY-2021-014	6/25/2021	-	130,000
	Total Public Transportation Innovation Program			-	806,694
TOTAL FROM U.S. DEPARTMENT OF TRANSPORTATION				-	11,918,237,258
U.S. Department of Homeland Security:					
97.036	Disaster Grants—Public Assistance (Presidentially Declared Disasters)—SANDY 2015	FEMA 4085 DRNY (Operating)	11/23/2012	-	2,169,057
	Total Disaster Grants—Public Assistance (Presidentially Declared Disasters) Program			-	2,169,057
Direct - U.S. Department of Homeland Security:					
97.056	Port Security Grant program	FE2019-PU-00158	9/1/2019	-	403,313
97.075	Rail and Transit Security Grant program	FE2018-RA-00017	9/14/2018	-	10,771,700
	Rail and Transit Security Grant program	FE2019-RA-00004	9/1/2019	-	10,384,279
	Rail and Transit Security Grant program	FE2020-RA-00005	12/11/2020	-	7,462,668
	Total Rail and Transit Security Grant Program			-	28,618,647
TOTAL FROM U.S. DEPARTMENT OF HOMELAND SECURITY				-	31,191,017
TOTAL EXPENDITURES OF FEDERAL AWARDS				\$ -	\$ 11,949,428,275

See accompanying Notes to Schedule of Expenditures of Federal Awards.

(Concluded)

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

NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED DECEMBER 31, 2022

1. SIGNIFICANT ACCOUNTING POLICIES

Summary of Significant Accounting Policies — Expenditures reported on the schedule of expenditures of federal awards (the “Schedule”) are reported on the cash basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

Basis of Presentation - The accompanying Schedule includes the federal award activity of the Metropolitan Transportation Authority (“MTA”), a component unit of the State of New York under programs of the federal government for the year ended December 31, 2022. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (“Uniform Guidance”). Because the Schedule presents only a selected portion of the operations of the MTA, it is not intended to and does not present the financial position, changes in net position, or cash flows of the MTA.

Financial Reporting Entity — The 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 financial statements are of the Metropolitan Transportation Authority (“MTA”), including its related groups (collectively, the “MTA Group”), which are listed below. The Business-Type activities in these consolidated financial statements purport the operations of the MTA Group.

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 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 Construction and Development (“MTA Construction and Development”) 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.
- MTA Grand Central Madison Concourse Operating Company (“MTA GCMC”) operates and maintains the infrastructure and structures supporting Long Island Rail Road access into Grand Central Terminal
- 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

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

NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS (CONTINUED) YEAR ENDED DECEMBER 31, 2022

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 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, 15th Floor, New York, New York 10004.

Basis of Accounting — The accompanying consolidated 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*.

2. INDIRECT RATE

The MTA has not elected to use the 10% de minimis indirect cost rate allowed under the Uniform Guidance.

3. PASS-THROUGH PROGRAMS

When the MTA receives Federal funds from a government entity other than the Federal government (“pass-through”), the funds are accumulated based upon the Assistance Listing Number (“ALN”) number advised by the pass-through grantor.

4. RELATIONSHIP TO FEDERAL AND STATE FINANCIAL REPORTS

The regulations and guidelines governing the preparation of Federal and State financial reports vary by state and Federal agency and among programs administered by the same agency. Accordingly, the amounts reported in the Federal and state financial reports do not necessarily agree with the amounts reported in the accompanying Schedule of Expenditures of Federal Awards, which is prepared as explained in Note 1 above.

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

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
YEAR ENDED DECEMBER 31, 2022**

1. SUMMARY OF AUDITORS' RESULTS

Financial Statements

Type of auditor's report issued: Unmodified

Internal control over financial reporting:

Material weakness(es) identified	<u> </u> Yes	<u>X</u> No
Significant deficiency(ies) identified?	<u>X</u> Yes	<u> </u> None Reported
Noncompliance material to financial statements noted?	<u> </u> Yes	<u>X</u> No

Federal Awards

Internal Control over major programs :

Material weakness(es) identified	<u> </u> Yes	<u>X</u> No
Significant deficiency(ies) identified?	<u> </u> Yes	<u>X</u> No

Type of auditor's report issued on compliance for Major Programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance with Uniform Guidance? Yes X No

Information of Major Programs:

<u>ALN Number(s)</u>	<u>Name of Federal Program</u>
20.500/507/525/526	Federal Transit Cluster

Dollar threshold used to distinguish between Type A and Type B program \$ 30,000,000

Auditee qualified as low-risk auditee? Yes

2. FINDINGS RELATING TO THE FINANCIAL STATEMENTS REPORTED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

See pages 152-153.

3. FINDINGS AND QUESTIONED COSTS RELATING TO FEDERAL AWARDS

None.

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

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS (CONTINUED)
YEAR ENDED DECEMBER 31, 2022**

2022-1

1. Non-operating Revenue Account Reconciliation - SIGNIFICANT DEFICIENCY

Agency:

Metropolitan Transportation Authority – (Headquarters, “MTAHQ”)

Criteria:

MTAHQ performs a monthly close of receivables and revenue to the general ledger for MTAHQ. As part of the MTAHQ’s month-end close procedure, funds received and yet to be received from New York State are recorded to the general ledger.

Condition:

During our audit procedures, D&T identified a deficiency in MTAHQ’s non-operating revenue and corresponding receivables reconciliation as inappropriate amounts were recognized for each type of non-operating revenue and receivables. Specifically, through our substantive testing period on a sample of non-operating revenues recorded in the general ledger, D&T noted the following misstatements by type:

- a. Payroll Mobility Tax Reconciliation (G/L# 431440) – Revenue was overstated by \$11.0 million for the year-ended 12/31/2021.
- b. Supplemental Aid Trust Reconciliation (G/L# 431445) – Revenue was overstated by \$116.8 million for the year-ended 12/31/2021.
- c. Mansion Tax Reconciliation (G/L# 431458) – Revenue was overstated by \$92.3 million for the year-ended 12/31/2021.
- d. NYC Assistance Fund Reconciliation (G/L# 434252) – Revenue was understated as \$26.8 million of NYC Assistance Fund receivables should have been recorded for the year-ended 12/31/2021.

Cause:

MTAHQ did not appropriately recognize revenue and the corresponding receivables for the year-ended 12/31/2021 related to non-operating revenues.

Effect:

As a result, non-operating revenue and corresponding receivables were misstated and consolidated financial statements were improperly accounted, reported, and disclosed, as described in the ‘*Condition*’ section above.

Recommendation:

We recommend that MTAHQ management enhance review controls over non-operating revenue and corresponding receivable account reconciliations and involving the appropriate MTA departments (MTA Budget) and where applicable New York State for its timely and appropriate recognition of non-operating revenue and receivables.

Financial Statement Impact:

The net impact of these resulted in a known non-operating revenue overstatement of \$193.3 million, which was corrected by management prior to the 12/31/2021 consolidated financial statement issuance.

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

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS (CONTINUED)
YEAR ENDED DECEMBER 31, 2022**

Management Response (2021):

Management reconciled the non-operating revenue accounts, identified and corrected errors that related primarily to timing issues and allocation of revenue into various sub-accounts. The adjustments made to the financial statements did not reach the MTA’s predetermined materiality threshold.

Management is enhancing its process of revenue confirmation and validation with MTA Office of Management & Budget by establishing a standard revenue file template that indicates revenue receipts from appropriate sources with time period covered and any accruals required. In addition, an annual confirmation with New York State Division of Budget is planned at the end of the calendar year.

Status Update (2022):

While some progress has been made on the enhancement of review over non-operating revenue, management recorded \$352 million of Federal Emergency Management Agency (“FEMA”) grant revenue in the 2022 MTA consolidated financial statements for grant revenues received between 2016 and 2021. MTA originally recorded a third-party payable instead of FEMA revenue. While immaterial to the MTA consolidated financial statements, this is the second year improper recognition of non-operating revenue occurred. Therefore, we reiterate our prior recommendation.

Management Response (2022):

Steps were taken to enhance the revenue confirmation and validation processes for 2022. The errors that occurred in 2021 were addressed with the changes made to the processes. The accounting for the FEMA grant revenue was corrected as a result of the increased management oversight for the grant revenue and intercompany accounting processes.

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

**SCHEDULE OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS — FEDERAL
AWARDS**

YEAR ENDED DECEMBER 31, 2022

We performed MTA’s single audit for the year ended December 31, 2021 prior to performing the single audit for the fiscal year ended December 31, 2022.

The following schedule contains the finding reference number and title for each of the findings included in the December 31, 2021 report. The letters under the heading Corrective Action indicates the following:

- F Full (the Status of Prior Year Finding was fully implemented)
- R Repeated during Current Year

<u>Reference number</u>	<u>Compliance</u>	<u>Current Status</u>
2021-1	<u>Non-operating Revenue Account Reconciliation & Consolidation Reporting</u>	Repeat - See 2022-1



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REPORT ON COMPLIANCE FOR EACH MAJOR STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED REQUIRED BY PART 43 OF THE NEW YORK STATE CODIFICATION OF RULES AND REGULATIONS

To the Members of the Board of
Metropolitan Transportation Authority

Report on Compliance for Each Major State of New York Department of Transportation Assistance Program

Opinion on Each Major State of New York Department of Transportation Assistance Program

We have audited the Metropolitan Transportation Authority’s (the “MTA”), a component unit of the State of New York, compliance with the types of compliance requirements described in Part 43 of the New York State Codification of Rules and Regulations (“NYSCRR”) identified as subject to audit in the NYSCRR that could have a direct and material effect on each of the MTA’s major State of New York Department of Transportation Assistance Program for the year ended December 31, 2022. The MTA’s major State of New York Department of Transportation Assistance Program is identified in the summary of auditor’s results section of the accompanying State of New York Department of Transportation assistance expended schedule of findings and questioned costs.

In our opinion, the MTA complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of its major State of New York Department of Transportation Assistance Program for the year ended December 31, 2022.

Basis for Opinion on Each Major State of New York Department of Transportation Assistance Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*); and the audit requirements of NYSCRR. Our responsibilities under those standards and the NYSCRR are further described in the Auditor’s Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the MTA and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major State of New York Department of Transportation Assistance Program. Our audit does not provide a legal determination of the MTA’s compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to the MTA’s State of New York Department of Transportation Assistance Program.

Auditor's Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the MTA's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and the NYSCRR will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material, if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the MTA's compliance with the requirements of each major State of New York Department of Transportation Assistance Program as a whole.

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and the NYSCRR, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the MTA's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- obtain an understanding of the MTA's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the NYSCRR, but not for the purpose of expressing an opinion on the effectiveness of the MTA's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditor's Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the NYSCRR. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of State of New York Department of Transportation Assistance Expended Required by the Part 43 of the New York State Codification of rules and regulations

We have audited the financial statements of the business-type activities and fiduciary activities of the MTA as of and for the year ended December 31, 2022, and have issued our report thereon dated June 6, 2023, which contained unmodified opinions on those financial statements which included an emphasis of matter paragraph regarding the MTA requiring significant subsidies from other governmental entities and MTA's adoption of GASB Statement No. 87 *Leases*, as of January 1, 2021. Our audit was performed for the purpose of forming opinions on the financial statements as a whole. The accompanying Schedule of State of New York Department of Transportation Assistance Expended is presented for purposes of additional analysis as required by the NYSCRR and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of State of New York Department of Transportation Assistance Expended is fairly stated in all material respects in relation to the financial statements as a whole.

July 24, 2023

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

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION
ASSISTANCE EXPENDED**

YEAR ENDED DECEMBER 31, 2022

<u>State Grantor Program Title</u>	<u>ALN Number</u>	<u>State Contract Number</u>	<u>Expenditures</u>
Statewide Mass Transportation Operating Assistance Program	N/A	-	<u>\$ 187,924,000</u>
Total State Transportation Assistance Expended			<u>\$ 187,924,000</u>

See accompanying Notes to Schedule of State of New York Department of Transportation Assistance Expended.

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

NOTES TO SCHEDULE OF STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED

YEAR ENDED DECEMBER 31, 2022

1. BASIS OF PRESENTATION

- a. Reporting Entity—General Principles of Consolidation—** The consolidated financial statements of the business-type activities consist of MTA Headquarters, 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.

The accompanying Schedule of State of New York Department of Transportation Assistance Expended of the MTA presents the activity of all financial assistance programs provided by the New York State Department of Transportation to the MTA.

b. Program Tested

For the MTA's purpose, a State Transportation Assistance Program, as defined by Part 43 of the New York State Codification of Rules and Regulations ("NYSCR") is any program that exceeds \$3,000,000 when the total State Transportation Assistance Expended of the reporting entity exceeds \$100 million. Total expenditures incurred by the MTA for the State Transportation Assistance Programs were \$187,924,000.

c. Indirect Costs

Indirect costs are included in the reported expenditures to the extent they are included in the financial reports used as the source for the data presented.

2. BASIS OF ACCOUNTING

The accompanying 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*.

Operating Assistance— The MTA Group receives, subject to annual appropriation, New York State ("NYS") operating assistance funds that are recognized as revenue after the NYS budget is approved.

Generally, funds received under the NYS operating assistance program are fully matched by contributions from The City of New York and the seven other counties within the MTA's service area.

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 year ended December 31, 2022 and 2021 totaled \$8.4 billion and \$7.8 billion, respectively.

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

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS — STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED**

YEAR ENDED DECEMBER 31, 2022

**1. SUMMARY OF AUDITORS' RESULTS: STATE OF NEW YORK DEPARTMENT OF
TRANSPORTATION ASSISTANCE EXPENDED**

Internal control over State of New York Department of Transportation Assistance Expended:

Material weakness(es) identified	<u>Yes</u>	<input checked="" type="checkbox"/> <u>No</u>
Significant deficiency(ies) identified?	<u>Yes</u>	<input checked="" type="checkbox"/> <u>None Reported</u>

Type of auditor's report issued on compliance for State Transportation Assistance Programs:	Unmodified
--	------------

Any audit findings disclosed that are required to be reported in accordance with the <i>Part 43 of the New York State Codification of Rules and Regulations</i> ?	<u>Yes</u>	<input checked="" type="checkbox"/> <u>No</u>
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**Identification of State of New York Department of Transportation Assistance Program
tested:**

<u>State Grantor Program Title</u>	<u>ALN Number</u>	<u>State Contract Number</u>	<u>Expenditures</u>
Statewide Mass Transportation Operating Assistance Program	N/A	-	<u>\$187,924,000</u>

Dollar threshold used to determine program to be tested: \$3,000,000

Auditee qualified as low-risk auditee? Yes No

**2. FINDINGS AND QUESTIONED COSTS RELATING TO STATE OF NEW YORK DEPARTMENT
OF TRANSPORTATION ASSISTANCE EXPENDED**

None.

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

**SCHEDULE OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS — STATE OF NEW
YORK DEPARTMENT OF TRANSPORTATION ASSISTANCE EXPENDED**

YEAR ENDED DECEMBER 31, 2022

None

* * * * *

FEDERAL AWARDS—CORRECTIVE ACTION PLAN

REFERENCE # 2022-1	Non-operating Revenue Account Reconciliation & Consolidation Reporting - SIGNIFICANT DEFICIENCY
Agency:	Metropolitan Transportation Authority – (Headquarters, “MTAHQ”)
Criteria:	MTAHQ performs a monthly close of receivables and revenue to the general ledger for MTAHQ. As part of the MTAHQ’s month-end close procedure, funds received and yet to be received from New York State are recorded to the general ledger.
Condition/Context:	<p>During our audit procedures, D&T identified a deficiency in MTAHQ’s non-operating revenue and corresponding receivables reconciliation as inappropriate amounts were recognized for each type of non-operating revenue and receivables. Specifically, through our substantive testing period on a sample of non-operating revenues recorded in the general ledger, D&T noted the following misstatements by type:</p> <ul style="list-style-type: none"> a. Payroll Mobility Tax Reconciliation (G/L# 431440) – Revenue was overstated by \$11.0 million for the year-ended 12/31/2021. b. Supplemental Aid Trust Reconciliation (G/L# 431445) – Revenue was overstated by \$116.8 million for the year-ended 12/31/2021. c. Mansion Tax Reconciliation (G/L# 431458) – Revenue was overstated by \$92.3 million for the year-ended 12/31/2021. d. NYC Assistance Fund Reconciliation (G/L# 434252) – Revenue was understated as \$26.8 million of NYC Assistance Fund receivables should have been recorded for the year-ended 12/31/2021.
Recommendation:	We recommend that MTAHQ management enhance review controls over non-operating revenue and corresponding receivable account reconciliations and involving the appropriate MTA departments (MTA Budget) and where applicable New York State for its timely and appropriate recognition of non-operating revenue and receivables.
Corrective Action Plan:	Partially agree. Steps were taken to enhance the revenue confirmation and validation processes for 2022. The errors that occurred in 2021 were addressed with the changes made to the processes. The accounting for the FEMA grant revenue was corrected as a result of the increased management oversight for the grant revenue and intercompany accounting processes.
Step 1 Action Date:	
Final Implementation Date:	
Name and Phone # Of Person Responsible for Implementation:	

DRAFT

**The Metropolitan Transportation Authority
Report to Management
Year Ended December 31, 2022**

June 6, 2023

The Audit Committee
Metropolitan Transportation Authority
New York, New York

And

The Management of the Metropolitan Transportation Authority
New York, New York

Dear Members of the Audit Committee and Management:

In connection with our audits of the financial statements of the Metropolitan Transportation Authority, First Mutual Transportation Assurance Company, Long Island Rail Road Company, Metro-North Commuter Railroad Company, MTA Bus Company, New York City Transit Authority, Staten Island Rapid Transit Operating Authority and the Triborough Bridge and Tunnel Authority (collectively the “MTA”) as of and for the year ended December 31, 2022 (on which we have issued our reports dated June 6, 2023), performed in accordance with auditing standards generally accepted in the United States of America (generally accepted auditing standards), we considered internal control relevant to the MTA’s preparation of financial statements in order to design audit procedures that were appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the MTA’s internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control over financial reporting that might be significant deficiencies or material weaknesses and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, in connection with our audits, we have identified, and included in the attached Appendix A, a certain matter involving the MTA’s internal control over financial reporting that we consider to be a significant deficiency under generally accepted auditing standards.

