Metropolitan Transportation Authority

# Audit Committee Meeting

# October 2023

**Committee Members**

J. Barbas, Chair
D. Jones, Vice Chair
M. Fleischer
L. Sorin

# Audit Committee Meeting

**Monday, 10/23/2023**
**12:00 - 1:00 PM ET**

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

**1. PUBLIC COMMENTS**

**2. APPROVAL OF MINUTES**
*Minutes of the July 17 Meeting - Page 3*

**3. AUDIT COMMITTEE WORK PLAN**
*2024 WORKPLAN - Condensed - Page 9*
*2024 WORKPLAN - Detailed - Page 11*

**4. QUARTERLY FINANCIAL STATEMENTS - 2ND QUARTER 2023**
*Draft - Consolidated Interim Financial Statements - Q2 2023 - Page 16*

**5. APPOINTMENT OF EXTERNAL AUDITORS**
*PCAOB Report on 2021 Inspection of Deloitte - Page 148*

**6. AUDIT APPROACH/COORDINATION WITH EXTERNAL AUDITORS (Materials previously distributed)**

**7. REVIEW OF AUDIT COMMITTEE CHARTER**
*Audit Committee Charter - Page 171*

**8. OPEN AUDIT RECOMMENDATIONS**
*Remediation Plans Monitoring Report: Six Months Past Due - October 2023 - Page 178*

**9. ANNUAL AUDIT COMMITTEE ACTIVITY REPORT (Materials previously distributed)**

**10. EXECUTIVE SESSION**

**MINUTES OF MEETING**
**AUDIT COMMITTEE OF THE BOARD**
**MONDAY, JULY 17, 2023 – 12:00 P.M.**
**RONAN BOARD ROOM – 20TH FLOOR**
**2 BROADWAY**

---

**The following were present:**

**Honorable:**
**Jamey Barbas**
**Sherif Soliman**

| | | | | | |
|---|---|---|---|---|---|
| **M. Woods** | **– MTA** | **K. Willens** | **- MTA** | **J. Strohmeyer** | **- Deloitte** |
| **L. Kearse** | **– MTA** | **J. McGovern** | **- MTA** | **K. Makrakis** | **– Deloitte** |
| | | | | **L. Bady** | **- Deloitte** |
| | | | | **P. Zurita** | **- Deloitte** |
| | | | | **A. Lam** | **- Deloitte** |

**Also, in attendance were:**
**P. Graves - MTA**
**Q. Arroyo - MTA**

---

## 1. PUBLIC COMMENTS PERIOD

There were two speakers: Jason Anthony and Jack Nierenberg, VP Passengers United. 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/July-2023.

## 2. APPROVAL OF MINUTES

The minutes of the May 22, 2023, Audit Committee meeting were approved.

## 3. AUDIT COMMITTEE WORK PLAN

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

## 4. REVIEW OF 1st QUARTER 2023 MTA CONSOLIDATED FINANCIAL STATEMENTS

Jill Strohmeyer (Managing Director, Deloitte) reported on the results of Deloitte's review of the MTA's first quarter 2023 consolidated interim financial statements. Jill reminded the Committee that a review consists primarily of analytical procedures and inquiries with management and is less in scope than an audit. Based on their review, they were not aware of any material modifications that should be made to the interim financial statements for them to be in accordance with Generally Accepted Accounting Principles.

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

## 5. MANAGEMENT'S REVIEW OF PENSION PLANS

Jim McGovern (MTA Deputy Comptroller) provided the Committee with a high-level summary of the 2022 financial statements for the employee benefit plans. The MTA benefits plans have four financial statements, as follows:

1. The Management Discussion & Analysis,
2. Statement of Fiduciary Net Position (Balance Sheet) and the Statement of Changes in Fiduciary Net Position (Income Statement),
3. The Notes to the Financial Statements, and
4. Required Supplementary Information

McGovern then presented a slide that listed all the MTA pension plans. There are six benefit plans, namely: the (i) MTA Defined Benefit Plan, (ii) MaBSTOA Plan, (iii) LIRR Additional Plan, (iv) MNR Cash Balance Plan, (v) the MTA Deferred Compensation Plan (which are the 401K and 457 Plans), and (vi) the MTA Retiree Welfare Benefit (OPEB) Plan. All six benefit plans require audited financial statements. He noted the net pension liability for each plan including the NYCERS and NYSLERS plans (Items #5 and #6 on the presentation slide) which primarily consists of MTA, NYC Transit and MTA Bridge & Tunnel employees. At the end of December 2022, the (1) MTA Single Employer Plans had a Net Pension Liability of $4.3 billion and a blended funded ratio of 68.3%, and (2) The two Multi-Employer Plans (NYSLERS and NCYERS) had a Net Pension Liability of $3.9 billion and a blended funded ratio of approximately 82%. McGovern noted that these percentages are slightly less than last year primarily due to market conditions of the assets in these plans. In 2023, the MTA made two contributions to the plans: (1) $1.3 billion in prepaid contributions to the Defined Benefit Plans for 2023/24 and (2) a $1.3 billion prepaid benefit contribution to the OPEB Plan which were not reflected in the presentation slides. Lastly, McGovern briefly presented two slides which showed how the MTA's pension plans were being funded as compared against the rest of the United States and noted that New York State is in pretty good shape. With respect to the OPEB Plans, he noted that the MTA is not required to fund these plans.

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

## 6. 2022 PENSION PLAN AUDITS

Jill Strohmeyer (Deloitte) stated that Deloitte is in the process of completing the 2022 audits of the six MTA employee benefit plans. The audits were conducted in accordance with auditing standards generally accepted in the United States of America and they were not aware of any significant changes to previously adopted accounting policies or their application during 2022. It was noted that lease adoption was a topic of discussion back in the May meeting, but it does not impact any of the MTA plan reporting for this year. Deloitte was also not aware of any significant changes in accounting estimates or management judgments relating to such estimates, there were no uncorrected misstatements or disclosure items passed identified during their audits, and there were no material misstatements brought to the attention of MTA management because of their audit procedures. Lastly, Jill noted that there were no disagreements with management throughout the course of our audits and that they received the full cooperation of management and staff throughout the performance of our audits.