We have also identified, and included in the attached Appendix A, other deficiencies involving the MTA’s internal control over financial reporting as of December 31, 2022 that we wish to bring to your attention.

We also plan to issue our Uniform Guidance reports in accordance with *Government Auditing Standards* and the U.S. Office of Management and Budget (“OMB”) audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (“OMB Uniform Guidance”) and compliance with the types of compliance requirements described in the *Part 43 of the New York State Codification of Rules and Regulations* which will include (1) Independent Auditor’s Report (2) Independent Auditor’s Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in accordance with *Government Auditing Standards* (3) Independent Auditor’s Report on Compliance for Each Major Federal Program; and Report on Internal Control Over

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Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance, and (4) Independent Auditor's Report on Compliance for Each Major State of New York Department of Transportation Assistance Program; and Report on Internal Controls over Compliance; and Report on Schedule of State of New York Department of Transportation Assistance expended Required by Part 43 of the New York State Codification of Rules and Regulations.

The definitions of a deficiency, a material weakness, and a significant deficiency are set forth in the attached Appendix B

Although we have included management's written response to our comments in the attached Appendix A, such responses have not been subjected to the auditing procedures applied in our audits and, accordingly, we do not express an opinion or provide any form of assurance on the appropriateness of the responses or the effectiveness of any corrective actions described therein.

A description of the responsibility of management for designing, implementing, and maintaining internal control over financial reporting and of the objectives of and inherent limitations of internal control over financial reporting, is set forth in the attached Appendix C and should be read in conjunction with this report.

This report is intended solely for the information and use of management, the Audit Committee, Federal and State awarding agencies or pass-through entities, and others within the organization and is not intended to be, and should not be, used by anyone other than these specified parties.

Sincerely,

DRAFT

THE METROPOLITAN TRANSPORTATION AUTHORITY TABLE OF CONTENTS

	<u>Page</u>
APPENDIX A	
Metropolitan Transportation Authority- Headquarters	6
MTA Consolidated Information Technology Department	11
Metro North Commuter Railroad Company	26
Staten Island Rapid Transit Operating Assistance Company	28
Triborough Bridge and Tunnel Authority	30
First Mutual Transportation Assurance Company	36
APPENDIX B	
Definition of deficiency, a material weakness, and a significant deficiency	39
APPENDIX C	
Management’s responsibility for, and the objectives and inherent limitations of, internal control over financial reporting	40

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APPENDIX A

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METROPOLITAN TRANSPORTATION AUTHORITY- HEADQUARTERS

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METROPOLITAN TRANSPORTATION AUTHORITY- ALL AGENCIES CURRENT YEAR COMMENTS- OTHER MATTER-2022

OTHER MATTER

We identified, and included below, an Other Matter related to our observations concerning operations, compliance with laws and regulations, and best practices involving internal control over financial reporting as of December 31, 2022, related to the Metropolitan Transportation Authority (“MTA”) Controller’s Department that we wish to bring to your attention.

1. Succession Planning

Observation:

This comment has been tailored for the MTA Controller’s Department from the best practices issued by the Government Finance Officers Association (“GFOA”), as we feel it is applicable. Many governments face the challenge of ensuring continuity and consistency of service delivery due to employee turnover. In instances where large numbers of government employees are eligible to retire, there is a concern that not enough qualified or available workers will be prepared to replace them.

Background:

The GFOA encourages governments to address the following key issues and develop strategies concerning succession planning. □

- Develop an integrated approach to succession management. Key components of an integrated succession management approach include: workforce planning, succession planning, knowledge management practices, and recruitment and retention practices.
- Continually assess potential employee turnover.
- Provide a formal, written succession plan as a framework for succession initiatives. A formal plan identifies risks and strategies, thereby providing a guiding framework for specific succession initiatives, including how employees are eligible to participate and what being part of the succession plan means.
- Develop written policies and procedures to facilitate knowledge transfer. Knowledge transfer is a critical component of succession management. There should be written procedures in place to formalize the knowledge transfer.
- Design of better recruitment and retention practices may aid in the succession process. Making sure pay levels are competitive with the marketplace is a critical means of retaining employees. Providing career advancement opportunities for employees is another means of retention.

Background:

- Consider non-traditional hiring strategies. Options such as part-time work, job-sharing, volunteers, and flexible schedules and flexible-place arrangements are providing mechanisms to both meet the needs of the organization and employees.

References:

- GFOA's Generational Change Task Force Report:
http://www.gfoa.org/downloads/GFOA_GenChangeReportFINAL.pdf

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METROPOLITAN TRANSPORTATION AUTHORITY- ALL AGENCIES CURRENT YEAR COMMENTS- OTHER MATTER-2022 (continued)

- GFOA Advisory: Evaluating the Use of Early Retirement Incentives, 2004.
Approved by the GFOA's Executive Board, February, 2011.

Recommendation:

It is recommended that the MTA Controller's Department implement a strategic approach to succession planning, including the identification of mission critical positions; workforce analytics to identify potential high loss separations from the MTA Controller's Department; leadership development programs focused on continuous development and retention of high potential employees; and external recruitment for new staff who can grow and adapt to future MTA Controller's Department needs. In addition, MTA Controller's Department should ensure that competitive compensation packages are in place in order to entice strong, competent, and talented candidates to come work MTA Controller's Department.

Management Response (2022):

MTA Controller's Department will review this recommendation to apply, as appropriate to more than just the financial reporting areas in the department. Working with the Human Resources department, changes and updates to compensation levels have occurred and continue to be evaluated. New and additional hires are being recruited.

METROPOLITAN TRANSPORTATION AUTHORITY- HEADQUARTERS PRIOR YEAR COMMENTS- DEFICIENCIES-2021

We identified and previously communicated the following deficiency that was considered to be a significant deficiency in the MTA’s internal control over financial reporting during our audit of the financial statements of the MTA for the year ended December 31, 2021. As of the date of this report, we believe this deficiency has not yet been remediated by the MTA.

1. Non-operating Revenue Account Reconciliation - SIGNIFICANT DEFICIENCY

Agency:

Metropolitan Transportation Authority – (Headquarters, “MTAHQ”)

Criteria:

MTAHQ performs a monthly close of receivables and revenue to the general ledger for MTAHQ. As part of the MTAHQ’s month-end close procedure, funds received and yet to be received from New York State are recorded to the general ledger.

Condition:

During our audit procedures, D&T identified a deficiency in MTAHQ’s non-operating revenue and corresponding receivables reconciliation as inappropriate amounts were recognized for each type of non-operating revenue and receivables. Specifically, through our substantive testing period on a sample of non-operating revenues recorded in the general ledger, D&T noted the following misstatements by type:

- a. Payroll Mobility Tax Reconciliation (G/L# 431440) – Revenue was overstated by \$11.0 million for the year-ended 12/31/2021.
- b. Supplemental Aid Trust Reconciliation (G/L# 431445) – Revenue was overstated by \$116.8 million for the year-ended 12/31/2021.
- c. Mansion Tax Reconciliation (G/L# 431458) – Revenue was overstated by \$92.3 million for the year-ended 12/31/2021.
- d. NYC Assistance Fund Reconciliation (G/L# 434252) – Revenue was understated as \$26.8 million of NYC Assistance Fund receivables should have been recorded for the year-ended 12/31/2021.

Cause:

MTAHQ did not appropriately recognize revenue and the corresponding receivables for the year-ended 12/31/2021 related to non-operating revenues.

Effect:

As a result, non-operating revenue and corresponding receivables were misstated and consolidated financial statements were improperly accounted, reported, and disclosed, as described in the ‘*Condition*’ section above.

Recommendation:

We recommend that MTAHQ management enhance review controls over non-operating revenue and corresponding receivable account reconciliations and involving the appropriate MTA departments (MTA Budget) and where applicable New York State for its timely and appropriate recognition of non-operating revenue and receivables.

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METROPOLITAN TRANSPORTATION AUTHORITY- HEADQUARTERS PRIOR YEAR COMMENTS- DEFICIENCIES-2021 (continued)

Financial Statement Impact:

The net impact of these resulted in a known non-operating revenue overstatement of \$193.3 million, which was corrected by management prior to the 12/31/2021 consolidated financial statement issuance.

Management Response (2021):

Management reconciled the non-operating revenue accounts, identified and corrected errors that related primarily to timing issues and allocation of revenue into various sub-accounts. The adjustments made to the financial statements did not reach the MTA's predetermined materiality threshold.

Management is enhancing its process of revenue confirmation and validation with MTA Office of Management & Budget by establishing a standard revenue file template that indicates revenue receipts from appropriate sources with time period covered and any accruals required. In addition, an annual confirmation with New York State Division of Budget is planned at the end of the calendar year.

Status Update (2022):

While some progress has been made on the enhancement of review over non-operating revenue, management recorded \$352 million of Federal Emergency Management Agency ("FEMA") grant revenue in the 2022 MTA consolidated financial statements for grant revenues received between 2016 and 2021. MTA originally recorded a third-party payable instead of FEMA revenue. While immaterial to the MTA consolidated financial statements, this is the second-year improper recognition of non-operating revenue occurred. Therefore, we reiterate our prior recommendation.

Management Response (2022):

Steps were taken to enhance the revenue confirmation and validation processes for 2022. The errors that occurred in 2021 were addressed with the changes made to the processes. The accounting for the FEMA grant revenue was corrected as a result of the increased management oversight for the grant revenue and intercompany accounting processes.

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MTA CONSOLIDATED INFORMATION TECHNOLOGY (“IT”) DEPARTMENT

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METROPOLITAN CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT CURRENT YEAR COMMENTS- DEFICIENCIES-2022

DEFICIENCIES

We identified, and included below, deficiencies involving the MTA Consolidated IT Department's internal control over financial reporting for the year ended December 31, 2022, that have not been previously communicated in writing or orally, by others within the MTA, or by us that we wish to bring to your attention.

1. CSS Application Privilege Access

Agency:

Metro-North Railroad Commuter Railroad Company ("MNR" and/or "company")

Criteria:

Privileged Level Access (e.g., Security administrators) is authorized and appropriately restricted.

Condition:

During our audit procedures, D&T identified 12 accounts that did not require the privilege access as per their job responsibilities and were currently working in a different profile were having elevated access in the system.

Cause:

D&T noted that users who no longer require access have inappropriate privileged level access to the application during the current audit period. The root cause of this deficiency is that IT Management did not enforce user access review process in a timely manner. This control is not dependent on any other GITCs. It was not caused by a deficiency in any other GITC, nor does it impact the performance of any other controls.

Effect:

These accounts can be utilized to access the reports and can make changes which might impact the credibility of the reports being generated and make inappropriate changes

Recommendation:

We recommend that MNR management review the access permissions granted to users in elevated role and also monitor the activity performed by each user. When access of a user is not required, the management should make sure that the access is revoked in a timely manner.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2022): IT Management agrees that unused and no-longer-needed accounts should be disabled in a timely fashion.

The following steps have already been or will shortly be taken:

1. A monthly report for MNR Management was moved to production on 4/18/2023, listing all application accounts and their roles. The procedure established with the agreement of MNR Management is that the report is returned to IT by MNR management, indicating accounts that should be disabled and IT disables

DRAFT

METROPOLITAN CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT CURRENT YEAR COMMENTS- DEFICIENCIES-2022

the application account (per the vendor, the account cannot be completely removed) and removes the network account of the employee(s) indicated.

2. The application support team will request (by 6/23/2023) that MTA-IT Security resume the annual account recertification process that was performed in prior years. This process will complement the monthly effort of MNR Management described above, by identifying and disabling unnecessary and unused accounts of MTA-IT employees.

Management Concur, Management will perform a monthly review and annual recertification.

Estimated Completion Date 4th Quarter 2023

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METROPOLITAN CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT CURRENT YEAR COMMENTS- DEFICIENCIES-2022

2. Change Management Segregation of Duties - Access to Production – TSS Application & Database

Agency:

Long Island Railroad Company (“LIRR” and/or “company”)

Criteria:

Access to implement changes into the application production environment should be appropriately restricted to the IT Security Administrator and segregated from application developers.

Condition:

D&T noted for 11 accounts- the MTA management failed to provide access confirmations since they were not sure about who accessed these accounts. Since these accounts were granted privilege access, it was imperative that the management maintained relevant details around them.

There is a risk of unauthorized access of the system since these accounts have unregulated access.

Cause:

The root cause of this deficiency is that the team managing the relevant application and its database is not properly reviewing the access granted to the system and therefore unaware of the permission and user performing tasks in the system. MTA management failed to provide access confirmations since they were not sure about who accessed these accounts. While this control is dependent on the provisioning process, we noted that this access was set per management's intention and therefore was not caused by a deficiency in any other GITC, nor does it impact the performance of any other controls.

Effect:

If management does not review the user and permission granted in the system, there is a risk of unauthorized access of the system, since these accounts have unregulated access.

Recommendation:

We recommend that LIRR management review the access permissions granted to users in elevated role and also monitor the activity performed by each user. When access of a user is not required, the management should make sure that the access is revoked in a timely manner.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2022):

IT Management agrees that unused and no-longer-needed accounts should be disabled in a timely fashion. As with the MNR CSS finding, the following steps will be taken shortly: 1. A monthly report for LIRR Management will be developed by the end of Q3, 2023, listing all application accounts and their roles. IT will request that LIRR Management return the report to IT, indicating accounts that should be disabled. IT will then disable the application account (per the vendor, the account cannot be completely removed) and remove the network account of the employee(s) indicated.

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MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT CURRENT YEAR COMMENTS- DEFICIENCIES- 2022 (continued)

2. The application support team will request (by 6/23/2023) that MTA-IT Security resume the annual account recertification process that was performed in prior years. This process will complement the monthly effort of LIRR Management described above, by identifying and disabling unnecessary and unused accounts of MTA-IT employees.

Management Concur, Management will perform a monthly review and annual recertification.
Estimated Completion Date 4th Quarter 2023

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MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021

3. OMNY Application Provisioning (Carryforward from prior year)

Agency:

MTA Headquarters

Criteria:

Management should approve the nature and extent of user-access privileges for new and modified user access, including standard application profiles/roles, critical financial reporting transactions, and segregation of duties.

Condition:

D&T noted there is no formalized process around the authorization and documentation of approval for access requests for MTA employees on the OMNY (Cubic) application. As such, a design gap is identified.

Cause:

The root cause of this deficiency is that IT Management does not have a formalized access provisioning process in place.

Effect:

Security mechanisms are inadequate, ineffective, or inconsistent due to lack of established security policies and standards. This increases the risk of unauthorized access to the OMNY (Cubic) application which could potentially lead to inappropriate changes to application data.

Recommendation:

We recommend that MTA NYCT IT management creates a formalized access provisioning process for users with access to the OMNY (Cubic) application. This process should include proper access request, approval, and implementation.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: Management will establish a formalized process for access provisioning requests to add or update users to the OMNY (Cubic) application.

Estimated Completion Date 4th Quarter 2022.

Management Response (2022): Management Concur: Management will establish a formalized process for access provisioning requests to add or update users to the OMNY (Cubic) application.

Estimated Completion Date 4th Quarter 2023.

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MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

4. OMNY Application Deprovisioning (Carryforward from prior year)

Agency:

MTA Headquarters

Criteria:

The security administrator should be notified of employees who have been terminated by Human Resources. Access privileges of such employees should be immediately disabled.

Condition:

D&T noted there is no formalized process to define procedures or timeliness for the removal of access for terminated MTA employees from the OMNY (Cubic) application.

Cause:

The root cause of this deficiency is that IT Management does not have a formal user deprovisioning process in place to remove access for terminated users.

Effect:

Security mechanisms are inadequate, ineffective, or inconsistent due to lack of established security policies and standards. This increases the risk of unauthorized access to the OMNY (Cubic) application which could potentially lead to inappropriate changes to application data.

Recommendation:

We recommend that MTA NYCT IT management creates a formalized access deprovisioning process for users with access to the OMNY (Cubic) application. This process should include proper access removal request, approval, and implementation.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: Management will establish a formalized process for deprovisioning users access to the OMNY (Cubic) application.

Estimated Completion Date 4th Quarter 2022

Management Response (2022): Management Concur: Management will establish a formalized process for deprovisioning users access to the OMNY (Cubic) application.

Estimated Completion Date 4th Quarter 2023

MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

5. AFC Application Provisioning (Carryforward from prior year)

Agency:

New York City Transit Authority

Criteria:

Management should approve the nature and extent of user-access privileges for new and modified user access, including standard application profiles/roles, critical financial reporting transactions, and segregation of duties.

Condition:

D&T noted for 12 out of 15 sampled new hires/transfers there was no documentation related to the access request, including approval and access required. Per discussion with management, these users were discussed verbally with the IT team, but no evidence of the access request was retained.

Cause:

This is a preventative automated control, and the deficiency was found during our operating effectiveness testing. The root cause of this deficiency is that IT Management did not adhere to the formal onboarding process for new access to users.

Effect:

Security mechanisms are inadequate, ineffective, or inconsistent due to lack of established security policies and standards. This increases the risk of unauthorized access to the AFC which could potentially lead to inappropriate changes to application data.

Recommendation:

We recommend that NYCT management reinforce the access request process with end users and system administrators to ensure that access changes are appropriately communicated and documented in sufficient detail to demonstrate approvals and required levels of access.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: The current identity and Access Management System (IAMS) currently has a process. When a user needs to be added or modify the access, it is required to make entitlement requests in IAMS system, then approved by the user's manager, and then obtain Data owner approval. MTA IT will reinforce the documentation requirements over the access request process with the end users and system administrators.

Estimated Completion Date 4th Quarter 2022.

Management Response (2022): Management Concur: The current identity and Access Management System (IAMS) currently has a process. When a user needs to be added or modify the access, it is required to make entitlement requests in IAMS system, then approved by the user's manager, and then obtain Data owner approval. MTA IT will reinforce the documentation requirements over the access request process with the end users and system administrators.

Estimated Completion Date 4th Quarter 2023

DRAFT

MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

6. AFC Application Deprovisioning (Carryforward from prior year)

Agency:

New York City Transit Authority

Criteria:

Access for terminated and/or transferred users should be removed or modified in a timely manner.

Condition:

For 1 out of the 3 sampled terminated/deprovisioned users access was not removed in a timely manner.

Cause:

This is a preventative manual control and the deficiency was found during our operating effectiveness testing. The root cause of this deficiency is that IT Management was not notified by the business in a timely manner of the user terminations and therefore did not disable the accounts timely.

Effect:

Security mechanisms are inadequate, ineffective, or inconsistent due to lack of established security policies and standards. This increases the risk of unauthorized access to the AFC which could potentially lead to inappropriate changes to application data.

Recommendation:

We recommend that New York Transit Authority management reinforce the termination process with end users and system administrators to ensure that access changes are appropriately communicated and removed in a timely manner when the access is no longer required.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: The current process for terminated / Retired employee is revoking their account, and the recertification process will delete the revoked account. IAMS will look to expand the logic to revoke the account and delete the account automatically. Estimated Completion Date 3rd Quarter 2023.

Management Response (2022): Management Concur: The current process for terminated / Retired employee is revoking their account, and the recertification process will delete the revoked account. IAMS will look to expand the logic to revoke the account and delete the account automatically. Estimated Completion Date 3rd Quarter 2023.

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MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

7. TBTA Kronos Terminations (Carryforward from prior year)

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

Access for terminated and/or transferred users is removed or modified in a timely manner.

Condition:

During our audit procedures, D&T noted that there is not a process in place for the TBTA Kronos application team to be notified when users are terminated. As such, management is not disabling accounts belonging to terminated users in a timely manner.

Cause:

The root cause of this deficiency is that IT Management does not have a formal user deprovisioning process in place to remove access for terminated users on the application.

Effect:

There is a risk that the accounts could be compromised and result in unauthorized access to the application, which may create improper segregation of duties.

Recommendation:

We recommend that TBTA management design a process to remove access from the Kronos application when users are terminated from TBTA.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: The move to Single Sign On will create a de facto termination of the users access upon leaving the MTA. MTA IT will work on a report process to identify employee and manager accounts in Kronos that exist for employees that have been terminated so they can be addressed in a timely manner.

Estimated Completion Date 1st Quarter 2023.

Management Response (2022): Management Concur: A manual process will be created to disable user accounts timely.

Estimated Completion Date 3rd Quarter 2023.

DRAFT

MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

8. ORT Application – User Access Recertification (Carryforward from prior year)

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

User account recertifications / entitlement reviews are performed by the IT Department and application owners.

Condition:

D&T noted that for the ORT application, there is no periodic user account recertification / entitlement review performed by the IT Department or ORT application owners.

Cause:

The root cause of this deficiency is that IT Management does not have a formal user access review process in place to recertify access for the users who have access to the relevant application.

Effect:

Given that logical access is not periodically reviewed, there is a risk that users have access privileges beyond those necessary to perform their assigned duties, which may create improper segregation of duties.

Recommendation:

We recommend that MTA IT design and implement a review control to periodically recertify the appropriateness of users with access to ORT and their related system privileges.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: ORT will recertify privilege users access annually.

Estimation Completion Date 4th Quarter 2022.

Management Response (2022): Management Concur: a design & operation of control was put in place in 2023.

**MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT
PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)**

9. ManageEngine Tool Password Parameters (Carryforward from prior year)

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

The identity of users should be authenticated to the systems software through passwords or other authentication mechanisms, in compliance with entity security policies. The use of passwords incorporates policies on periodic change, confidentiality, and password format (e.g., password length, alphanumeric content, expiration, account lockout).

Condition:

The ManageEngine Tool password parameters are not set in accordance with MTA policy for the following parameters: minimum password length, expiration, password history, and complexity. Weak password parameters could potentially result in users gaining unauthorized access the applications.

Cause:

Although Management has a formal policy as it pertains to password parameters, they have not sufficiently reinforced the policy and haven't monitored adherence to the policy. D&T noted that the root cause was attributed to oversight on behalf of management.

Effect:

Security mechanisms are inadequate, ineffective, or inconsistent due to lack of established security policies and standards. This increases the risk of unauthorized access to the ManageEngine tool which could potentially lead to inappropriate changes being implemented to the production environment (tool is used to implement ORT changes to production).

Recommendation:

We recommend that MTA TBTA management update password parameters on the ManageEngine tool to align either to the MTA HQ security policies or industry best practices.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: ORT will research the feasibility of updating the Password Policy to align with MTA HQ security policy or industry best practice.
Estimated Completion 4th Quarter 2022.

Management Response (2022): Management Concur: a design & operation of control was put in place in 2023.

**MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT
PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)**

10. ORT Application Terminations (Carryforward from prior year)

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

Access for terminated and/or transferred users is removed or modified in a timely manner.

Condition:

During our audit procedures, D&T noted for 2 out of the 2 sampled terminated/deprovisioned users, access was not removed in a timely manner. The users were terminated on 1/12/2022 and 1/19/2022 and access was removed on 7/29/2022 for both.

Cause:

The root cause of this deficiency is that IT Management did not adhere to the user deprovisioning process when removing access for the terminated users identified in this finding.

Effect:

Given that these accounts remain enabled, there is a risk that the accounts could be compromised by other users and result in unauthorized access to the application, which may create improper segregation of duties.

Recommendation:

We recommend that TBTA management reinforce the termination process with end users and system administrators to ensure that access changes are appropriately communicated and removed in a timely manner when the access is no longer required.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: ORT will reinforce the termination process with end users and system administrators to ensure that access changes are appropriately communicated and removed in a timely.

Estimated Completion Date 4th quarter 2022.

Management Response (2022): Management Concur: a design & operation of control was put in place in 2023.

DRAFT

MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

11. ORT Batch Job Monitoring (Carryforward from prior year)

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

Automated scheduling tools have been implemented for the completeness of the flow of processing and are monitored by the IT Department.

Condition:

During our audit procedures, D&T noted that management does not maintain documentation related to batch job monitoring. As such, we were unable to validate that management performs appropriate monitoring procedures around the completion of the relevant batch jobs and resolution of job errors.

Cause:

The root cause of this deficiency is that Management does not maintain documentation around the monitoring of batch jobs, specifically error resolution.

Effect:

There is a risk that production systems, programs, and/or jobs result in inaccurate, incomplete, or unauthorized processing of data.

Recommendation:

We recommend that TBTA management retain documentation related to monitoring of batch job status and the resolution of any noted errors.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2021): Management Concur: ORT will create procedures for monitoring of batch job status and resolution of any noted errors.

Estimated Completion Date 4th Quarter 2022.

Management Response (2022): Management Concur: a design & operation of control was put in place in 2023.

MTA CONSOLIDATED INFORMATION TECHNOLOGY DEPARTMENT
PRIOR YEAR COMMENTS- DEFICIENCIES- 2021 (continued)

12. LIRR CAMS-FS Database & TSS Database Password Parameters (recurring from 2021)

Agency:

Long Island Railroad Company (“LIRR” and/or “company”)

Criteria:

The identity of users should be authenticated to the systems software through passwords or other authentication mechanisms, in compliance with entity security policies. The use of passwords incorporates policies on periodic change, confidentiality, and password format (e.g., password length, alphanumeric content, expiration, account lockout).

Condition:

Password settings for the DEFAULT profile (minimum length, expiration, lockout, history, & complexity) is not set in compliance with the company. Given that both profiles have user accounts assigned to them, including individual database administrator accounts, these settings are inappropriate

Cause:

Although Management has a formal policy as it pertains to password parameters, they have not sufficiently reinforced the policy and haven't monitored adherence to the policy. D&T noted that the root cause was attributed to oversight on behalf of management.

Effect:

Security mechanisms are inadequate, ineffective, or inconsistent due to lack of established security policies and standards. This increases the risk of unauthorized access to the Oracle database supporting the CAMS application and the Oracle database supporting the TSS application, which could potentially lead to inappropriate changes to the application or underlying data.

Recommendation:

We recommend that LIRR management align the password parameters for the CAMS-FS and TSS databases with the LIRR security policies and industry best practices.

Financial Statement Impact:

No Impact – risk associated with this deficiency mitigated by other controls and factors.

Management Response (2022):

As mentioned in last year's response, there are no user accounts or database administrator accounts within the DEFAULT and FNC_APR_PROFILE database profiles. The only accounts within these profiles are system accounts. The database administrator accounts are within a profile called DBA_PROFILE. System account passwords will be addressed by MTA IT as part of the CAMS-FS Oracle 12 upgrade. System account passwords will be addressed by MTA IT as part of the TSS upgrade to ensure continued PCI compliance. The project is currently awaiting approval and funding. We anticipate the start of the project at the beginning of Q4, 2023. Note that the application enforces password security standards.

Estimated Completion date 2nd Quarter 2024

DRAFT

METRO NORTH COMMUTER RAILROAD COMPANY

METRO-NORTH COMMUTER RAILROAD COMPANY CURRENT YEAR COMMENTS- DEFICIENCIES-202

DEFICIENCIES

We identified, and included below, deficiencies involving the Metro-North Commuter Railroad Company's ("MNR") internal control over financial reporting for the year ended December 31, 2022, that have not been previously communicated in writing or orally, by others within MNR, or by us that we wish to bring to your attention.

1. Overstatement of ROU Assets and Lease Liability - DEFICIENCY

Agency:

Metro North Commuter Railroad Company ("MNR")

Criteria:

The ROU assets and lease liabilities are appropriately recorded and correctly stated on the Statement of Net Position, Statements of Revenue, Expenses and Changes in Net Position and Statement of Cash Flows in accordance with newly adopted accounting standard GASB 87- Leases.

Condition:

As a result of adoption of GASB 87, Metro-North identified an incorrect ROU Asset and Lease Liability. The Asset was already recorded in the Projects in Progress balance resulting in double counting of an Asset. As a result, ROU assets were overstated by \$10.87 million.

Cause:

Although Management reviewed the adoption of GASB 87 in detail including the accounting treatment of ROU asset and lease liabilities, D&T noted that this oversight was attributable to the volume of MTA leases assessed in the retroactive implementation of GASB 87 for 2021 and 2022.

Effect:

The ROU Asset and Lease Liabilities financial statement line items were misstated by \$10.87 million.

Recommendation:

We recommend that Metro North Commuter Railroad Company management enhances review controls over ROU assets and lease schedule reconciliations to ensure that ROU assets and lease obligations are appropriately recognized and recorded as per GASB 87.

Financial Statement Impact:

There was no financial statement impact as this overstatement was corrected by management and properly reflected in the 2022 Financial Statements.

Management Response (2022): Management concurs. MNR will enhance reviews over the ROU assets and lease obligations to ensure that accounting treatment aligns with the GASB 87 accounting standard.

DRAFT

Staten Island Rapid Transit Operating Authority

DRAFT

STATEN ISLAND RAPID TRANSIT OPERATING AUTHORITY CURRENT YEAR COMMENTS- DEFICIENCIES-2022

DEFICIENCIES

We identified, and included below, deficiencies involving the Staten Island Rapid Transit Operating Authority's ("SIRTOA") internal control over financial reporting for the year ended December 31, 2022, that have not been previously communicated in writing or orally, by others within SIRTOA, or by us that we wish to bring to your attention.

1. Current versus Noncurrent Liability Classification - DEFICIENCY

Agency:

Staten Island Rapid Transit Operating Authority – ("SIRTOA")

Criteria:

An estimated liability from injuries to persons is calculated by the SIRTOA's Actuary each year. SIRTOA uses this estimate to record the appropriate liability and expense. An estimate of this liability includes a current and noncurrent classification.

Condition:

During our audit procedures, D&T identified a misclassification between the current and noncurrent estimated liability arising from injuries to persons.

Cause:

SIRTOA did not utilize the actuarial estimate to classify the liabilities between current and noncurrent. Instead, the current portion of the liability arising from injuries to persons was based on the historical methodology of using actual cash payouts for the current year (2022) to estimate the current portion of the liability arising from injuries to persons.

Effect:

As a result, the current liability arising from injuries to persons was understated by \$2.4 million and the noncurrent liability arising from injuries to persons was overstated by \$2.4 million.

Recommendation:

We recommend that SIRTOA management records the current estimated liability arising from injuries to persons utilizing the actuarial determined estimate.

Financial Statement Impact:

There was no Financial Statement impact as the 2022 Financial Statements were adjusted to utilize the actuarial estimate.

Management Response (2022):

Going forward, SIRTOA management will record the current liability arising from injuries to persons from the Actuary report.

DRAFT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

DRAFT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CURRENT YEAR COMMENTS- DEFICIENCIES-2022

DEFICIENCIES

We identified, and included below, deficiencies involving the Triborough Bridge and Tunnel Authority's ("TBTA") internal control over financial reporting for the year ended December 31, 2022, that have not been previously communicated in writing or orally, by others within TBTA, or by us that we wish to bring to your attention.

1. Review of Claims Liability - DEFICIENCY

Agency:

Triborough Bridge and Tunnel Authority ("TBTA")

Criteria:

An estimated liability from injuries to persons is calculated by the TBTA's Actuary each year. TBTA uses this estimate to record the appropriate liability and expense. An estimate of this liability includes a current and noncurrent classification.

Condition:

During our audit procedures, D&T identified a misclassification between the current and noncurrent estimated liability arising from injuries to persons.

Cause:

TBTA did not utilize the correct actuarial estimate to classify the liabilities between current and noncurrent.

Effect:

As a result, the current liability arising from injuries to persons was overstated by \$1.8 million and the noncurrent liability arising from injuries to persons was understated by \$1.8 million.

Recommendation:

We recommend that TBTA management enhances review controls over claims liability for the classification of current and noncurrent estimated liability arising from injuries to persons on the financial statements.

Financial Statement Impact:

There was no Financial Statement impact as the 2022 Financial Statements were adjusted to utilize the correct actuarial estimate.

Management Response (2022):

Management will use the appropriate section of the actuary report in recording the current and noncurrent claims liability arising from injuries to persons.

DRAFT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CURRENT YEAR COMMENTS- DEFICIENCIES-2022 (continued)

2. Review of Investments Reconciliation - DEFICIENCY

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

TBTA performs a monthly reconciliation of all daily investment activity and cash movements to the general ledger. As part of the TBTA’s month-end close procedure, it is ensured that each investment fund per the MTA investment log agrees to the general ledger.

Condition:

During our audit procedures, we identified a deficiency in TBTA’s investments reconciliation as the unrealized gain/loss from investment income was inappropriately netted against interest expense and loan receivable from the MTA as of December 31, 2022.

Cause:

TBTA did not assess the materiality of netting interest expense with unrealized investment income in the current year. Management has always been aware of this netting process as the unrealized investment gains were historically immaterial.

Effect:

As a result, the following account balances were understated: loan receivable – MTA by \$4,433,000, interest expense by \$5,114,000, and unrealized gain/loss from investment income by \$9,547,000.

Recommendation:

We recommend that TBTA management records the unrealized gain/loss from investment income, interest expense and loan receivable from the MTA without netting the accounts to appropriately reflect the balances on the financial statements.

Financial Statement Impact:

There was no Financial Statement impact as the accounts identified were adjusted and reported correctly in the 2022 Financial Statements.

Management Response (2022):

Management will record the unrealized gain/loss from investment and interest expense transactions without netting the accounts so these are reflected separately in the financial statements.

DRAFT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CURRENT YEAR COMMENTS- DEFICIENCIES-2022 (continued)

3. Review of GASB 87 Adoption- DEFICIENCY

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

TBTA reviewed the adoption of GASB 87 – leases journal entries and underlying support to ensure it is properly recorded to the general ledger in the correct period.

Condition:

During our audit procedures, we identified a deficiency in TBTA’s review of GASB 87 adoption. Based on a substantive testing performed on the 2021 beginning balance lessor leases recorded in the general ledger, the present value of contractual payments per the lease agreement for two selections were understated. This resulted in an understatement of lease receivable and deferred inflows of resources – leases as of 12/31/2022.

Cause:

Although Management reviewed the adoption of GASB 87 in detail, D&T noted that this oversight was attributable to the volume of MTA leases assessed in the retroactive implementation of GASB 87 for 2021 and 2022.

Effect:

As a result, both lease receivable and deferred inflows of resources – leases were understated by \$2,082,351.

Recommendation:

We recommend that TBTA management enhance review controls over the GASB 87 leases journal entries and underlying support to ensure the lease-related accounts are appropriately reflected in TBTA’s financial statement as of year-end.

Financial Statement Impact:

There was no financial statement impact as the understatements were corrected by management and properly reflected in the 2022 Financial Statements.

Management Response (2022):

Management will enhance reviews over the lease transactions to ensure that these are appropriately set-up in the system.

DRAFT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CURRENT YEAR COMMENTS- DEFICIENCIES-2022 (continued)

4. Review of Non-operating Revenue- DEFICIENCY

Agency:

Triborough Bridge and Tunnel Authority (“TBTA”)

Criteria:

TBTA performs a monthly close of non-operating revenue (i.e., internet tax revenue) and receivables to the general ledger. As part of TBTA’s month-end close procedure, funds received and yet to be received from New York State are recorded to the general ledger.

Condition:

During our audit procedures, we identified a deficiency in TBTA’s review of non-operating revenue as inappropriate amounts were recognized as non-operating revenue when they were transfers from MTAHQ. This resulted in an overstatement of non-operating revenue and an understatement of transfer in from MTA for the year ended 12/31/2022.

Cause:

TBTA did not appropriately recognize non-operating revenue for the year ended December 31, 2022.

Effect:

As a result, non-operating revenue was overstated by \$2,435,193, and transfer in – MTA was understated by \$2,435,193. There was no impact on the Changes in Net Position.

Recommendation:

We recommend that TBTA management enhance review controls of non-operating revenue to ensure appropriate recognition of non-operating revenue for the year is properly reflected in the financial statements.

Financial Statement Impact:

The effect of the known errors identified was \$2,435,193 on the Statements of Revenues, Expenses, and Changes in Net Position for the year ended 12/31/2022.

Management Response (2022):

TBTA management will ensure agreement from MTA HQ is obtained to substantiate unusual and material items impacting the financial statements prior to recording in the Agency ledger.