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

## 7. SINGLE AUDIT REPORT

Jill Strohmeyer (Deloitte) briefed the Committee on the results of the Federal and State mandated Single Audits (of the MTA and NYC Transit) for the year ended December 31, 2022. In 2022, the MTA had a total of $12 billion in federal expenditures over numerous grant programs reported on its schedule of expenditures of federal awards. This was a $10 billion increase compared to 2021 (which was $2 billion in 2021) and is largely due to cash received by the MTA in 2022 related to ARPA (American Rescue Plan Act) and CRRSA (Coronavirus Response and Relief Supplemental Appropriations) programs which increased its schedule of federal award expenditures. As part of the Federal Single Audit, Deloitte selected one major grant (the federal transit cluster) which was tested in accordance with the 2022 OMB compliance supplement. The Federal Transit Administration cluster tested had $11.6 billion dollars in federal expenditures. Therefore, out of $12 billion dollars that could be tested, Deloitte tested $11.6 billion or 97% of the total awards. In addition, of the $11.6 billion tested by Deloitte, $10.5 billion was related specifically to COVID funding (both ARPA and CRRSA). Deloitte had no findings relating to its compliance work and Jill noted that its internal report (Yellow Book Report) will reference one finding relating to a significant deficiency related to non-operating revenues. The details regarding this finding will be discussed later during the Management Letter. In regards to the State Single Audit, the MTA had $188 million in state expenditures related to one program – the Statewide Mass Transportation Operating Assistance Program. Deloitte tested this one program and had no compliance or internal control findings to report to the Committee.

Board member Bianca Lopez inquired as to whether the programs tested were selected randomly. In response, Jill stated that Deloitte conducts a risk assessment that considers the MTA's total federal expenditures by each grant program  The factors considered by Deloitte include:

1. Dollar value
2. Whether the program was highlighted as a high-risk program by the Offices of Management and Budget (OMB)
3. When was the program last tested by Deloitte. If Deloitte has not tested a large program in the last three years, then it will be selected for testing in the current year

Jill noted that this program was, in fact, classified as a high-risk program by OMB because of the significant COVID funding that went into the federal transit cluster. Lastly, she added that every year they do tend to select a different program and this year it happened to be the federal transit cluster with the most dollars and the most COVID funding.

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

## 8. <u>2022 MANAGEMENT LETTER</u>

With respect to the 2022 Management Letter for the MTA and its agencies, Jill Strohmeyer (Deloitte) reminded the Committee that there are three levels of internal control deficiencies (three severity levels): specifically, (i) low-level deficiency; (ii) significant deficiency; and, (iii) material weakness. There were no material weaknesses to report to the Committee and Jill noted that all but one comments are low-level deficiencies. The one significant deficiency relates to controls over non-operating revenue accounts and reconciliations.  This is a carry forward comment from last year, however there is a slight difference in what was noted this year.  Specifically, last year the non-operating revenue accounts related to the payroll mobility tax and other mansion and supplementally tax type revenues. As Jill reported to the Audit Committee this past May, back in 2022 they had noted that management had recorded an adjusting entry of $352 million related to FEMA revenue that was not recorded in prior years. As a result, that carried over into a significant deficiency around internal controls over non-operating revenues. Management has responded with next steps and actions to take regarding this comment and Deloitte is comfortable with management's response related to this deficiency. Between Metro-North, SIRTOA, FMTAC, and Bridges & Tunnels, there were also six (6) low-level deficiency comments related to account reconciliations, GASB 87 Lease Implementation, and other classification type comments. Deloitte's recommendation is for management to enhance the review controls relating to these areas including having detailed documentation supporting the amounts recorded in the General Ledger. There were four "other matters" described in Deloitte's Management Letter related to legal expenses, interagency communication, and succession planning within the Accounting Department. These matters are being brought to the attention of the Audit Committee because Deloitte believes that these are important "better business" practices and are other items that the MTA should consider improving the efficiency of its financial reporting. Lastly, there were 12 comments within the Letter relating to information technology that spanned several different systems. These comments mainly relate to five areas:

1. Password length and complexity, expiration and parameters
2. Removal of accounts for transferred or terminated employees
3. Periodic review and recertification of account access
4. Segregation of duties
5. Maintaining evidence of monitoring of automated scheduling and batch processing

Jill added that all the IT matters noted in the Letter were mitigated by other controls, or other factors.

Committee member Sherif Soliman asked for clarification about how the IT issues were mitigated by other factors. In response, Jill stated that generally this means there was a manual control in place by the Accounting group (such as a manual reconciliation) or additional reviews that were done manually to mitigate the deficiency. Lauren Bady, the IT Director for Deloitte added that in a lot of circumstances there are multiple IT controls that address a particular risk. Therefore, if there was a deficiency in one of them but the other controls were noted to be effective, that would serve to mitigate the overall risk. As a follow-up question, Soliman then asked about terminating IT credentials of employees who have been transferred ot terminated. In response, Jill stated that in such situations, they would look whether the employee entered into the system to make any changes after termination to determine whether any inappropriate changes were made that would impact the financial statements. Kevin Willens, MTA Chief Financial Officer, suggested that they review these findings with IT to assess whether there is something they can do better going forward.

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

## 9. REVIEW OF MTA INSPECTOR GENERAL'S OFFICE

Jill Strohmeyer (Deloitte) stated that Deloitte has performed the agreed upon procedures as prescribed to them by the MTA related to the IG's Office of Management and Budget for the year end December 31, 2022. There are 14 procedures that Deloitte was required to perform, which consisted primarily of comparing information to source documents such as employee and payroll information to HR forms and payroll registers; reviewing disbursements and petty cash vouchers for approvals and supporting documentation; and, comparing IG expense information to MTA books and records. As a result of these agreed upon procedures, there are no significant exceptions or findings to report to the Committee.

Upon motion duly made and seconded, the Committee approved for submission to the full board to accept the five Deloitte reports: First Quarter 2023 Consolidated Financial Statements, Pension Audits, Single Audit Report, Management Letter Reports, and the Review of the Inspector General's Office.

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

## 10. ETHICS AND COMPLIANCE PROGRAM & FINANCIAL INTEREST REPORTS

First, in regards to the Enterprise Risk Management, the Financial Interest Report, and the Open Audit Recommendations, Lamond Kearse (MTA Chief Compliance Officer) referred the Committee to the presentations and materials in the Audit Committee Book and noted that things are progressing well in each of these areas. He then briefed the Committee on the Ethics and Compliance Program. In regards to the Ethics Program, Kearse reminded the Committee about the core board responsibility surrounding ethics and compliance and then referenced a slide that summarized the key areas covered since the last report to the Audit Committee noting that they have handled over 2,600 ethics issues or inquiries. In addition, they deal with prohibitive source events (they use a system called Ethics Request that handles a lot of the Prohibitive Source Events) whereby they assess whether it's appropriate for MTA employees to attend certain conferences or other types of events to ensure that it meets our ethical requirements. They continue to work with the Commission on financial disclosure to ensure that all MTA employees ultimately file their financial disclosure statements. In addition, they continue to manage MTA conflict of interest and Kearse noted a significant increase with what is known as "reverse two-year bar." These are employees who come to the MTA from the private sector and their relationships with their former employer needs to be managed to ensure that they look out for the interests of the MTA over that of their former employer. Kearse referred to a slide on Due Diligence reviews and noted that they continue to look at areas by agency adding that Headquarters continues to be very active in terms of the overall number of reviews. Additionally, they continue to manage inquiries versus issues and noted that an inquiry is when an employee comes to Corporate Compliance before they do something, and that an issue is when the employee has already done something. He noted positively that there are more inquiries than issues. Kearse then referenced a slide that broke down due diligence reviews by their source (from last year) and noted that most due diligence reviews come in via e-mail. He reminded the Committee that last year it was mentioned that they we were implementing an automated system to help manage these reviews and noted that this new automated system is taking in almost half of the due diligent reviews. Kearse then referenced a slide on Outside Activities and noted that they continue to manage outside activities and since the last report to the Committee they have managed 422 outside activity requests from MTA employees. Quite a few have been approved and quite a few have been denied. They also have had a few employees who opted to withdraw their requests (as opposed to having them be denied). Lastly, they conducted 26 ethics training sessions which provided training to over 2,000 employees.