DRAFT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CURRENT YEAR COMMENTS- OTHER MATTER-2022

OTHER MATTERS

We identified, and have included below, Other Matters related to our observations concerning operations and best practices involving internal control over financial reporting as of December 31, 2022, related to the Triborough Bridge and Tunnel Authority (“TBTA”) that we wish to bring to your attention.

1. Legal expenses

Criteria:

As part of legal expenses reconciliation, TBTA accounting team records legal expense accruals on a quarterly basis in accordance with GASB Codification C50, *Claims and Judgements*. Based on communications with the Legal department, a reserve is recorded on legal cases where the incurrence of the liability is probable, and the amount of loss can be reasonably estimated.

Condition:

Through our review of legal reserve on pending or threatened litigation and unasserted claims or assessments, we noted management was only focusing on matters above D&T established thresholds and leaving out all other matters less than our threshold.

Effect:

There is a risk of inaccurate/unsupported expense accruals.

Recommendation:

We recommend to management more frequent and detailed communication between TBTA accounting team and the Legal department so that all legal matters regardless of a threshold are properly reflected in the underlying books and financial statements.

Financial Statement Impact:

No impact noted.

Management Response (2022):

TBTA General Counsel and MTA Risk Management will coordinate to ensure all loss contingencies meeting GASB codification section 50 are properly accrued for in TBTA financial statements.

DRAFT

FIRST MUTUAL TRANSPORTATION ASSURANCE COMPANY

FIRST MUTUAL TRANSPORTATION ASSURANCE COMPANY CURRENT YEAR COMMENT-OTHER MATTERS- 2022

OTHER MATTERS

We identified, and have included below, Other Matters related to our observations concerning operations and best practices involving internal control over financial reporting as of December 31, 2022, related to the First Mutual Transportation Assurance Company (“FMTAC”) that we wish to bring to your attention.

1. Unearned Revenue for OCIP Projects

Criteria:

As part of FMTAC's calculation of unearned revenue for Owner-Controlled Insurance Program (OCIP) programs, the MTA OCIP team reviews project costs details for the period and updates the unearned revenue calculation file that is sent to Marsh Captive Solutions (“Marsh”), third-party captive manager.. Marsh uses this file to record unearned revenue for OCIP projects. FMTAC is responsible for recording unearned revenue based on proper support.

Condition:

We note that through our testing of Unearned Revenue, the MTA OCIP team was not able to provide the FY22 cost details that tied to the Unearned Revenue schedule obtained from Marsh. . When D&T asked for detail that agrees to the schedule, MTA OCIP Team was not clear on how to provide an accurate schedule. This situation was primarily due to the retirement of the employee who performed this reconciliation and provided the numbers to Marsh. Since this employee's retirement, MTA OCIP team was not able to provide the support previously compiled and reconciled by the former employee.

Effect:

There is a risk of inaccurate calculation of unearned revenue for OCIP projects if the correct project-level detail is not communicated to Marsh, who records the Unearned Revenue entries for FMTAC based on input from the MTA OCIP team.

Recommendation:

We note this other matter appears to be isolated to this year due to an experienced employee retiring. Even so, we recommend to that there should be more frequent communication between the MTA OCIP team and Marsh in terms of calculating unearned revenue for OCIP projects. Additionally, we recommend enhancing the unearned revenue control by Marsh reviewing the project cost detail for the period and agreeing it to the unearned revenue calculation. As Marsh is the main point of contact for the audit, they should be able to timely provide details that agree to their subledgers in order for us to make selections, etc.

Financial Statement Impact:

No impact noted.

Management Response:

Management accepts this recommendation This inaccuracy was mainly due to the timing from when Marsh provided the report to when the MTA OCIP team provided the report with updated numbers. For FY22, the corrected reconciliation was completed by RIM's Assistant Director of Budget and Non-OCIP Deputy Director. Going forward it will be completed by the MTA OCIP team.. The MTA OCIP team will incorporate more frequent communication with Marsh on these OCIP programs, and Marsh will review the detail with Management and agree it to the Unearned Revenue schedule.

FIRST MUTUAL TRANSPORTATION ASSURANCE COMPANY CURRENT YEAR COMMENT-OTHER MATTERS- 2022

2. Intercompany Risk Management Fees

Criteria:

As part of expenses, MTA HQ sends the various agencies quarterly invoices for work performed for those agencies, which are recorded at FMTAC as risk management fees. HQ and the agencies reconcile their intercompany balances, investigating any differences. Agencies are responsible for recording the respective accruals based on proper support.

Condition:

The agencies (including FMTAC) record quarterly expense accruals based on services performed for the agencies by HQ. D&T notes that our initial review, the risk management fee accrual appeared high when annualized from the first three quarterly invoices. As such, we concluded there was a discrepancy between the accrual and supporting invoices.

Effect:

There is a risk of inaccurate/unsupported expense accruals if the intercompany amounts are not properly tracked and agreed to.

Recommendation:

We recommend to management more frequent and detailed communication between FMTAC and MTA HQ of intercompany amounts so material discrepancies are avoided.

Financial Statement Impact:

No impact noted. The correct charges were recorded to the Financial Statements

Management Response:

Management accepts this recommendation. The error occurred whereby accounts normally charged back were excluded in first three quarter invoices which caused the discrepancy upon annualizing. This discrepancy has been corrected. FMTAC will incorporate more frequent communication with MTA HQ on these expenses.

DRAFT

APPENDIX B

DEFINITION

The definitions of a deficiency, a material weakness, and a significant deficiency are as follows:

A *deficiency* in internal control over financial reporting exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A deficiency in design exists when (a) a control necessary to meet the control objective is missing, or (b) an existing control is not properly designed so that, even if the control operates as designed, the control objective would not be met. A deficiency in operation exists when a properly designed control does not operate as designed or when the person performing the control does not possess the necessary authority or competence to perform the control effectively.

A *material weakness* is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis.

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness yet important enough to merit attention by those charged with governance.

APPENDIX C

MANAGEMENT’S RESPONSIBILITY FOR, AND THE OBJECTIVES AND INHERENT LIMITATIONS OF, INTERNAL CONTROL OVER FINANCIAL REPORTING

The following comments concerning management’s responsibility for internal control over financial reporting and the objectives and inherent limitations of internal control over financial reporting are included in generally accepted auditing standards.

Management’s Responsibility

The MTA’s management is responsible for the overall accuracy of the financial statements and their conformity with accounting principles generally accepted in the United States of America. In this regard, the MTA’s management is also responsible for designing, implementing, and maintaining effective internal control over financial reporting.

Objectives of Internal Control over Financial Reporting

An entity’s internal control over financial reporting is a process effected by those charged with governance, management, and other personnel, designed to provide reasonable assurance regarding the preparation of reliable financial statements in accordance with accounting principles generally accepted in the United States of America. An entity’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the entity; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the entity are being made only in accordance with authorizations of management and those charged with governance; and (3) provide reasonable assurance regarding prevention, or timely detection and correction, of unauthorized acquisition, use, or disposition of the entity's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Control over Financial Reporting

Because of its inherent limitations, internal control over financial reporting may not prevent, or detect and correct, misstatements. Also, projections of any assessment of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

* * * * *

DRAFT

INDEPENDENT ACCOUNTANT'S AGREED-UPON PROCEDURES REPORT

The Audit Committee of the
Metropolitan Transportation Authority

We have performed the procedures enumerated in the accompanying Exhibit A on the Metropolitan Transportation Authority (the "MTA") Office of the Inspector General's budget accountability for the year ended December 31, 2022 ("the subject matter"). The MTA Office of the Inspector General (the "IG") is responsible for the subject matter.

The MTA, the IG, and the Auditor General of the MTA have agreed to and acknowledged that the procedures performed are appropriate to meet the intended purpose of assisting the specified parties in evaluating the subject matter.

We make no representation regarding the appropriateness of the procedures either for the purpose for which our report has been requested or for any other purpose. Accordingly, this report may not be suitable for either the purpose of which this report has been requested or for any other purpose. The procedures performed may not address all the items of interest to a user of this report and may not meet the needs of all users of this report and, as such, users are responsible for determining whether the procedures performed are appropriate for their purposes.

The procedures and associated findings are included in the accompanying Exhibit A.

We were engaged by the MTA, the IG, and the Auditor General of the MTA to perform this agreed-upon procedures engagement and conducted our engagement in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an audit or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the subject matter. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

We are required to be independent of the IG and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our agreed-upon procedures engagement.

This report is intended solely for the information and use of the MTA, the IG, and the Auditor General of the MTA, and is not intended to be, and should not be, used by anyone other than these specified parties.

July 17, 2023

AGREED-UPON PROCEDURES PERFORMED IN
CONNECTION WITH THE MTA IG'S BUDGET
ACCOUNTABILITY FOR THE YEAR ENDED
DECEMBER 31, 2022

EXHIBIT A

The procedures and the associated findings are as follows:

1. We utilized a random number generator to randomly select five employees from the MTA Headquarters - IG payroll register for the month of December 2022 and we compared each individual's salary to an approved Personnel Action Form obtained from the IG management ("management").

We found no exceptions as a result of the procedures.

2. We utilized a random number generator to randomly select two terminated employees from the listing of terminated employees for the year ended December 31, 2022 and obtained each individual's Personnel Action Form for completeness. We inspected the payroll register subsequent to each employee's termination and inspected these employees were appropriately removed from the payroll register.

We found no exceptions as a result of the procedures.

3. We compared the IG's total payroll per the payroll register for the month of December 2022 to the MTA's monthly expense report for the month of December 2022 and observed they agreed.

We found no exceptions as a result of the procedures.

4. We utilized a random number generator to randomly select five purchases made during the year from the IG's general ledger for the year ended December 31, 2022. For each purchase, we obtained from management the related requisitions and purchase orders and observed an approver's sign off.

We found no exceptions as a result of the procedures.

5. We utilized a random number generator to randomly select fifteen disbursements from the IG's General Fund for the year ended December 31, 2022 and compared the selected disbursements to supporting documentation including invoices, purchases orders and cancelled checks obtained from management. For each selected disbursement, we observed the reimbursement recorded agreed to the invoice, purchase order, and cancelled check and was also signed off by management as evidence of authorization.

We found no exceptions as a result of the procedures.

6. We utilized a random number generator to randomly select five petty cash vouchers from the IG's general ledger for the last quarter ended December 31, 2022, and obtained the respective voucher from management. For each selection, we observed the voucher was approved and signed off by management in accordance with IG Petty Cash Policy.

We found no exceptions as a result of the procedures.

AGREED-UPON PROCEDURES PERFORMED IN
CONNECTION WITH THE MTA IG'S BUDGET
ACCOUNTABILITY FOR THE YEAR ENDED
DECEMBER 31, 2022

7. We compared the Cash Inspector General Fund's bank reconciliation for the month of December 31, 2022 to the Authority's general ledger and observed they both agreed.

We found no exceptions as result of the procedures.

8. We utilized a random number generator to randomly select five employee reimbursements from the IG listing of employees' reimbursements for the year ended December 31, 2022. We observed the reimbursements were supported by invoices, purchase orders, bank statements, reimbursement applications and refund requisitions provided by management. We also utilized a random number generator to randomly select five employee expense reports from the IG listing of employee expenses reports for the year ended December 31, 2022 and observed the expense reports were supported by invoices, purchase orders, and proof of payment such as bank statements.

We found no exceptions as a result of the procedures.

9. We obtained a listing of fixed asset additions for the year ended December 31, 2022 from management. We observed that five fixed asset additions were made during the year ending December 31, 2022. For the fixed asset additions, we obtained the respective invoice, purchase order, and payment support from management. We observed management sign off of approval on the purchase orders and agreed the amounts in the invoices to proof of payment such as bank statements.

We found no exceptions as a result of the procedures.

10. We inquired of management whether there were any fixed asset disposals made during the year ended December 31, 2022 for the IG, and management indicated there were none.

11. We recalculated the depreciation expense amount for all fixed assets whose depreciation expense recorded in the IG's general ledger for the month of December 2022 were in excess of \$1,000.

We found no exceptions as a result of the procedures.

12. We compared the IG's general ledger depreciation expense for the month of December 2022 to the MTA's general ledger and found them to be in agreement.

We found no exceptions as a result of the procedures.

13. We compared the IG's total monthly expense report to the MTA's total monthly expense report for the month of December 2022.

We found no exceptions as a result of the procedures.

14. We obtained from management the IG's 2022 total expense budget and the actual total expenditures for the year ended December 31, 2022. We compared these reports and observed that total actual expenditures were less than the IG's 2022 total expense budget by \$5,269,072.

MTA
CORPORATE COMPLIANCE

Enterprise Risk Management
Status Report

Report to the Audit Committee
July 2023



In Honor of **William J. Ronan**

November 8, 1912 – October 15, 2014
First Chairman of the Metropolitan Transportation Authority

Dr. Ronan was the architect of the New York region's mass transit network. He was the guiding hand that unified bus, subway and commuter rail services for the benefit of millions of daily commuters.

Praising as a visionary for both the formation and funding of the system as we know it today, Dr. Ronan's foresight included plans for the Second Avenue subway, a connection from the Long Island Rail Road to the East Side of Manhattan, and construction of the 63rd Street tunnel. His successful efforts and ambitious plans served to strengthen and bolster the economic prosperity of New York City and the entire region.

Board's Role & Responsibilities

Public Authorities Law 2932 states
"The governing board of each covered authority shall: establish and maintain for the authority guidelines for a system of internal controls that are in accordance with this article and internal control standards..."

Enterprise Risk Assessment

Control Self Assessment

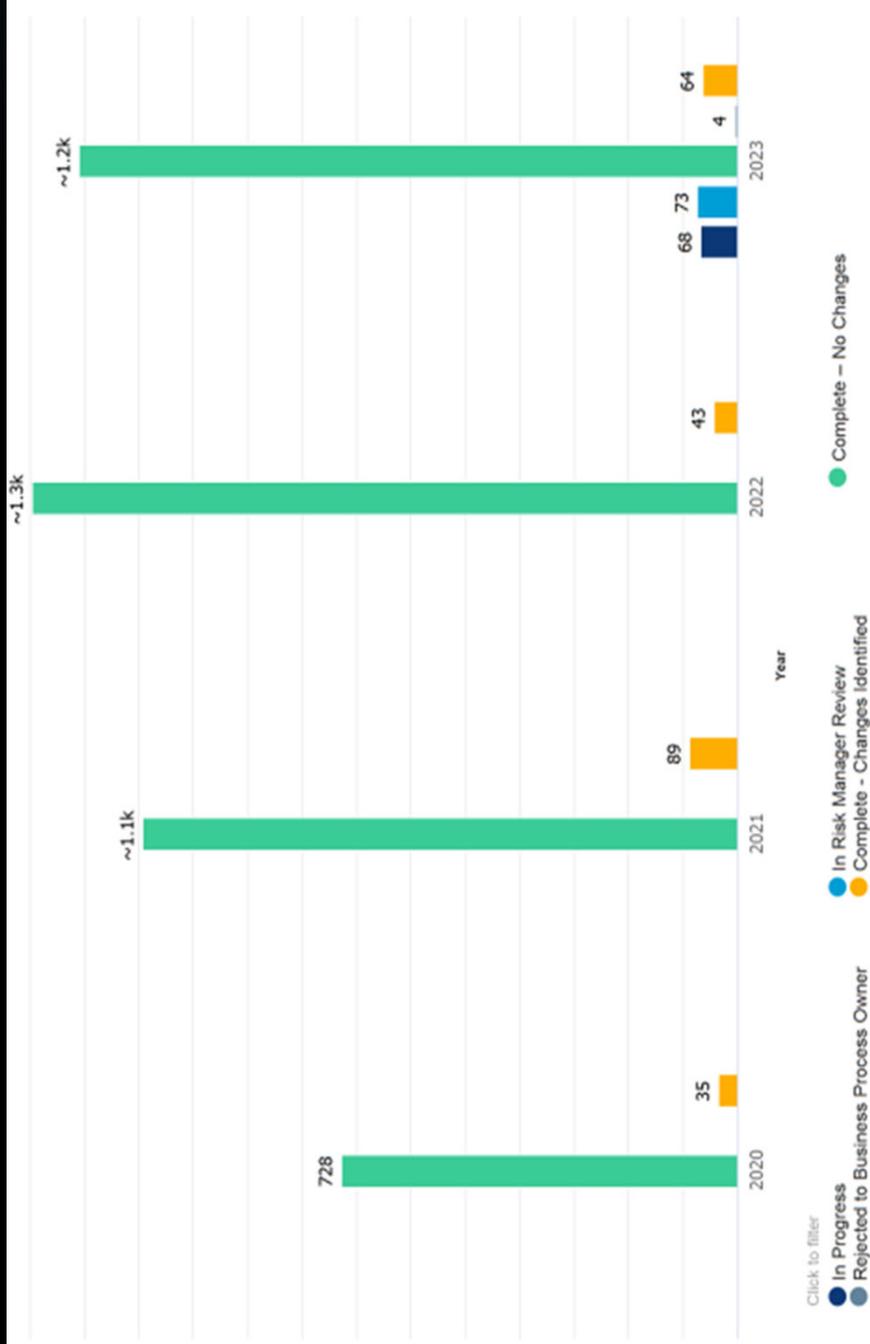
Issues Management

Policy Lifecycle Management

Enterprise Risk
Management
Core Areas

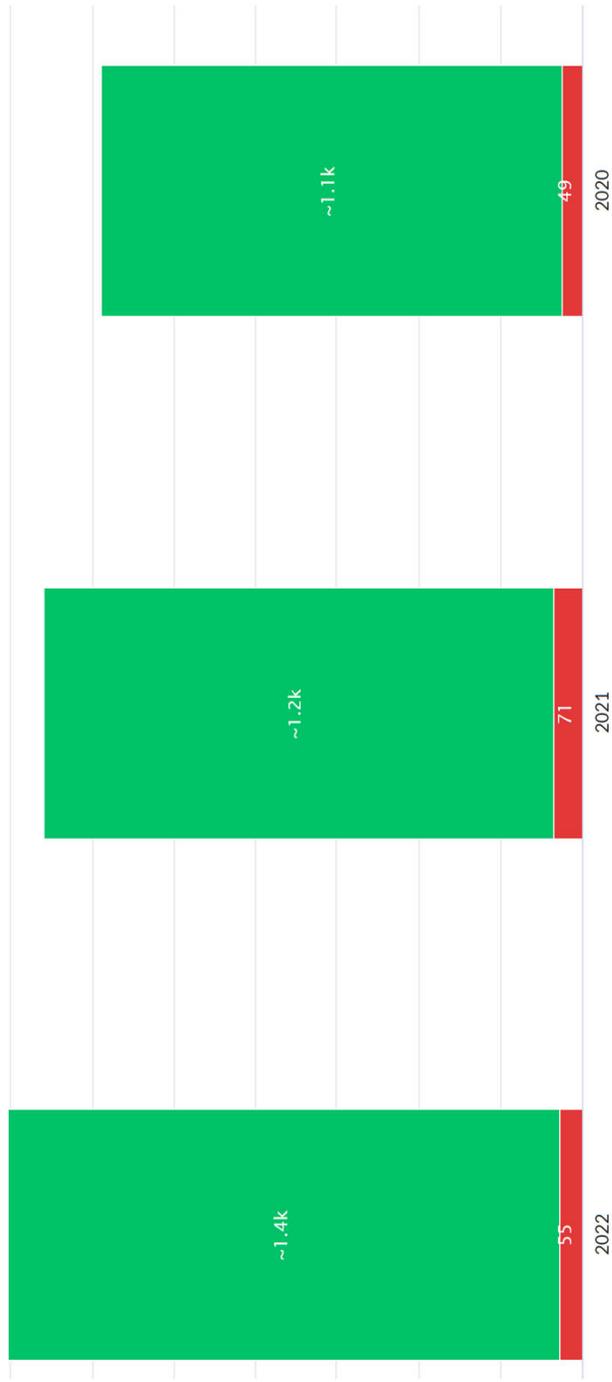
Enterprise Risk Assessments (ERA)

For 2023 and as of this report, we launched 1,418 ERAs of which 145 or 10% are still under review by the various department management.