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

## 11. OPEN AUDIT RECOMMENDATIONS

The Audit Committee Book included a report to the members on the status of open and past due audit recommendations previously accepted.

## 12. 2023 AUDIT PLAN STATUS UPDATE

The Auditor General (Michele Woods) first thanked her team: Darren Jurgens, Phyllis Richardson and Judy Beckford, as well as the entire audit staff noting that they have identified approximately $26 million in potential cost savings. Woods then referred the Committee to the full presentation in the Audit Committee Book.

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

## 13. MOTION TO ADJOURN

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

**Respectfully submitted,**

Michele S Woods

**Michele Woods**
**Auditor General**

Metropolitan Transportation Authority

# 2024 AUDIT COMMITTEE WORK PLAN

| I. RECURRING AGENDA ITEMS | Responsibility |
|---|---|
| **Each Meeting:** | |
| Approval of Minutes | Committee Chair & Members |
| Audit Work Plan | Committee Chair & Members |
| **As Appropriate:** | |
| Pre-Approval of Audit and Non-Auditing Services | Committee Chair & Members |
| Follow-Up Items | Auditor General |
| Status of Audit Activities | Auditor General/MTA IG/ CCO/CFO/ Controllers/External Auditor/ |
| Executive Sessions | Committee Chair & Members |

## II. SPECIFIC AGENDA ITEMS

January 2024

| | |
|---|---|
| Quarterly Financial Statements – 3rd Quarter 2023 | External Auditor |
| Enterprise Risk Management Update and Internal Control Guidelines | Chief Compliance Officer |
| Compliance with the Internal Control Act | Chief Compliance Officer |
| 2023 Audit Plan Status Report | Auditor General |
| 2024 Audit Plan | Auditor General |
| Information Technology Report | Chief Technology Officer |
| Open Audit Recommendations | Chief Compliance Officer |

May 2024

| | |
|---|---|
| 2023 Audited Financial Statements | External Auditor/CFO |
| Management's Review of Consolidated Financial Statements | Deputy Chief, Controller's Office |
| Investment Compliance Report | External Auditor |
| Open Audit Recommendations | Chief Compliance Officer |
| Contingent Liabilities/Third Party Lawsuits (Executive Session) | General Counsels/External Auditor |

July 2024

| | |
|---|---|
| Quarterly Financial Statements – 1st Quarter 2024 | External Auditor |
| Pension Audits (2023) | External Auditor/Deputy Chief, Controller |
| Management's Review of Pension Audits | Deputy Chief, Controller's Office |
| Single Audit Report | External Auditor/CFOs |
| Management Letter Reports | External Auditor/CFOs/Controllers |
| Review of MTA/IG's Office (FY 2023) | External Auditor |
| Enterprise Risk Management Update | Chief Compliance Officer |
| Ethics and Compliance Program | Chief Compliance Officer |
| Financial Interest Reports | Chief Compliance Officer |
| MTAAS 2024 Audit Plan Status Report | Auditor General |
| Open Audit Recommendations | Chief Compliance Officer |

October 2024

| | |
|---|---|
| Quarterly Financial Statements – 2nd Quarter 2024 | External Auditor |
| Appointment of External Auditors | Committee Chair & Members |
| Audit Approach Plans/Coordination | External Auditor |
| Review of Audit Committee Charter | CCO and Committee Chair |
| Security of Sensitive Data & Systems (Executive Session) | Chief Technology Officer |
| Open Audit Recommendations | Chief Compliance Officer |
| Annual Audit Committee Report | Committee Chair |

# 2024 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

### JANUARY 2024

Quarterly Financial Statements - 3rd Quarter 2023
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 2023.

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 2023/2024 Audit Plans

i. 2023 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 2023.

ii 2024 Audit Plan
A discussion by Audit Services of the areas scheduled to be reviewed in 2024 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 2024**

2023 Financial Statements
The MTA public accounting firm will review the results and conclusions of their examination of the 2023 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 2023 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 2024**

Quarterly Financial Statements – 1st Quarter 2024
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 2024.

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 2023 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 MTA's public accounting firm.

Review of the MTA Inspector General's Office
Representatives of MTA's public accounting firm will provide the results of their 2023 "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 2024 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 2024**

Quarterly Financial Statements – 2nd Quarter 2024
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 2024.

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 their 2023 engagement. 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 2024 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 2024. 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 Six-Month Period Ended June 30, 2023

# Table of Contents

**(A Component Unit of the State of New York)**

## MANAGEMENT'S DISCUSSION AND ANALYSIS

## AS OF JUNE 30, 2023 AND DECEMBER 31, 2022 AND FOR THE SIX-MONTH PERIODS ENDED JUNE 30, 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 June 30, 2023 and December 31, 2022 and for the six-month periods ended June 30, 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 June 30, 2023 and December 31, 2022 and for the six-month periods ended June 30, 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**

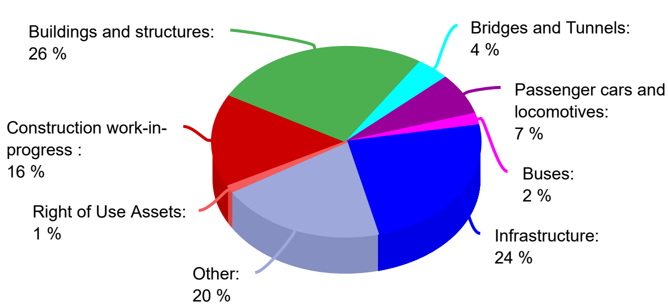
Capital assets include, but are not limited to: bridges, structures, tunnels, construction of buildings and the acquisition of buses, equipment, passenger cars, and locomotives. Right-of-use assets for leases on building, office space, storage space, equipment and vehicle have been included as a result 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*.