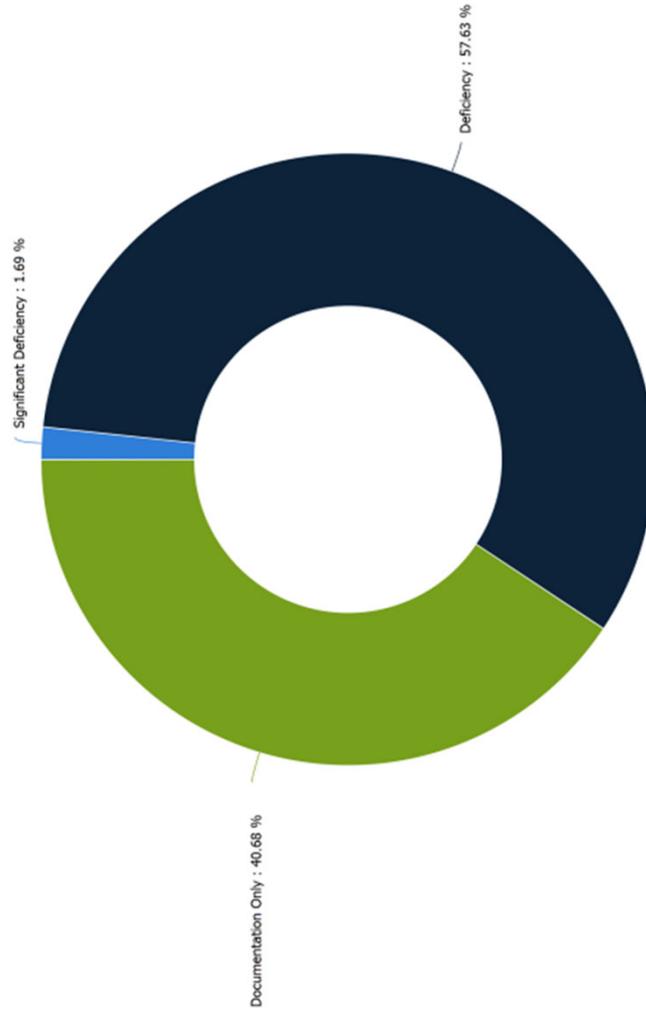
Control Self Assessments (CSA)

In 2022 over 1,400 passed while 55 failed.



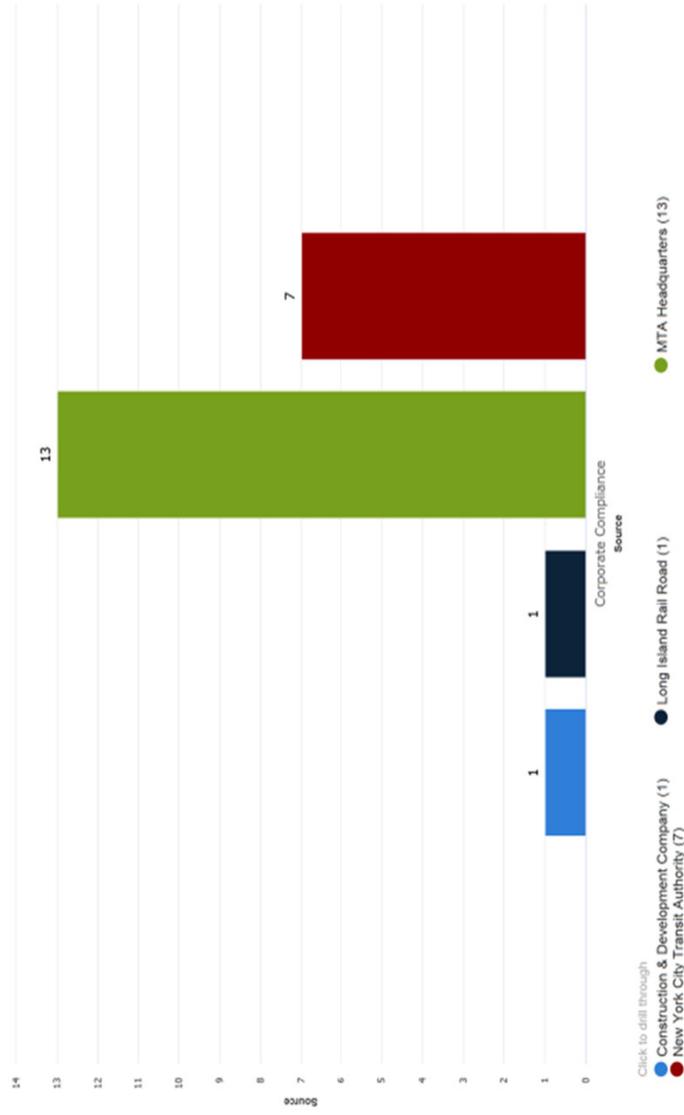
CSA: Deficiencies Details

In 2022 we have identified
55 CSA Deficiencies



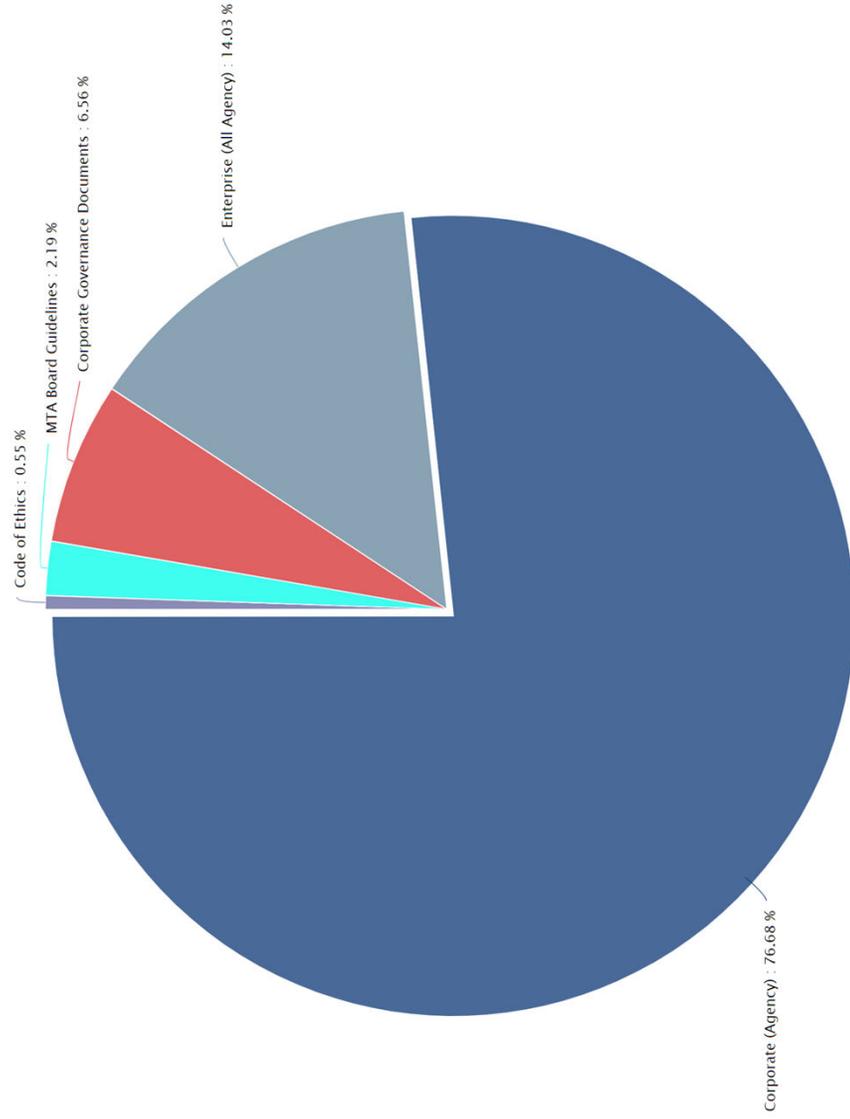
CSA: Deficiencies Details by Agencies

At the last Audit Committee meeting, we reported 76 deficiencies, 22 or 29% Open and 54 or 71% Closed



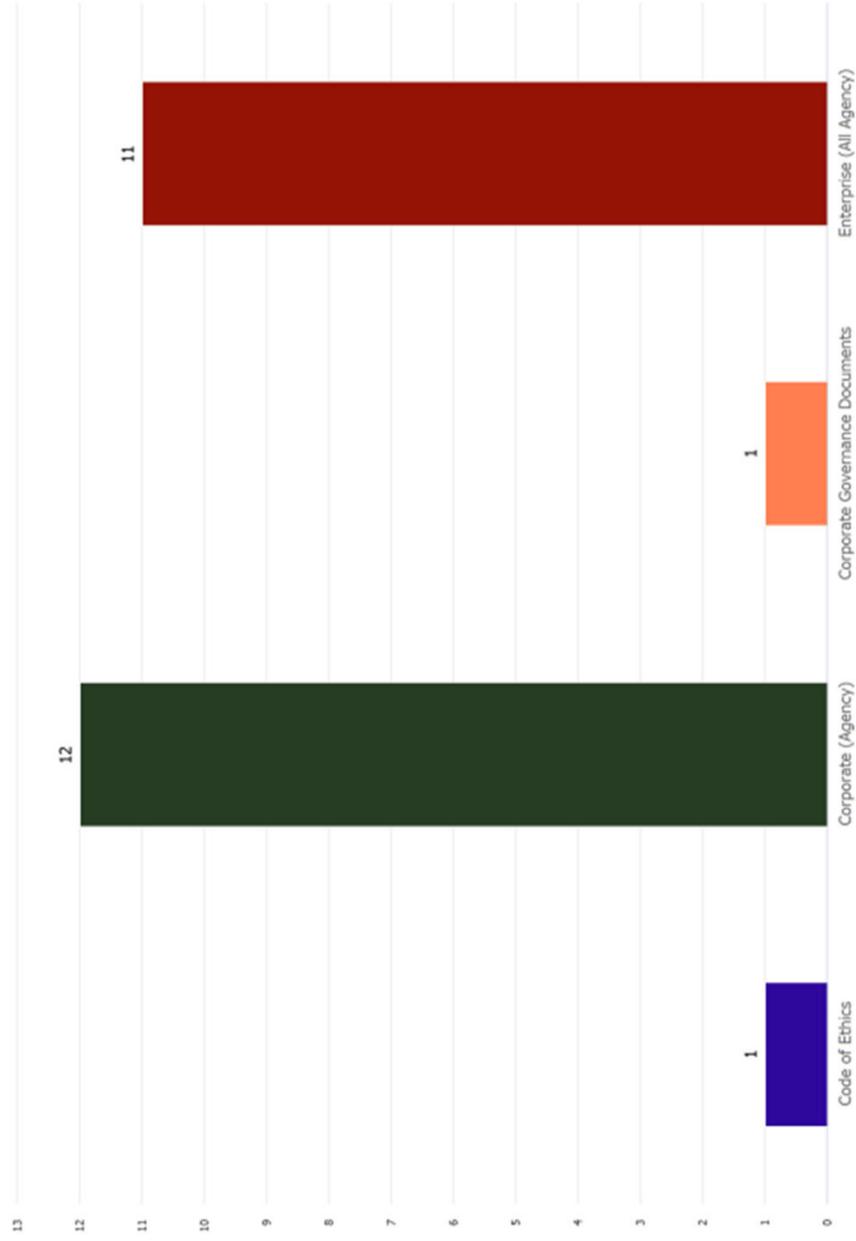
Policy Lifecycle Management

MTA Policy portal contains the following inventory 421 Agency Policies, 77 Enterprise Policies, 36 Corporate Governance Documents, 12 Board Guidelines and 3 Code of Ethics.



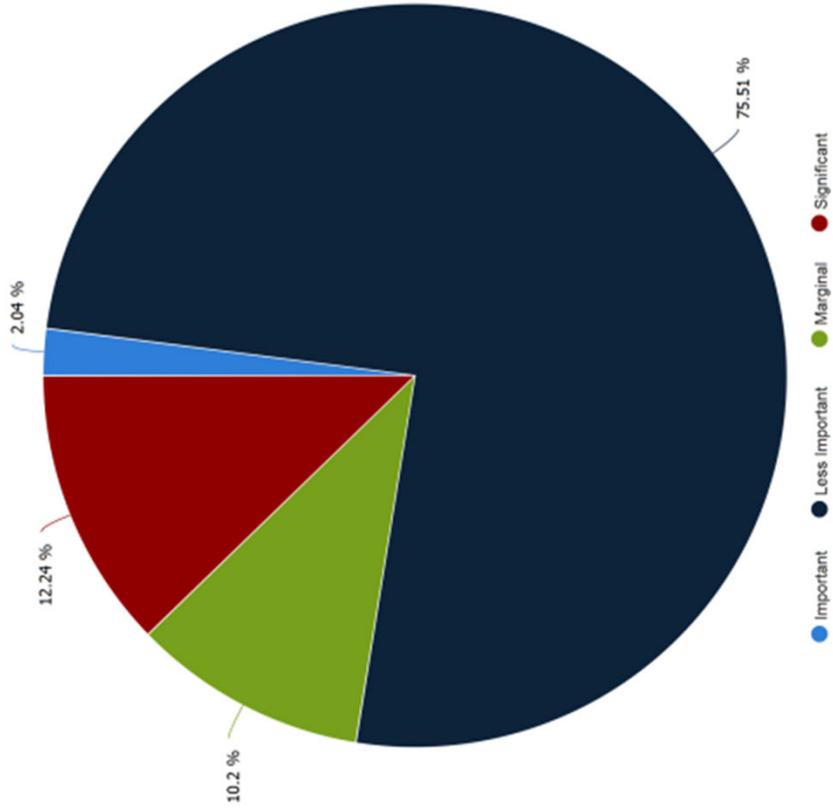
Policy Management

Policies Under Review by Type



Policy Management

Policies by Significance to be Reviewed in 2023



ERM: Enterprise-Wide Risks

Risk Process

Cyber Security

Infrastructure and Equipment Maintenance

Reputational

Safety - Employee and Customer

Security

Succession Planning

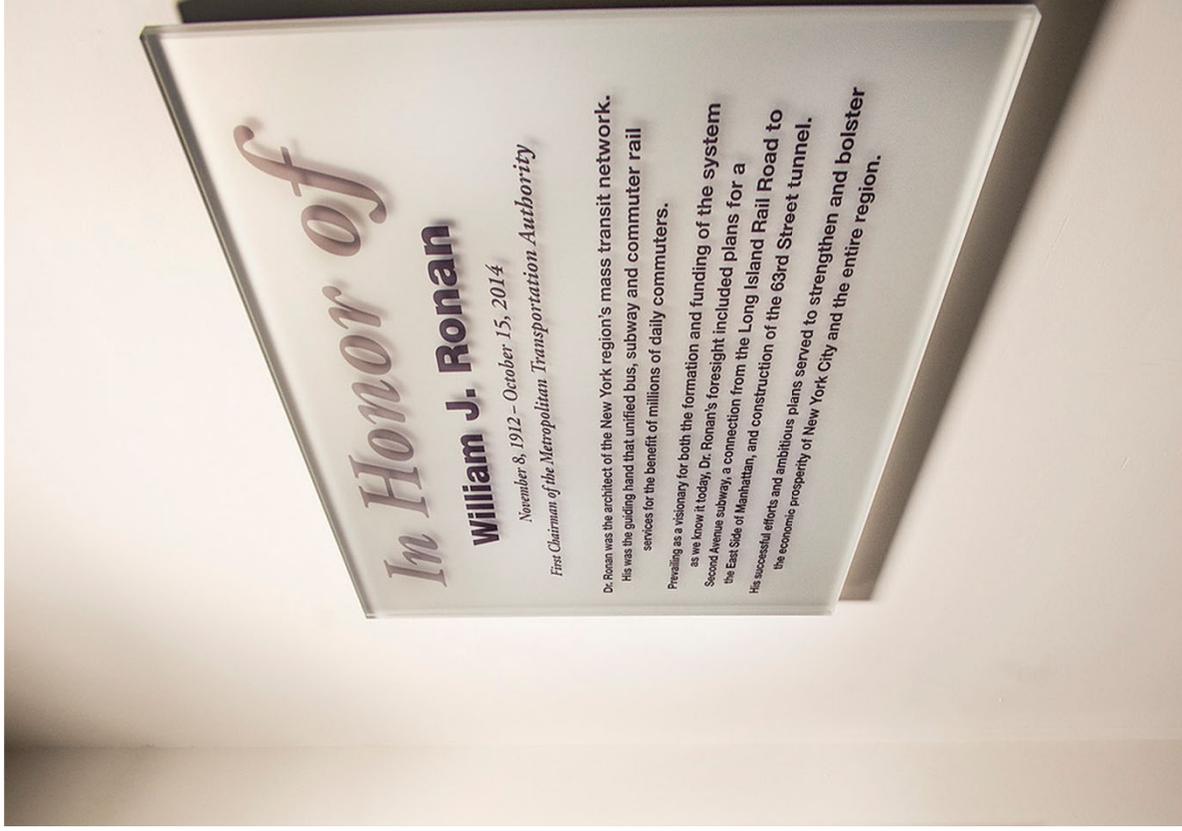
The graphic features a dark blue vertical bar on the left side. A large, light blue semi-circle overlaps the top of this bar and extends into the white background. The text is centered within the semi-circle and the dark blue bar.