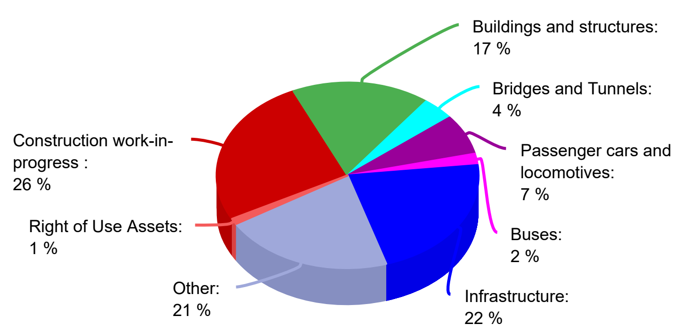
Deferred outflows of resources reflect: changes in fair values of hedging derivative instruments that are determined to be effective, unamortized loss on debt refunding, deferred outflows from pension activities, and deferred outflows from OPEB activities.

| (In millions) | June 30, 2023 | December 31, 2022 | Increase / (Decrease) |
|---|---|---|---|
| Capital assets — net (see Note 6) | $ 88,134 | $ 87,506 | $ 628 |
| Other assets | 18,331 | 21,138 | (2,807) |
| Total Assets | 106,465 | 108,644 | (2,179) |
| Deferred outflows of resources | 9,402 | 8,274 | 1,128 |
| Total assets and deferred outflows of resources | $ 115,867 | $ 116,918 | $ (1,051) |

**Capital Assets, Net - June 30, 2023**




**Capital Assets, Net - December 31, 2022**



***Significant Changes in Assets and Deferred Outflows of Resources Include:***

**June 30, 2023 versus December 31, 2022**

- Net capital assets increased by $628, or 0.7%. This change includes:
  - An increase in buildings and structures of $8,260.
  - An increase in infrastructure of $2,306.
  - An increase in other capital assets of $387.
  - An increase in passenger cars and locomotives of $90.
  - An increase in bridges and tunnels of $23.
  - An increase in right of use assets of $1.

  Offsetting these increases were:
  - A decrease in construction in progress of $8,765.
  - An increase in accumulated depreciation of $1,586.
  - A decrease in buses of $56.

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 contributing to the increase were:

  - 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 $2,807, or 13.3%. The major items contributing to this change include:
  - A decrease in investments of $4,353, primarily due to redemption of MTA Grant Anticipation Notes offsetting FTA grants received in 2022.

  Offsetting this decrease were:
  - An increase in cash of $759 from net cash flow activities, including timing of New York State's funding towards the MTA Capital Program and processing of capital payments.
  - A net increase in various other current and noncurrent assets of $742, 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 of $45 in federal and state government receivables.

- Deferred outflows of resources increased by $1,128, or 13.6%, primarily attributed to decreases in the amortization of loss on debt refunding of $164, and increases in deferred outflows related to pensions and other post-employment benefits of $1,306, offset by a decrease in changes in the fair value of derivative instruments of $14.

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

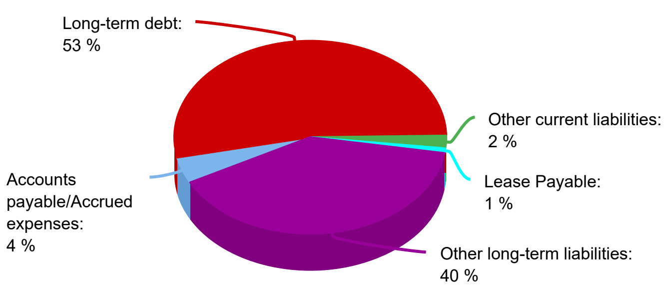
Current liabilities include: accounts payable, accrued expenses, current portion of long-term debt, pollution remediation liabilities, unredeemed fares and tolls, and other current liabilities. This also includes the current portion of long-term lease liability as a result of the implementation of GASB 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*.

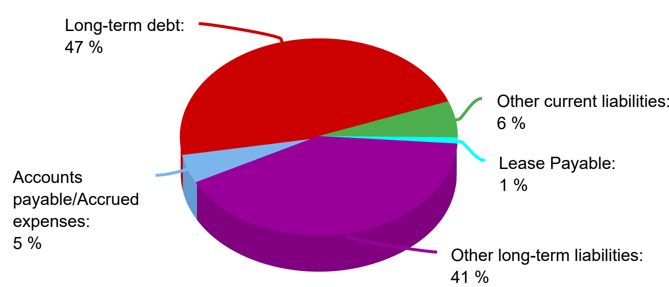
Deferred inflows of resources reflect unamortized gains on debt refunding, pension related deferred inflows, and deferred inflows from OPEB activities. As a result of the implementation of GASB Statement No. 87, *Leases*, a deferred inflow of resources from leases at the amount of the lease receivable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

| (In millions) | June 30, 2023 | December 31, 2022 | Increase / (Decrease) |
|---|---|---|---|
| Current liabilities | $ 10,141 | $ 10,552 | $ (411) |
| Non-current liabilities | 86,114 | 85,375 | 739 |
| Total liabilities | 96,255 | 95,927 | 328 |
| Deferred inflows of resources | 4,042 | 4,074 | (32) |
| Total liabilities and deferred inflows of resources | $ 100,297 | $ 100,001 | $ 296 |

**Total Liabilities - June 30, 2023**




**Total Liabilities - December 31, 2022**




### *Significant Changes in Liabilities and Deferred Inflows of Resources Include:*

**June 30, 2023 versus December 31, 2022**

- Current liabilities decreased by $411 or 3.9%. The decreases were primarily due to:
  - A decrease in the current portion of long-term debt of $945, primarily from the redemption of MTA Grant Anticipation Notes and MTA Bond Anticipation Notes.
  - A decrease in capital accruals of $178.
  - A decrease in accrued expenses of $84.
  - A net decrease of $26 in employee related accruals.

  Offsetting increases were as follows:
  - An increase in unearned revenue of $723 due to timing of New York State's funding towards the MTA Capital Program and processing of capital payments.
  - An increase in accounts payable due to vendors of $79.
  - A net increase in other current liabilities of $20.

- Non-current liabilities increased by $739 or 0.9%. This increase was mainly due to:
  - An increase in the non-current portion of long-term debt of $663, which includes $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 Refunding Bonds and $765 from issuance of MTA Bridges and Tunnels Payroll Mobility Tax Senior Lien Refunding Green Bonds.These were offset by bond retirements of $2,172.
  - An increase of $101 in estimated liability arising from injuries to persons.
  - A net increase in other noncurrent liabilities of $15.

  Offsetting decreases were:
  - A decrease in lease payable of $20.
  - A decrease in derivative liabilities of $20 resulting mainly from changes in market valuation and a reduction in the notional amount of derivative contracts.
- Deferred inflows of resources decreased by $32 or 0.8%.