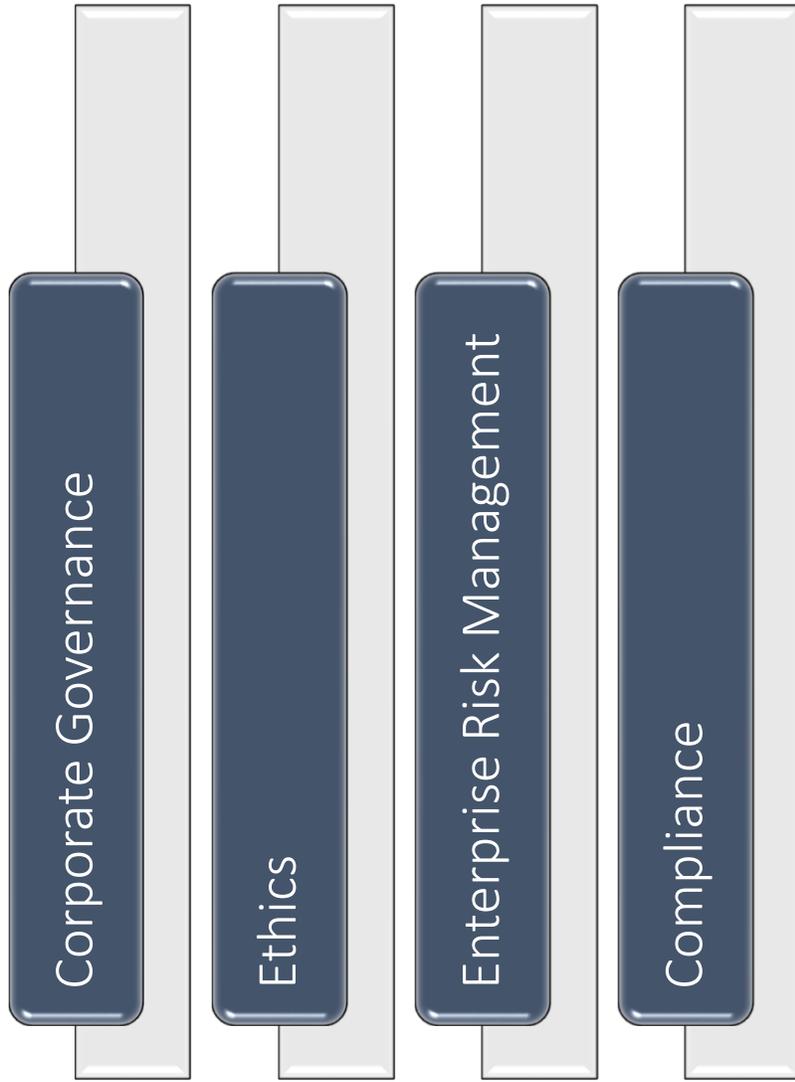
MTA
CORPORATE COMPLIANCE
Ethics & Compliance

Report to the Audit Committee
July 2023

Ethics: Role and Responsibilities of Board

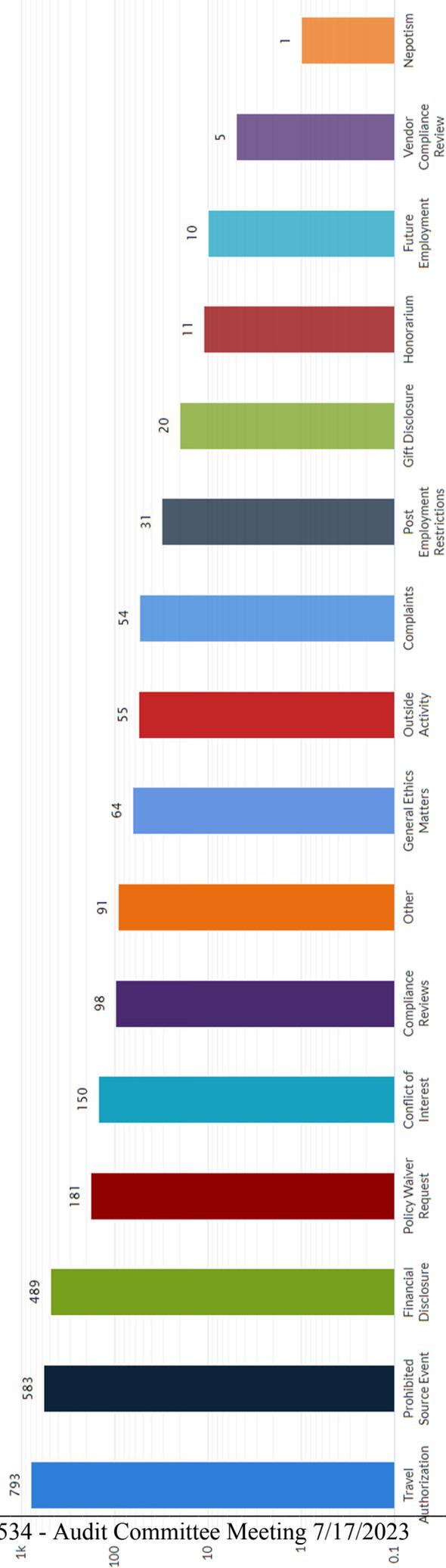
Public Authorities Law Section 2824 states
“Board members of state and local authorities shall (a) execute **direct oversight** of the authority's chief executive and other management in the effective and **ethical management** of the authority...”





Corporate Compliance
Core Areas of
Responsibility

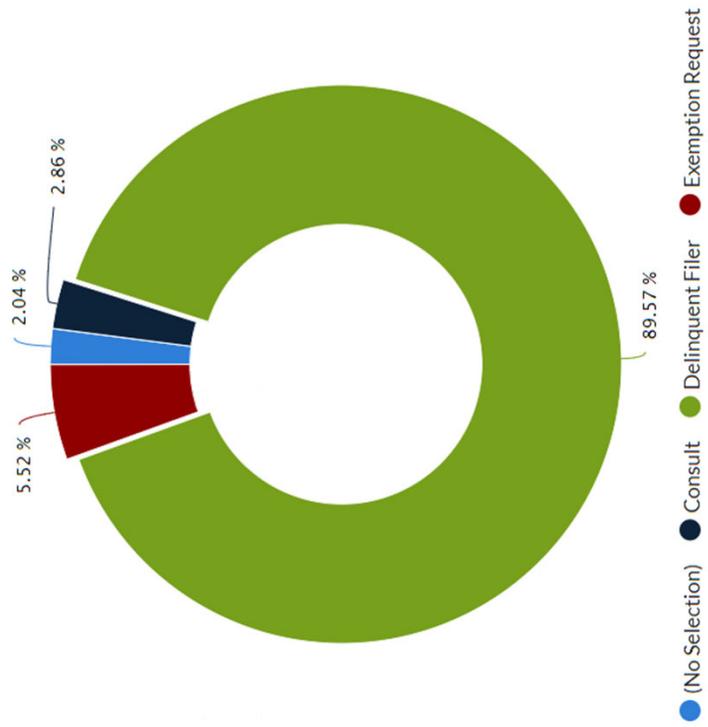
Ethics: Due Diligence Reviews By Category