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

| (In millions) | June 30, 2023 | December 31, 2022 | Increase / (Decrease) |
|---|---|---|---|
| Net investment in capital assets | $ 38,767 | $ 34,886 | $ 3,881 |
| Restricted for debt service | 1,048 | 381 | 667 |
| Restricted for claims | 224 | 192 | 32 |
| Restricted for other purposes | 2,521 | 4,491 | (1,970) |
| Unrestricted | (26,990) | (23,033) | (3,957) |
| Total Net Position | $ 15,570 | $ 16,917 | $ (1,347) |

### *Significant Changes in Net Position Include:*

### June 30, 2023 versus December 31, 2022

At June 30, 2023, total net position decreased by $1,347 or 8.0%, when compared with December 31, 2022. This change is a result of an increase in net non-operating revenues of $2,760 , an increase in appropriations, grants and other receipts externally restricted for capital projects of $1,381, offset by operating losses of $5,488.

The net investment in capital assets increased by $3,881 or 11.1%. Funds restricted for debt service, claims and other purposes decreased by $1,271 or 25.1% in the aggregate, mainly due to scheduled debt service payments. Unrestricted net position decreased by $3,957 or 17.2%.

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

| (In millions) | Six-Month Period Ended June 30, 2023 | Six-Month Period Ended June 30, 2022 | Increase / (Decrease) |
|---|---|---|---|
| Operating revenues | | | |
| Passenger and tolls | $ 3,404 | $ 3,002 | $ 402 |
| Other | 343 | 323 | 20 |
| Total operating revenues | 3,747 | 3,325 | 422 |
| Non-operating revenues | | | |
| Grants, appropriations and taxes | 2,988 | 3,436 | (448) |
| Other | 658 | 6,310 | (5,652) |
| Total non-operating revenues | 3,646 | 9,746 | (6,100) |
| Total revenues | 7,393 | 13,071 | (5,678) |
| Operating expenses | | | |
| Salaries and wages | 3,364 | 3,179 | 185 |
| Retirement and other employee benefits | 1,723 | 1,670 | 53 |
| Postemployment benefits other than pensions | 409 | 358 | 51 |
| Depreciation and amortization | 1,774 | 1,606 | 168 |
| Other expenses | 1,965 | 1,769 | 196 |
| Total operating expenses | 9,235 | 8,582 | 653 |
| Non-operating expenses | | | |
| Interest on long-term debt | 884 | 900 | (16) |
| Other net non-operating expenses | 2 | 3 | (1) |
| Total non-operating expenses | 886 | 903 | (17) |
| Total expenses | 10,121 | 9,485 | 636 |
| (Loss) / Gain before appropriations, grants and other receipts externally restricted for capital projects | (2,728) | 3,586 | (6,314) |
| Appropriations, grants and other receipts externally restricted for capital projects | 1,381 | 1,855 | (474) |
| Change in net position | (1,347) | 5,441 | (6,788) |
| Net position, beginning of period | 16,917 | 9,143 | 7,774 |
| Net position, end of period | $ 15,570 | $ 14,584 | $ 986 |

### *Revenues and Expenses, by Major Source:*

### Period ended June 30, 2023 versus 2022

- Total operating revenues increased by $422, or 12.7%. 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 $358 and $44, respectively. Other operating revenues increased by $20 when compared with the same period in 2022 due to higher advertising revenues and higher paratransit reimbursement subsidy.
- Total non-operating revenues decreased by $6,100, or 62.6%.
  - Other subsidies decreased by $5,652, primarily due to a decrease in funds from the Federal government's American Rescue Plan Act ("ARPA") of $5,854 to support operations, offset by increases in other net non-operating expenses of $178, subsidies from the Connecticut Department of Transportation for the MTA Metro-North Railroad of $19, and station maintenance, operation and use assessments of $5.
  - Grants, appropriations, and taxes decreased by $448 primarily due to a decrease in Urban Tax of $211, a decrease in Mortgage Recording Tax of $186, a decrease in Mansion Tax of $114, a decrease in Payroll Mobility Tax of $9, a decrease in Internet Sales Tax of $4, and a decrease in Operating Assistance of $2. These were offset by an increase in Metropolitan Mass Transportation Operating Assistance of $46, an increase in New York City Assistance Fund of $12, an increase in MTA Aid Trust subsidies of $10, an increase in Mass Transportation Trust Fund from New York State of $9 and an increase of $1 for Build America Bond subsidy.

- Non-labor operating costs increased by $364, or 10.8%. The variance was primarily due to:
  - An increase in depreciation and amortization of $168 primarily due to assets placed in service during 2023 and its related depreciation including $51 for Grand Central Madison terminal.
  - An increase in professional service contracts of $91.
  - An increase in paratransit service contracts of $61.
  - An increase in material and supplies of $33, mainly due to higher maintenance and repairs requirements.
  - A net increase in other non-labor expenses of $19.
  - An increase in insurance of $17.
  - An increase in maintenance and other operating contracts of $6.
  - An increase in pollution remediation projects of $4.
  - A decrease in fuel and electric power of $18 and $6, respectively.
  - A decrease in claims of $11.
- Total net non-operating expenses decreased by $17, or 1.9%, due to an increase in interest on long-term debt.
- Appropriations, grants and other receipts externally restricted for capital projects decreased by $474, or 25.6% 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 second quarter 2023 remained below the pre-pandemic level, with ridership down 217 million trips (-49.2%) below 2019 second quarter ridership. Year-over-year improvements continued, with 2023 exceeding 2022 ridership levels by 44.3 million trips (11.2%) during the second quarter. For the second quarter compared with the second quarter of 2023, MTA New York City Transit subway ridership increased by 37.3 million trips (14.4%), MTA New York City Transit bus increased by 215 thousand trips (0.2%), MTA Long Island Rail Road ridership increased by 2.9 million trips (21.5%), MTA Metro-North Railroad increased by 2.9 million trips (22.8%), MTA Bus increased by 1.0 million trips (4.7%), and MTA Staten Island Railway increased by 50 thousand trips (9.6%). Vehicle traffic at MTA Bridges and Tunnels facilities for the second quarter of 2023 exceeded 2019 levels by 1.1 million crossings (1.3%), and B&T traffic in the second quarter, compared with the second quarter of 2022, was up 1.5 million crossings (1.7%).

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). On June 27, 2023, the Federal Highway Administration (FHWA) issued a Finding of No Significant Impact, confirming the conclusion of the Final Environmental Assessment, which includes mitigation measures to be undertaken by the program, that the program will have no significant environmental impacts. The Traffic Mobility Review Board (TMRB), the six-member panel that will issue a recommended tolling structure for the CBD Tolling Program, held its first meeting on July 19, 2023. Contractors have up to 310 days from the federal approval to complete the design, development, testing, and installation of the tolling system and equipment, and the MTA Bridges and Tunnels Board must adopt a toll structure, before toll collection can begin.

Seasonally adjusted non-agricultural employment in New York City for the second quarter was higher in 2023 than in 2022 by 145.9 thousand jobs (3.1%). On a quarter-to-quarter basis, New York City employment gained 9 thousand jobs (0.2%), 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 2.4% in the second quarter of 2023, according to the most recent estimate released by the Bureau of Economic Analysis; in the first quarter of 2023, the revised RGDP increased 2.0 percent. The increase in consumer spending reflected increases in both services and goods. Within services, the leading contributors to the increase were housing and utilities, health care, financial services and insurance, and transportation services. Within goods, the increase was led by recreational goods and vehicles as well as gasoline and other energy goods. The increase in nonresidential fixed investment reflected increases in equipment, structures, and intellectual property products. The increase in state and local spending reflected increases in compensation of state and local government employees and gross investment in structures. The increase in private inventory investment reflected increases in both farm and nonfarm inventories. Compared to the first quarter, the acceleration in GDP in the second quarter primarily reflected an upturn in private inventory investment and an acceleration in nonresidential fixed investment. These movements were partly offset by a downturn in exports, and decelerations in consumer spending, federal government spending, and state and local government spending. Imports declined during the second quarter.

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 second quarter of 2023, with the metropolitan area index increasing 3.2% while the national index increased 3.8% when compared with the second quarter of 2022. Regional prices for energy products decreased 15.4%, and national prices of energy products fell 11.4%. In the metropolitan area, the CPI-U exclusive of energy products increased by 4.6%, while nationally, inflation exclusive of energy products increased 5.4%. The New York Harbor spot price for conventional gasoline decreased by 28.0% from an average price of $3.70 per gallon to an average price of $2.66 per gallon between the second quarters of 2022 and 2023.

In its announcement on July 26th, 2023, the Federal Open Market Committee ("FOMC") raised its target for the Federal Funds rate to the 5.25% to 5.50% 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 increased the range to 5.25% to 5.50% range on July 26, 2023. In support of its actions, FOMC noted the committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will consider a wide range of information, including readings on labor market conditions, inflation pressures and inflation expectations, and financial and international developments. 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.

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 second quarter of 2023 were lower than the second quarter of 2022 by $88.2 million (-51.3%). Average monthly receipts in the second quarter of 2023 were $30.4 million (-52.1%) 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 second 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 $90 million (-51.8%) lower than receipts during the second quarter of 2022. Average monthly receipts in the second quarter of 2023 were $40.9 million (-55.5%) 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 six months ended June 30, 2023, operating revenue from tolls totaled $1,177, which was $44, or 3.9%, higher than the six months of 2022. Paid traffic for the second quarter of 2023 totaled 164 million crossings, which was 6 million, or 3.8% above the second 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 six months ended June 30, 2023, revenue from fares was $1,611, an increase of $219, or 15.7%, compared to June 30, 2022. For the same comparative period, total operating expenses were higher by $262, or 4.8%, totaling $5,756 for the six months ended June 30, 2023.

*MTA Long Island Rail Road* – Total operating revenue for the six months ended June 30, 2023 was $276, which was higher by $55, or 24.9%, compared to six months ended June 30, 2022. For the same comparative period, operating expenses were higher by $105, or 10.1%, totaling $1,146 for the six months ended June 30, 2023.

*MTA Metro-North Railroad* – For the six months ended June 30, 2023, operating revenues totaled $281, an increase of $69, or 32.5%, compared to June 30, 2022. During the same period, operating expenses increased by $58, or 6.9%, to $901. For the six months ended June 30, 2023, fare revenue increased by 34.9% to $263 compared to June 30, 2022. Passenger fares accounted for 93.59% and 91.98% 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 June 30, 2023 was $177 compared to $363 at June 30, 2022.

## *Capital Programs*

At June 30, 2023, $19,751 had been committed and $5,650 had been expended for the combined 2020-2024 MTA Capital Programs and 2020-2024 MTA Bridges and Tunnels Capital Program, $30,663 had been committed and $24,374 had been expended for the combined 2015-2019 MTA Capital Programs and the 2015-2019 MTA Bridges and Tunnels Capital Program, and $29,402 had been committed and $27,760 had been expended for the combined 2010- 2014 MTA Capital Programs and the 2010-2014 MTA Bridges and Tunnels Capital Program, and $24,115 had been committed and $23,982 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 million 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 million 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. On June 27, 2023, the MTA Board approved an amendment primarily to reflect $678 million in budget transfers from the core agencies to support Network Expansion's Penn Station Access project. The amendment to the capital programs was subsequently submitted to the CPRB and is awaiting its approval. The revised 2020-2024 MTA Bridges and Tunnels Capital Program totaling $3,327 as last approved by the MTA Board on July 27, 2022, remains unchanged and is not subject to CPRB approval.

By June 30, 2023, the last CPRB approved 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. On June 27, 2023, the MTA Board approved an amendment to change the Program's funding mix to allow the MTA to best meet the funding requirements of the Second Avenue Subway Phase 2 project. This amendment does not change the Program's budget at $33,913, as last approved.

By June 30, 2023, the 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 June 30, 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 June 30, 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 July Financial Plan*

The July Financial Plan ("the July Plan") incorporates the 2023 Mid-Year Forecast, the 2024 Preliminary Budget and a Financial Plan for the years 2024 to 2027 and updates the 2023 February Plan. This Plan reflects the ongoing financial and operational impacts stemming from the pandemic, and the gradual recovery of the MTA Region. This Plan reflects a significant commitment from both New York State and New York City to address the MTA's fiscal shortfalls, as well as resources for service, safety and security improvements.

***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. New York City Transit, Long Island Rail Road and Metro-North Railroad each have compiled detailed lists of operating efficiencies initiatives totaling, over the Plan period, $688 million at NYCT, $139 million at the LIRR and $140 million at MNR, with $94 million of the MNR savings accruing to the MTA and the remaining $46 million impacting the CDOT subsidy for Connecticut service. These identified savings have been incorporated into Agency financial plans. The remainder of the annual savings targets, along with an annual $100 million increase in the savings target beginning in 2025 remain below-the-line.

***Anticipated Farebox and Toll Revenue Increase*** - The 4% fare and 5.5% toll rate increases expected to go into effect in late August or early September, are expected to generate $61 million of additional farebox revenue and $57 million of additional toll revenue in 2023, followed by approximately $205 million annually of farebox revenue and $133 million of toll revenue, on average, through the remainder of the Plan. The Plan also includes the resumption of regular biennial fare and toll increases yielding a four percent increase in farebox and toll revenues, which are proposed to be instituted in January 2025 and March 2027. These proposed increases are expected to generate $1.15 billion through the Plan period.

***Anticipated additional actions*** - The Plan anticipates two additional actions to be taken: a 2024 prepayment of $500 million towards 2025 pension expenses for MTA-sponsored plans, and the use of $258 million over the Plan period for OPEB Trust for retiree health benefits.