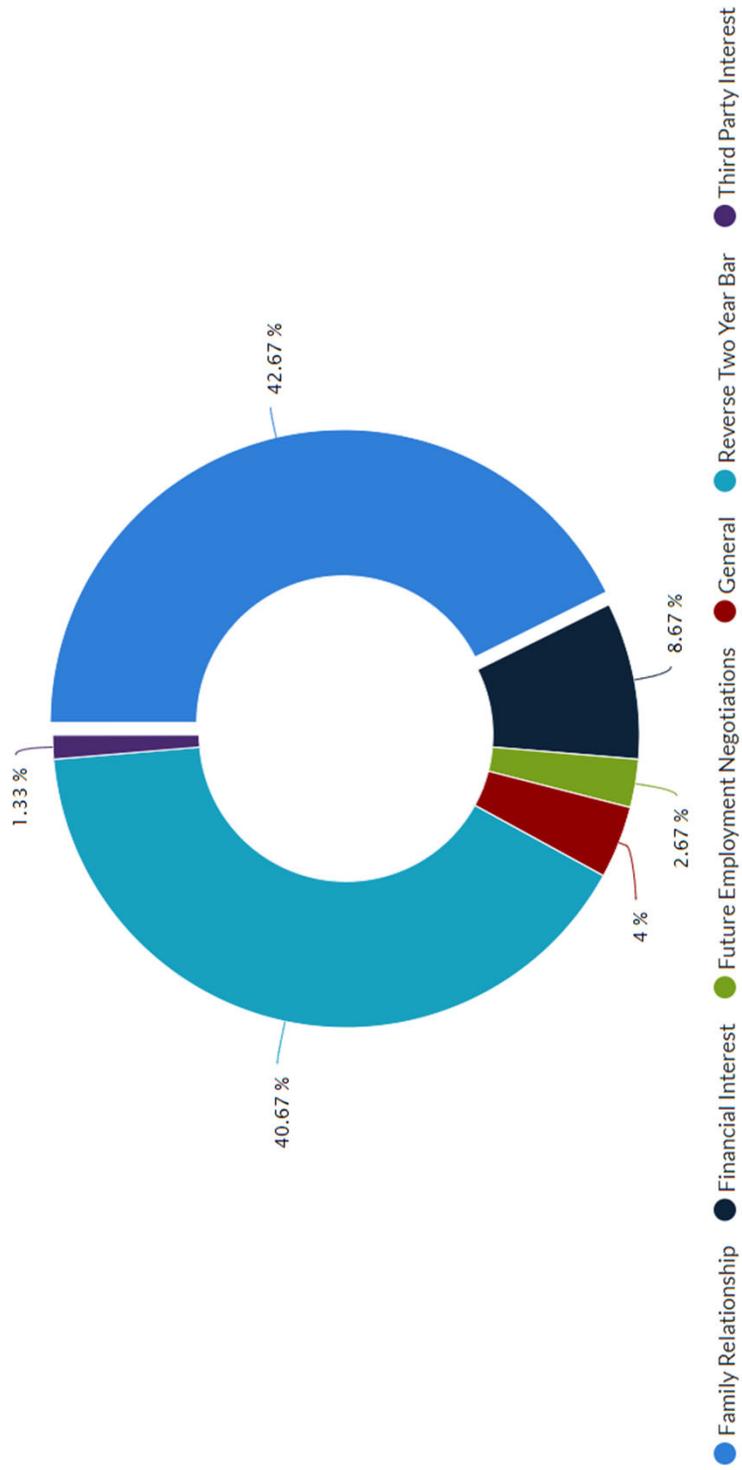
Ethics: Prohibited Source Events



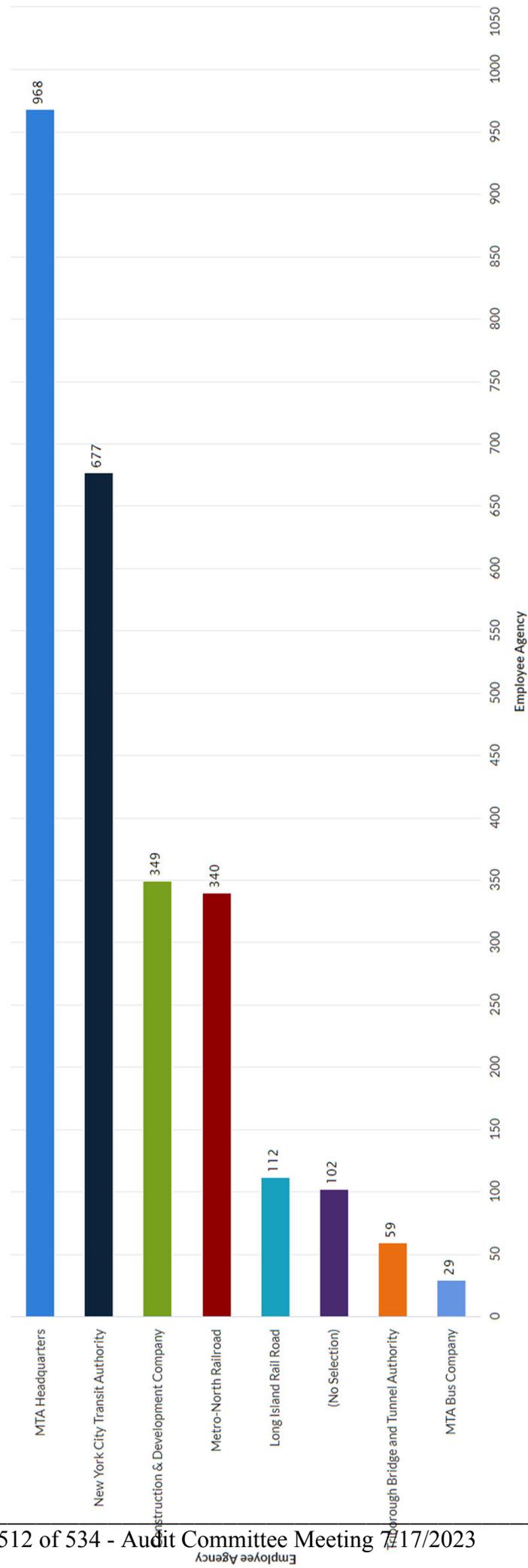
Ethics: Financial Disclosure



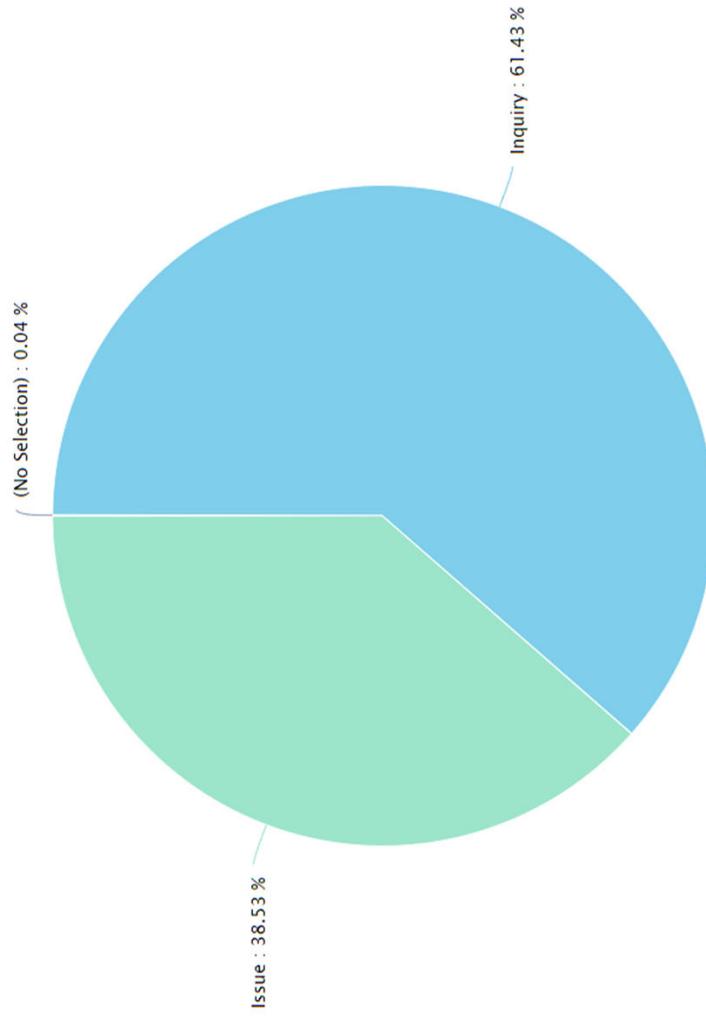
Ethics: Conflict of Interest



Ethics: Due Diligence Reviews By Agency

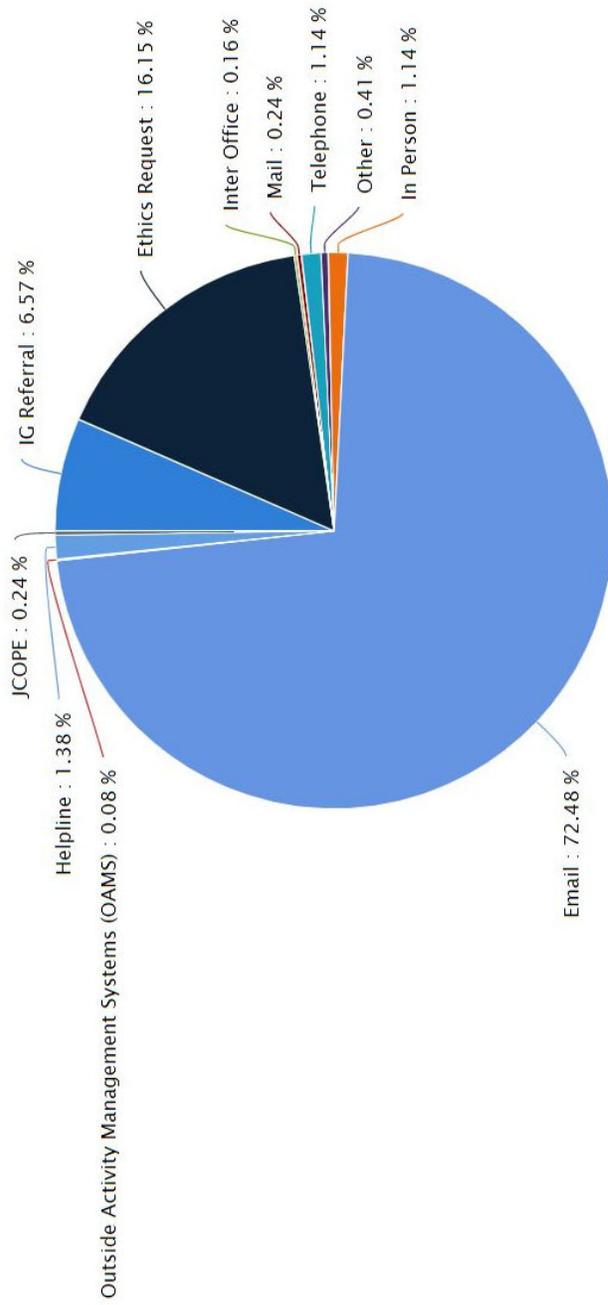


Ethics: Due Diligence Reviews Issues versus Inquiries



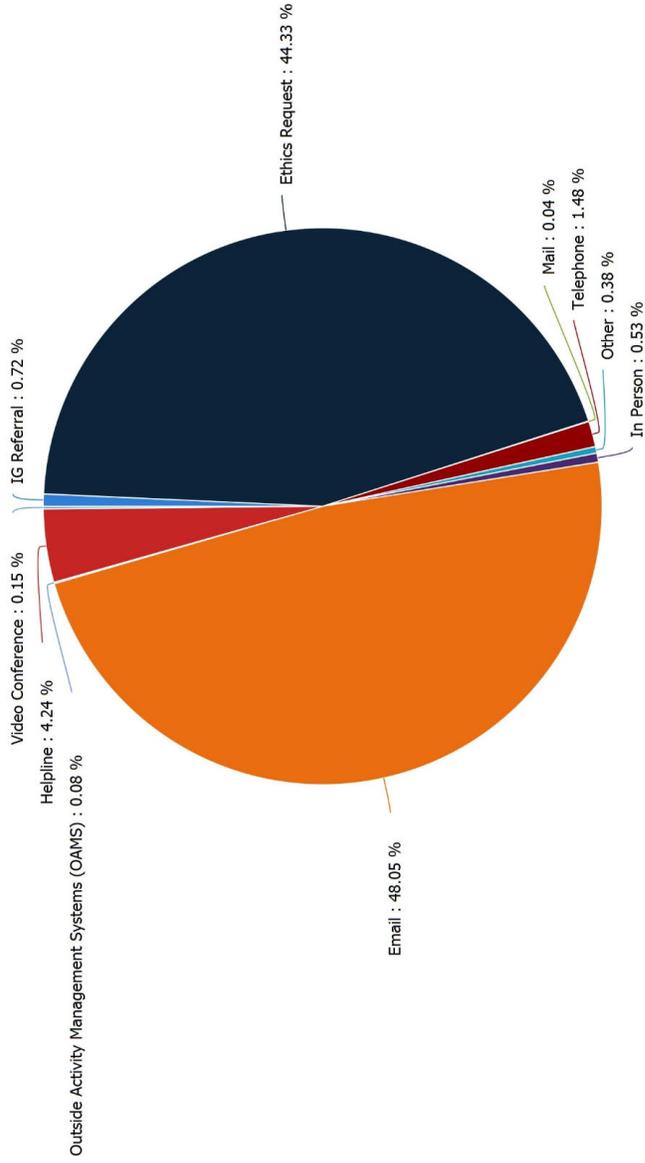
Ethics: Due Diligence Reviews By Source

Last Year's Report

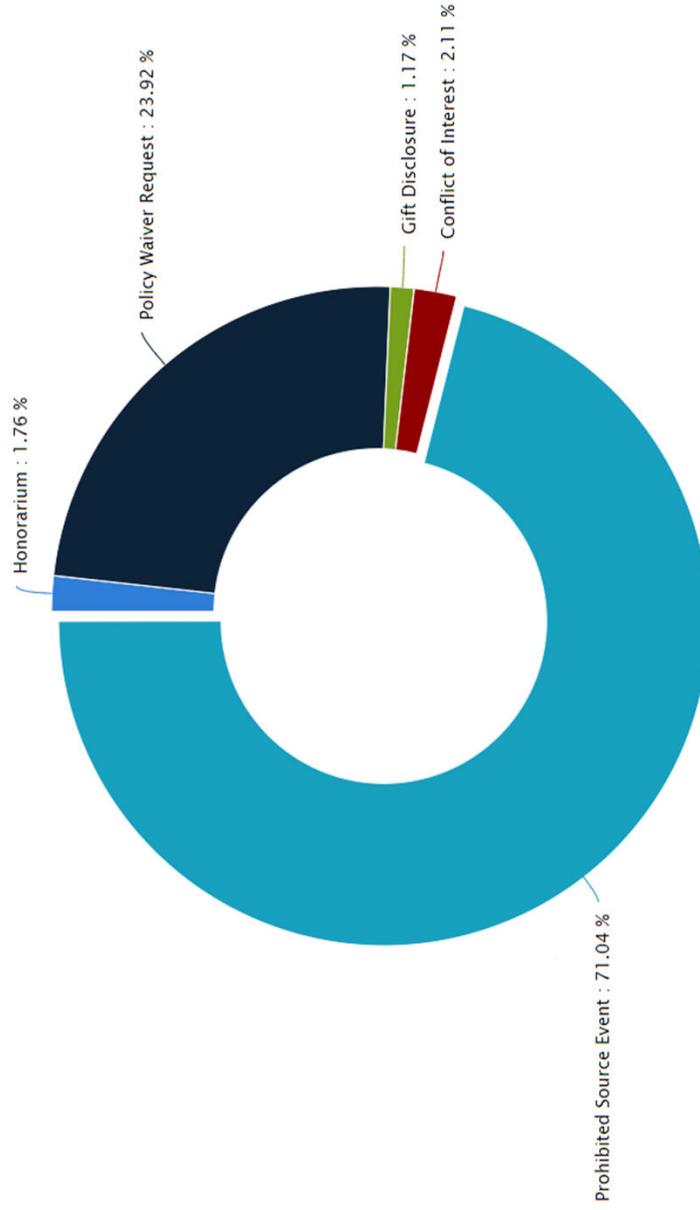


Ethics: Due Diligence Reviews By Source

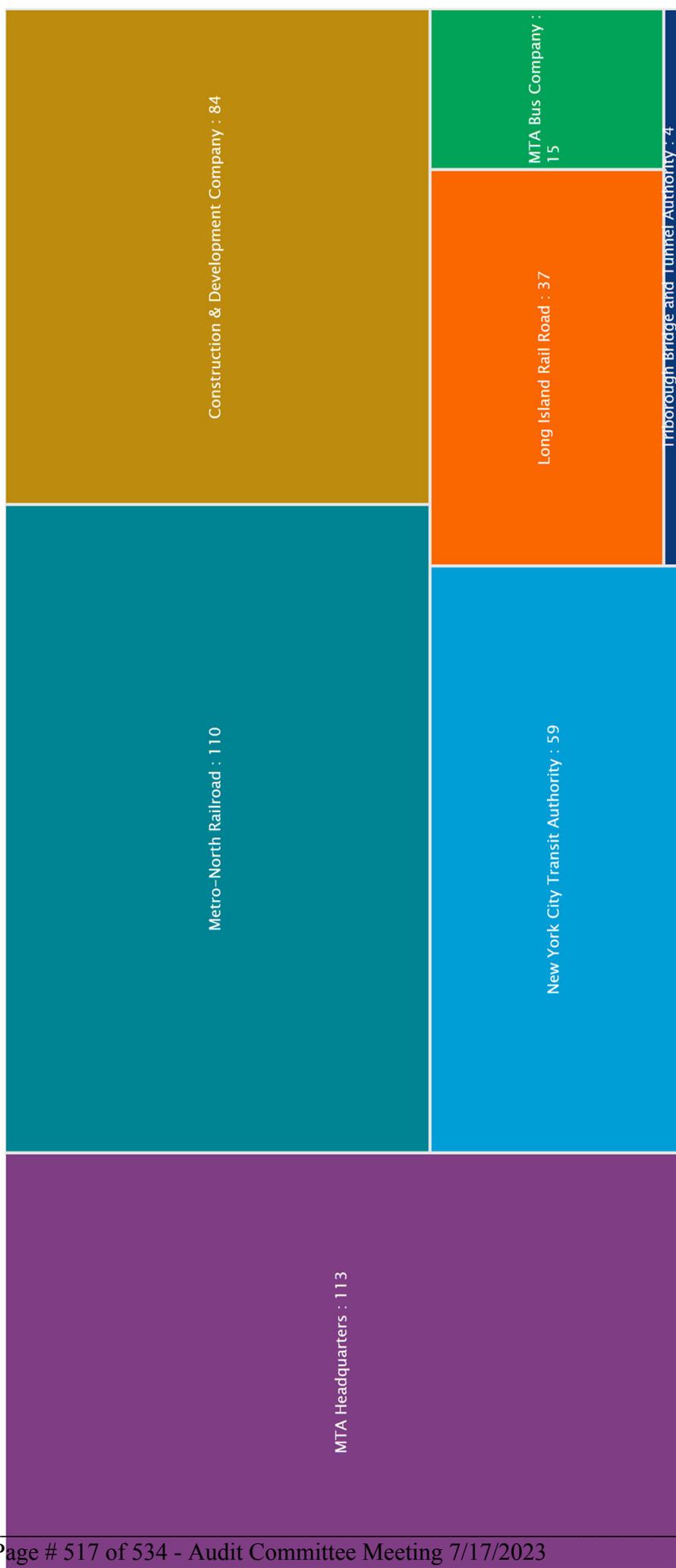
Current Year's Report



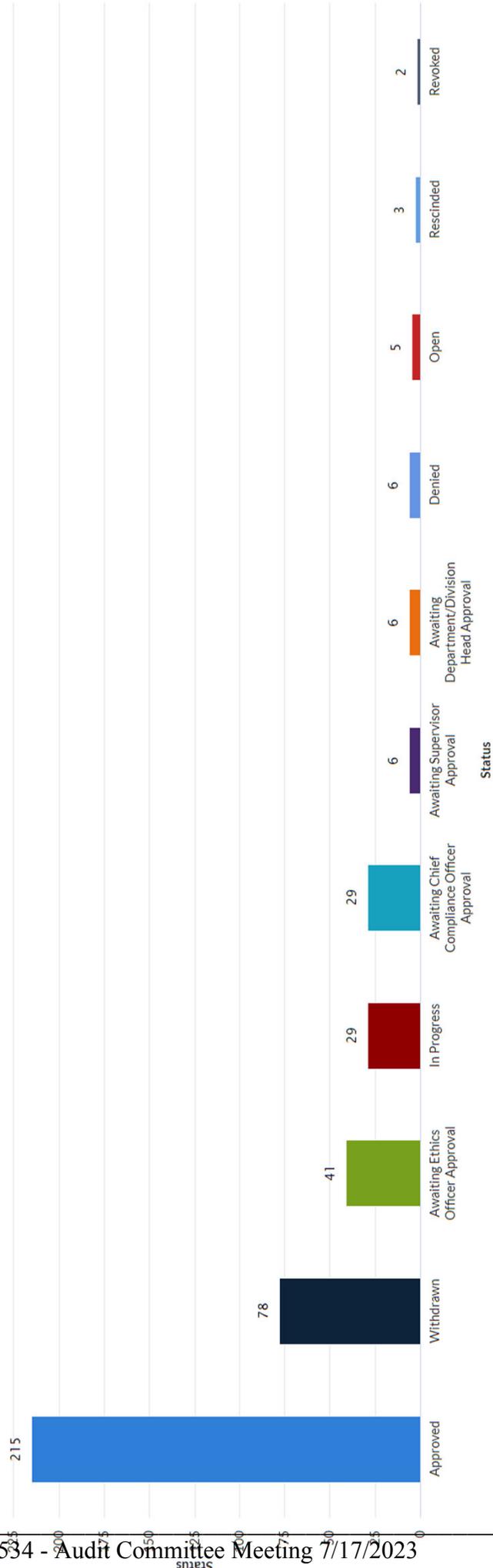
Ethics: Due Diligence Reviews Ethics Requests



Ethics: Outside Activities

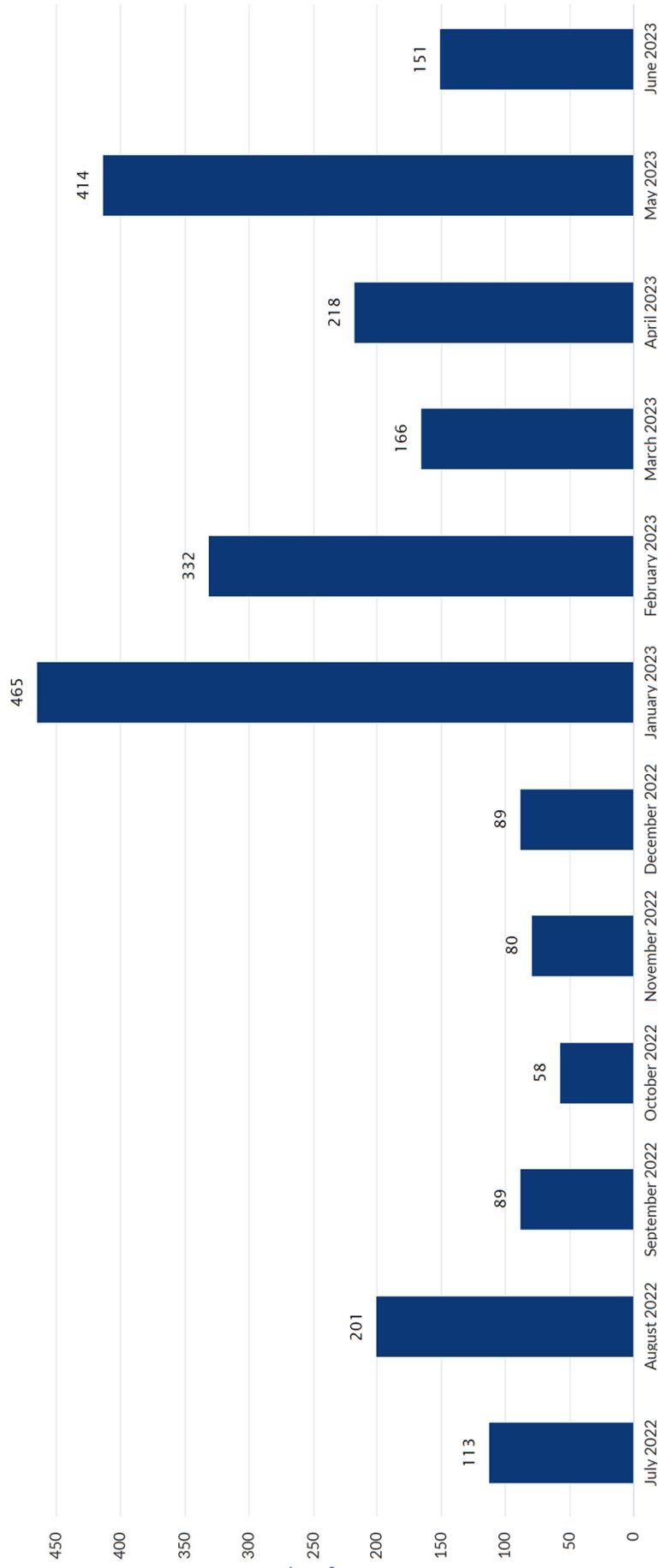


Ethics: Outside Activities



Ethics: Training

Conducted 26 Ethics training sessions for 2, 276 Employees



Memorandum



Metropolitan Transportation Authority

State of New York

Date July 06, 2023

To Audit Committee

From Lamond W. Kears, Chief Compliance Officer 

Re Annual Report on 2022 Financial Interest Reporting Compliance

At its January 1992 meeting, this Committee requested an annual report regarding compliance by MTA Headquarters and its Agencies (“MTA”) with the financial interest reporting requirements established by Public Officers Law and the MTA All Agency Code of Ethics.

Pursuant to MTA’s Code of Ethics and Public Officers Law §73-a, each year MTA identifies those employees who are required to file a Financial Disclosure Statement based upon earning in excess of the statutory amount and those employees who are designated policy makers. This information is sent to Commission on Ethics and Lobbying in Government (“Commission”). Employees in these categories receive notices from the Commission that they are required to complete a Financial Disclosure Statement which must be returned to the Commission by the statutory deadline of May 15.

At its January 1996 board meeting, the Board authorized and directed the Chairman or his designees to actively assist the Commission in its enforcement of the State’s financial disclosure reporting requirements and to impose disciplinary action in appropriate cases.

In accordance with the Board’s directive, and in order to reinforce in the minds of all MTA employees the MTA’s commitment to compliance with the State’s financial disclosure requirements, the annexed memoranda regarding compliance with financial disclosure was sent to all MTA employees and Board Members concurrently with the notice from the Commission.

The MTA will also continue actively to assist the Commission in its enforcement of the law. As of the date of this memorandum, there are approximately 5 delinquent filers from 2022.

This year the MTA has almost 6,500 filers. MTA Corporate Compliance will be monitoring compliance closely in the coming year.

Memorandum



Metropolitan Transportation Authority

State of New York

Date: May 3, 2023

To: All MTA Financial Disclosure Statement Filers

From: Lamond W. Kearse, Chief Compliance Officer 

Re: Financial Disclosure Statement – Covering Calendar Year 2022

As a reminder, employees who are required to file a Financial Disclosure Statement (FDS) with Commission on Ethics and Lobbying in Government (“COELIG”), whether completed online or hard copy, should complete the filing **no later than Monday, May 15, 2023**.