**Reduce current and future expenses and aid in eliminating annual deficits through 2027**- These actions include pre-paying 2023 and 2024 pension expenses for employees covered by MTA-sponsored pension plans ($1.06 billion), pre-paying of debt and debt service expenses ($1.37 billion) and funding the OPEB (Other Post-Employment Benefits) Trust, which will cover retiree health benefits ($1.32 billion).

***Other local subsidy resources freed up from receipt of Federal COVID funding*** - all such resources will be applied to close remaining annual deficits. The Plan assumes $1.24 billion of resources will be used to close the 2023 deficit, followed by $17 million in 2024, $38 million in 2025, $218 million in 2026 and $548 million in 2027.

More detailed information on the July Plan can be found in the MTA 2024 Preliminary Budget – July Financial Plan 2024-2027 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 30% on the subways, 37% for bus (combined NYCT bus and MTA Bus Company), 28% on MTA Metro-North Railroad, and 29% 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 June 30, 2023, MTA has drawn down a total of $4.18 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*

On May 15, 2023, the 2019-2023 labor agreement between the New York City Transit Authority and the Transport Workers Union (TWU Local 100) expired. At the start of the second quarter and through much of May, negotiations towards a new agreement occupied a major focus of collective bargaining, as the successor agreement with TWU Local 100 will establish the economic parameters for future agreements with most other labor unions at all MTA agencies.

Meanwhile, throughout the second quarter of 2023, the MTA continued to pursue equitable and financially prudent labor agreements with unions that had not yet settled according to the 2019-2023 TWU pattern.

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 June 30, 2023.

***MTA Long Island Rail Road*** – At the end of the second quarter of 2023, MTA Long Island Rail Road had approximately 7,391 employees. Approximately 6,589 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 in the second quarter the carrier was able to reach agreement with the last remaining main group not to have settled: 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. The new agreement covers approximately 754 members for the subsequent 26-month period from April 16, 2021 through June 15, 2023 and provides wage increases of 2.5% and 2.75% for 2021 and 2022, respectively. All effective railroad agreements are consistent with the MTA Financial Plan.

***MTA Metro-North Railroad*** – As of June 30, 2023, Metro-North Railroad employed approximately 6,122 people. Among these were approximately 5,264 employees represented by ten different unions.

In the second quarter of 2023, the MTA Board approved a new labor agreement between Metro-North and approximately 71 members of the Association of Commuter Rail Employees, Division 113 (Rail Traffic Controllers). The agreement will span the 26-month period from June 2, 2021 through August 2, 2023 and includes wage increases of 2.5% and 2.75% for 2021 and 2022, respectively. 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 June 30, 2023, MTA Headquarters employed approximately 4,917 people, of whom 3,305 are union members[1]. With the MTA Board's approval of one new labor agreement in the second quarter, most represented Headquarters employees are currently under effective deals. In June, the MTA Board approved new agreement terms with approximately 71 employees in Clerical/Administrative and civilian Police titles who are represented by the International Brotherhood of Teamsters, Local 808. The four-year, two-month agreement will run October 1, 2021 through November 30, 2025; and it provides the same TWU pattern wage increases (2.0%, 2.25%, 2.5% and 2.75%). The agreement has therefore been anticipated in the MTA Financial Plan.

***MTA New York City Transit/Manhattan and Bronx Surface Transit Operating Authority*** – As of June 30, 2023, MTA New York City Transit and MaBSTOA currently employed approximately 46,845 people, 45,617 of whom are represented by 14 unions with 23 bargaining units. Collective bargaining at NYCT/MaBSTOA since 2021 has produced several TWU pattern-following agreements that cover most the Authorities' represented employees. In the second quarter, the MTA Board approved four additional agreements that correspond to the 2019-2023 pattern. Among these were three agreements with separate bargaining units of the Transport Workers Union, Local 106, the Transit Supervisors Organization (**TSO**), covering a total of approximately 1,018 Supervisory employees. The June Board also approved a pattern-based agreement with approximately 4,000 members of the Subway Surface Supervisors Association (**SSSA**). All four of these agreements are 48 months in duration, expiring in late 2024, and provide the same series of wage increases as in the 2019-2023 TWU labor agreement: 2.0% for the first contract year, 2.25% in the second contract year, 2.5% in the third contract year, and 2.75% for the final contract year. Additionally, each bargaining unit negotiated other distinct benefits. As a partial offset to the associated costs of these benefits, the parties have agreed to a change in employee medical coverage: aside from certain grandfathering provisions, employees will no longer be eligible to participate in NYSHIP and will remain in the Hourly Health Plan upon promotion to a Supervisory position and into retirement—a measure that will result in significant recurrent annual health coverage savings. Further, this initiative has the added benefit of providing consistency in health benefit coverage between the hourly and supervisory unions and facilitates future pattern bargaining where an Agreement with TWU Local 100, who sets the pattern, includes changes to the health plan. All four agreements with these Supervisory unions are consistent with the MTA's Financial Plan.

In June, the MTA Board also approved an agreement spanning from October 1, 2017 to April 30, 2021 between NYCT and approximately 69 members of the Organization of Staff Analysts. This agreement, as distinct from those described above, is patterned after New York City's previous agreement (now expired) with its OSA employees and provides the same wage increases that the City employees received: 2.0% for 2017, 2.25% for 2018 and 3.0% for 2019. As a City pattern follower, the OSA agreement has also been anticipated in MTA's Financial Plan.

On May 15, 2023, the Authorities' four-year agreement with TWU Local 100, covering approximately 33,000 current hourly employees, expired. As mentioned above, the successor agreement—still yet to be ratified at the end of the second quarter—will set a new bargaining pattern for the vast majority of labor unions across all MTA agencies.

***MTA Bus Company*** – As of June 30, 2022, MTA Bus Company has 3,782 employees, approximately 3,665 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 second quarter of 2023.

***MTA Bridges and Tunnels*** – As of June 30, 2023, MTA Bridges and Tunnels had 874 employees, approximately 689 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 June 30, 2023, MTA Staten Island Railway had 357 employees, approximately 341 of whom are represented by four different unions (five bargaining units). At the end of the second quarter, four of the five bargaining units at SIR were under effective agreements.

---

[1] This number includes "matrixed" employees who work at MTA Headquarters but are on the payroll of another agency.