I urge all employees to review our MTA Code of Ethics, which can be found [here](#) or obtained from MTA Corporate Compliance. As you complete your financial disclosure form, you should be aware of any potential or actual conflicts of interest that you may need to report to MTA Corporate Compliance.

There is no exemption from filing for anyone who is away from work for any part of the calendar year or is working a reduced work schedule. New employees are required to file within 30 days of notification from COELIG.

As you know, COELIG is authorized to enforce the State’s ethics and financial reporting laws, which include the ability to impose a civil penalty up to \$40,000 or to seek prosecution as Class A misdemeanor violations of those laws. Pursuant to Board guidelines, in addition to providing its full cooperation and assistance to COELIG in its enforcement of the law, the MTA will impose such disciplinary action as may be appropriate in the case of violations.

Instructions for filing your FDS can be found on the [MTA Ethics and Compliance Portal](#). Should you find yourself in a situation that raises any question as to your obligations concerning conflicts of interest or whether you are required to file a financial disclosure statement with COELIG, I encourage you to contact the Ethics Helpline at 888 U-ASK-MTA (888-827-5682) for guidance.

MTA AUDIT SERVICES

2023 Audit Plan Status

July 17, 2023

2023 Audit Plan Status

Financial/Operational/Technology

Projects Completed	43
Findings with Recommendations	60
Savings/Cost Efficiencies	\$ 8.5 M

Contracts

Projects Completed	78
Pre-Award / Overhead Reviews	112
\$ Audited	\$ 395.9 M
Questioned Costs	\$ 25.9 M

2023 - Highlights

- ❑ **Non-Revenue Fleet Fuel Usage**
- ❑ **Professional Services Contract**
- ❑ **Cost Proposals – Sole Source Procurements & Impact Claims**
- ❑ **Transit Grants – Sub-Recipient Reimbursements**

2023 – Sandy Audit Unit

Superstorm Sandy Audit Unit Recovery Oversight Audits (Since 2013)

Total Grant Expenditures	\$4.19 Billion
Costs Audited	\$545 Million
Projects/Recommendations	151/397
Follow-up Audits Completed	13
Total Cost Adjustments	\$ 66.62 Million

2023 Audit Areas

Service Delivery

Stations Inspection & Maintenance
Station Signage/Cleaning ✓
Bus Depot Operations ✓✓ ✓
Shop Overhaul Program
Car Maintenance [RCMP]
Bridge & Tunnel Operations ✓✓ ✓
Power
Facility Inspection & Maint.
Track Inspection & Maint. ✓✓(2) ✓
Video/Camera Inspection & Maint. ✓(2)
Elevators & Escalators
Subway Car Cleaning
Command Center Operations

Finance

Timekeeping/Overtime ✓
Accounts Payable ✓✓ ✓
Pensions ✓✓(6) ✓(2)
Treasury/Investments ✓✓ ✓
Payroll ✓
Travel Requests ✓✓
Settlement Payments
TA Receivables
Lien Payments
Internal Control Reviews ✓✓

Procurement

Operating Contracts ✓✓(3) ✓(2)
Professional Services Contract ✓
Materials Contract ✓
P-Card Review
Permanently Assigned Vehicles
Repair & Return
Paratransit Carrier Service ✓

Revenue

OMNY
Tolling/EZPass Revenue ✓
Wireless Agreement ✓
Railroads On-Board Revenue ✓✓(12)
Revenue & Subsidies
NTD External Reporting
MetroCard Fraud Mgmt./Refunds ✓
Bus Revenue Processing ✓
Fare Evasion
Commuter Railroad Ridership

Safety

Accident/Incident Reporting ✓✓(2)
Energy Management System ✓✓
MTA Police – Comp Time
Workplace Violence/Safety Training ✓
B&T Hazardous Waste Mgmt.
Petroleum Storage Tanks ✓
Gate Guard Program

Capital Program

Superstorm Sandy ✓✓(2) ✓
Prevailing Wages ✓✓(1) ✓(1)
Contract Management ✓
Additional Work Orders ✓✓(2)
Third Party Contracts ✓✓ ✓

Human Resources

All-Agency Recruiting/Hiring
Teleworking ✓
Health Benefits
Employee Availability ✓✓
Employee Tuition & Membership Dues
Salary Adjustments/Compensation
Force Account Availability
FMLA
Personnel Actions ✓
Workers Compensation

Technology

Network Reviews
Cybersecurity
Application Reviews/PeopleSoft Data
Operational Technology
System Implementations ✓
Cloud Computing
Security over Sensitive and PII Data
IT Assets/Mobile Devices
Cloud Computing

Looking Ahead

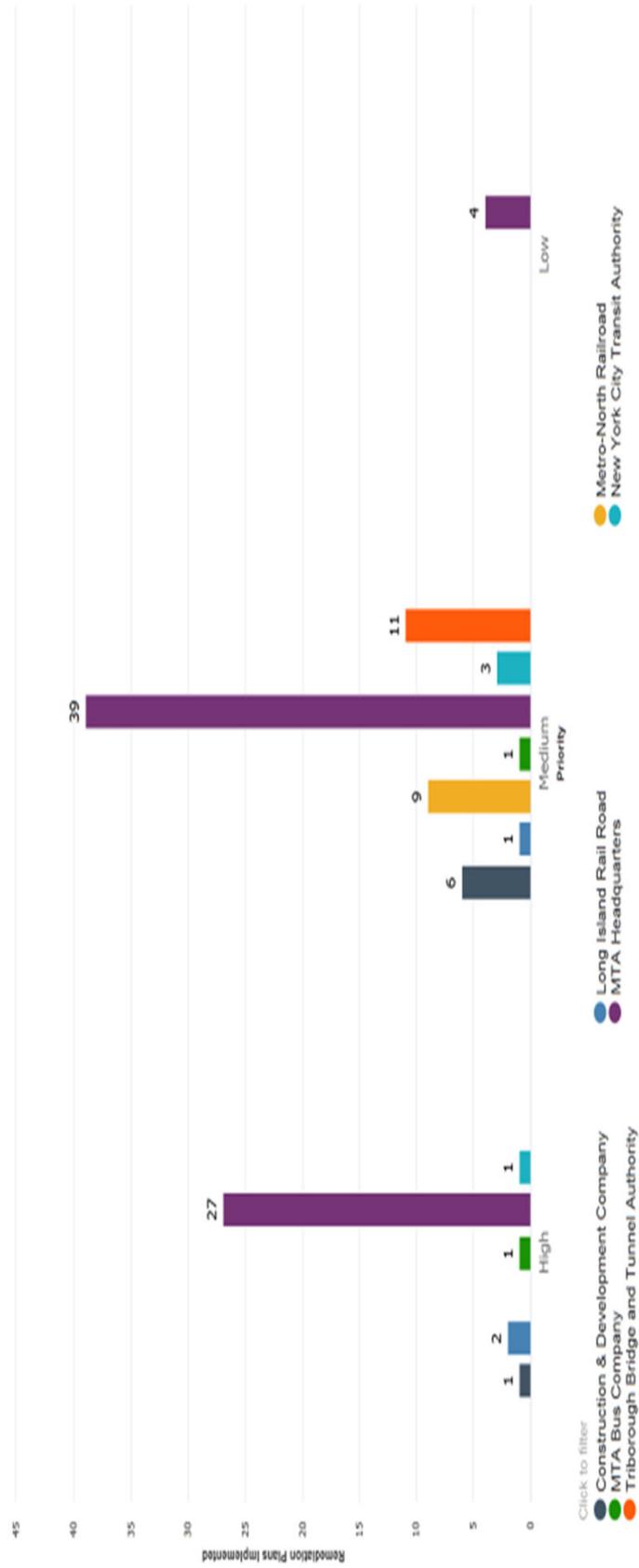
- ❑ Prioritize remaining audits for 2023 with input from Agency Presidents and HQ Tower Leads.
- ❑ Work with Management to achieve MTA's Strategic Priorities
- ❑ Continue to coordinate audit activities with:
 - External Auditors
 - City/State Controller's Office
 - MTA Chief Compliance Office
 - MTA Inspector General Office

QUESTIONS?

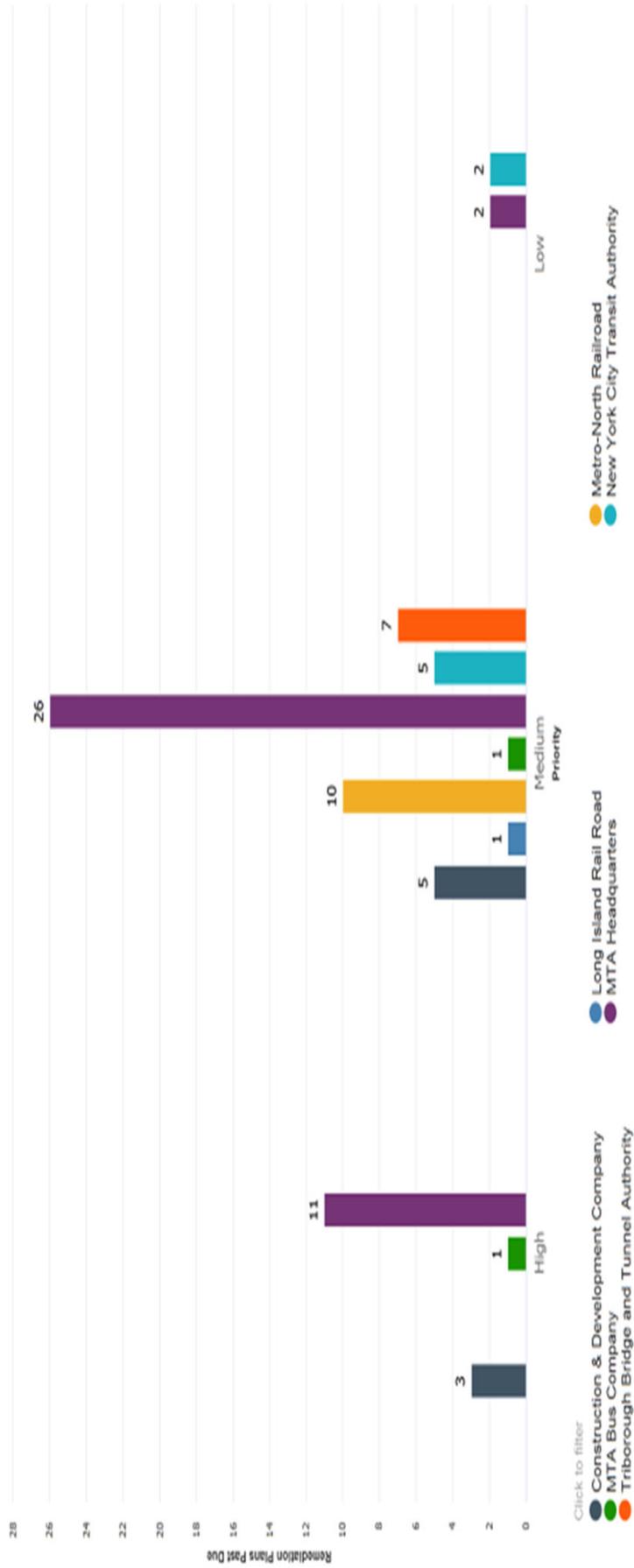
MTA
CORPORATE COMPLIANCE
Remediation Plans Monitoring
Six Months Past Due

Report to the Audit Committee
July 2023

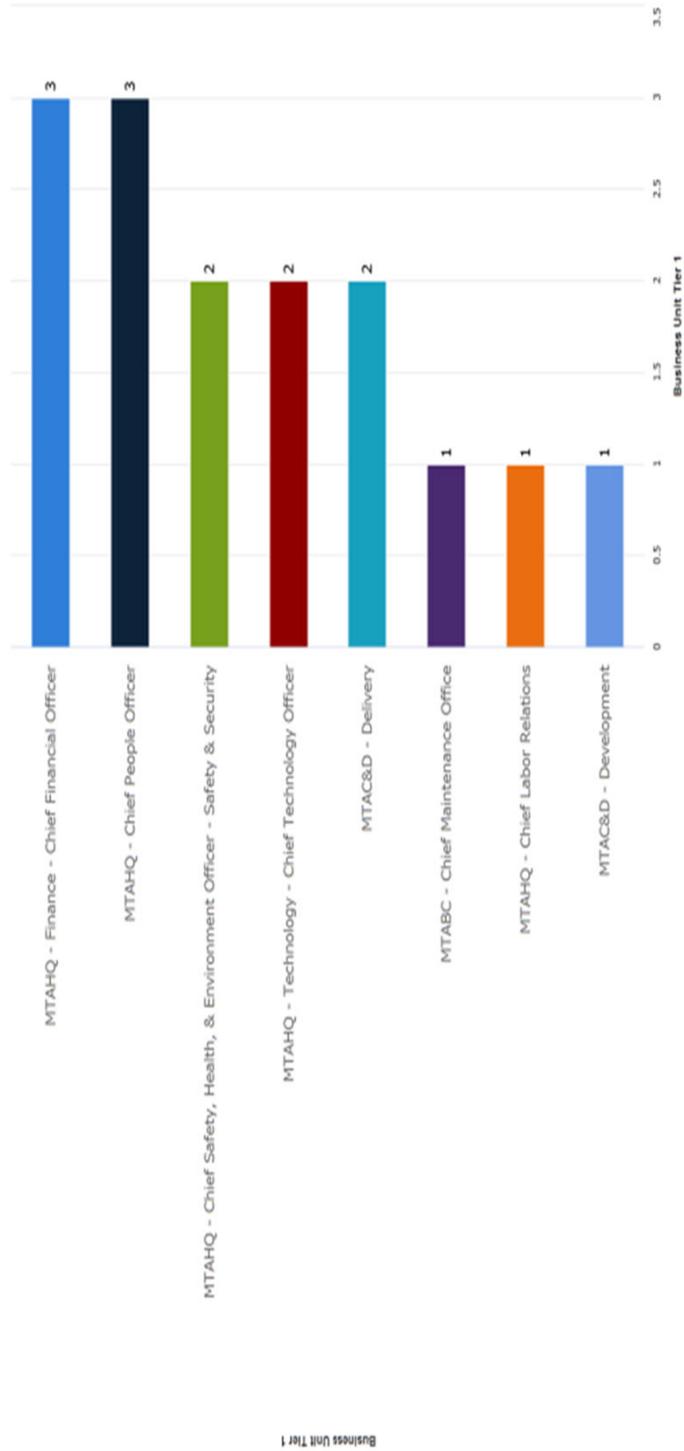
Remediation Plans Implemented Awaiting Closure By Agency & Priority



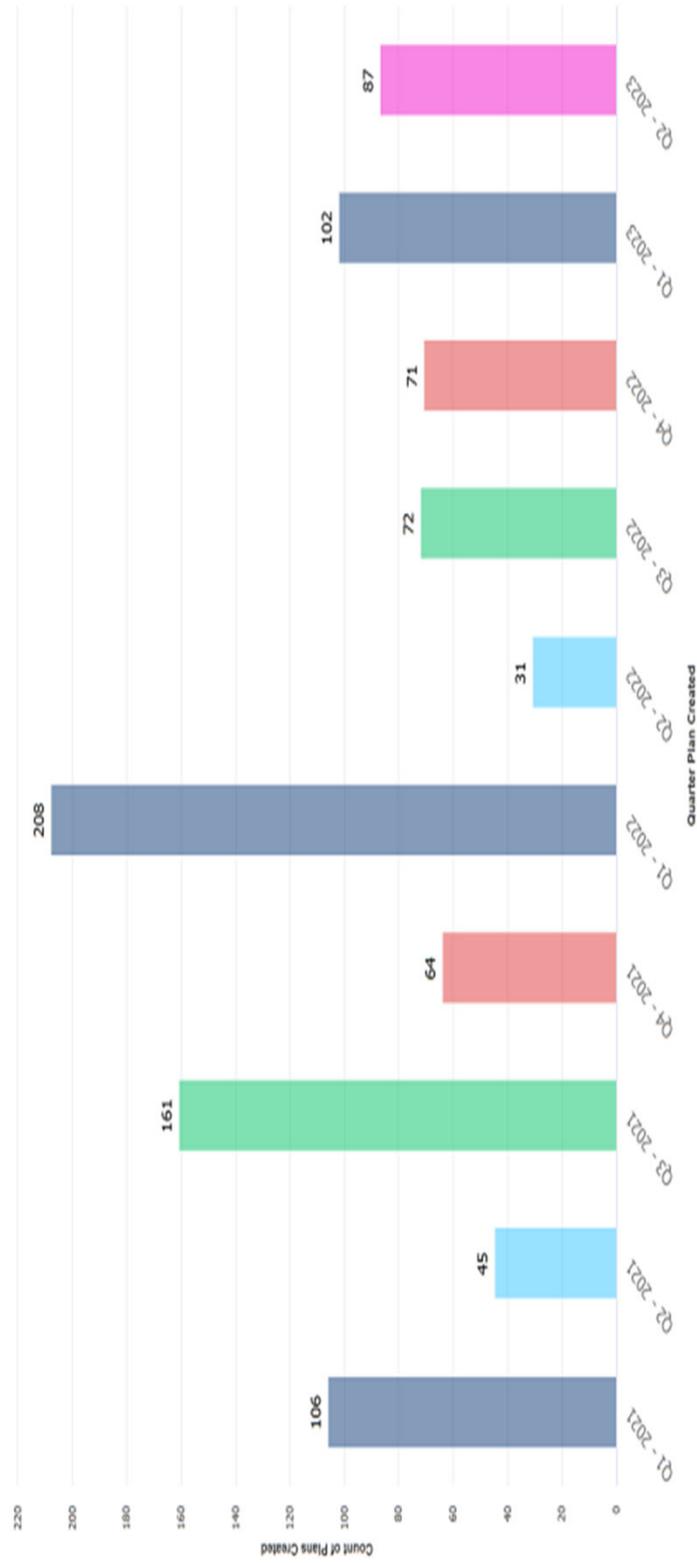
Remediation Plans Six Months Past Due by Agency & Priority



Remediation Plans Six Month Past Due which are High Priority By Business



Remediation Plans Open Trending By Quarter



Remediation Plans Closed Trending By Quarter