******

(A Component Unit of the State of New York)

## CONSOLIDATED INTERIM STATEMENT OF NET POSITION AS OF JUNE 30, 2023 AND CONSOLIDATED STATEMENT OF NET POSITION AS OF DECEMBER 31, 2022

**($ In millions)**

| | Business-Type Activities | |
|---|---|---|
| | **June 30, 2023** | **December 31, 2022** |
| **ASSETS AND DEFERRED OUTFLOWS OF RESOURCES** | | |
| CURRENT ASSETS: | | |
| Cash unrestricted (Note 3) | $ 771 | $ 403 |
| Cash restricted (Note 3) | 928 | 537 |
| Unrestricted investments (Note 3) | 4,932 | 9,559 |
| Restricted investments (Note 3) | 5,377 | 1,682 |
| Restricted investments held under financed purchase obligations (Notes 3 and 9) | 93 | 101 |
| Receivables: | | |
| Station maintenance, operation, and use assessments | 186 | 113 |
| State and regional mass transit taxes | 250 | 158 |
| Mortgage recording tax receivable | 32 | 39 |
| State and local operating assistance | 5 | 10 |
| Other receivable from New York City and New York State | 142 | 180 |
| Due from Build America Bonds | 1 | 3 |
| Capital project receivable from federal and state government | 126 | 81 |
| Other | 737 | 904 |
| Less allowance for doubtful accounts | (422) | (372) |
| Total receivables — net | 1,057 | 1,116 |
| Materials and supplies | 720 | 681 |
| Prepaid expenses and other current assets (Note 2) | 1,120 | 217 |
| Total current assets | 14,998 | 14,296 |
| NON-CURRENT ASSETS: | | |
| Capital assets (Note 6): | | |
| Land and construction work-in-progress | 14,163 | 22,928 |
| Other capital assets (net of accumulated depreciation and amortization) | 73,971 | 64,578 |
| Unrestricted investments (Note 3) | 1,415 | 2,496 |
| Restricted investments (Note 3) | 1,272 | 3,623 |
| Restricted investments held under financed purchase obligations (Notes 3 and 9) | 277 | 258 |
| Other non-current receivables | 327 | 384 |
| Receivable from New York State | 10 | 10 |
| Other non-current assets | 32 | 71 |
| Total non-current assets | 91,467 | 94,348 |
| TOTAL ASSETS | 106,465 | 108,644 |
| DEFERRED OUTFLOWS OF RESOURCES: | | |
| Accumulated decreases in fair value of derivative instruments (Note 7) | 95 | 109 |
| Loss on debt refunding (Note 7) | 376 | 540 |
| Deferred outflows related to pensions (Note 4) | 3,167 | 3,181 |
| Deferred outflows related to OPEB (Note 5) | 5,764 | 4,444 |
| TOTAL DEFERRED OUTFLOWS OF RESOURCES | 9,402 | 8,274 |
| TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES | $ 115,867 | $ 116,918 |

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 JUNE 30, 2023 AND CONSOLIDATED STATEMENT OF NET POSITION AS OF DECEMBER 31, 2022**
**($ In millions)**

| | Business-Type Activities | |
|---|---|---|
| | June 30, 2023 | December 31, 2022 |
| **LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION** | | |
| CURRENT LIABILITIES: | | |
| Accounts payable | $ 559 | 480 |
| Accrued expenses: | | |
| Interest | 370 | 393 |
| Salaries, wages and payroll taxes | 478 | 525 |
| Vacation and sick pay benefits | 1,127 | 1,106 |
| Current portion — retirement and death benefits | 31 | 31 |
| Current portion — estimated liability from injuries to persons (Note 11) | 598 | 567 |
| Capital accruals | 376 | 554 |
| Other accrued expenses | 712 | 796 |
| Total accrued expenses | 3,692 | 3,972 |
| Current portion — loan payable (Note 7) | 10 | 12 |
| Current portion — long-term debt (Note 7) | 3,855 | 4,800 |
| Current portion — pollution remediation projects (Note 13) | 40 | 40 |
| Derivative fuel hedge liability (Note 16) | 14 | - |
| Unearned revenues | 1,971 | 1,248 |
| Total current liabilities | 10,141 | 10,552 |
| NON-CURRENT LIABILITIES: | | |
| Net pension liability (Note 4) | 6,923 | 6,923 |
| Estimated liability arising from injuries to persons (Note 11) | 4,969 | 4,868 |
| Net OPEB liability (Note 5) | 24,956 | 24,956 |
| Loan payable (Note 7) | 67 | 71 |
| Long-term debt (Note 7) | 47,156 | 46,493 |
| Lease payable (Note 8) | 813 | 833 |
| Financed purchase (Note 9) | 172 | 170 |
| Pollution remediation projects (Note 13) | 121 | 116 |
| Contract retainage payable | 439 | 435 |
| Derivative liabilities (Note 7) | 124 | 144 |
| Other long-term liabilities | 374 | 366 |
| Total non-current liabilities | 86,114 | 85,375 |
| TOTAL LIABILITIES | 96,255 | 95,927 |
| DEFERRED INFLOWS OF RESOURCES: | | |
| Gain on debt refunding | 21 | 24 |
| Deferred inflows related to leases (Note 8) | 271 | 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 | 4,042 | 4,074 |
| NET POSITION: | | |
| Net investment in capital assets | 38,767 | 34,886 |
| Restricted for debt service | 1,048 | 381 |
| Restricted for claims | 224 | 192 |
| Restricted for other purposes (Note 2) | 2,521 | 4,491 |
| Unrestricted | (26,990) | (23,033) |
| TOTAL NET POSITION | 15,570 | 16,917 |
| TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION | $ 115,867 | $ 116,918 |

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

## SIX-MONTH PERIODS ENDED JUNE 30, 2023 AND 2022

**($ In millions)**

| | Business-Type Activities | |
|---|---|---|
| | **June 30, 2023** | **June 30, 2022** |
| OPERATING REVENUES: | | |
| Fare revenue | $ 2,227 | $ 1,869 |
| Vehicle toll revenue | 1,177 | 1,133 |
| Rents, freight, and other revenue | 343 | 323 |
| Total operating revenues | 3,747 | 3,325 |
| OPERATING EXPENSES: | | |
| Salaries and wages | 3,364 | 3,179 |
| Retirement and other employee benefits | 1,723 | 1,670 |
| Postemployment benefits other than pensions (Note 5) | 409 | 358 |
| Electric power | 263 | 269 |
| Fuel | 123 | 141 |
| Insurance | 22 | 5 |
| Claims | 174 | 185 |
| Paratransit service contracts | 252 | 191 |
| Maintenance and other operating contracts | 340 | 334 |
| Professional service contracts | 337 | 246 |
| Pollution remediation projects (Note 13) | 6 | 2 |
| Materials and supplies | 313 | 280 |
| Depreciation and amortization (Note 2) | 1,774 | 1,606 |
| Other | 135 | 116 |
| Total operating expenses | 9,235 | 8,582 |
| OPERATING LOSS | (5,488) | (5,257) |
| NON-OPERATING REVENUES (EXPENSES): | | |
| Grants, appropriations and taxes: | | |
| Tax-supported subsidies — NYS: | | |
| Mass Transportation Trust Fund subsidies | 297 | 288 |
| Metropolitan Mass Transportation Operating Assistance subsidies | 552 | 506 |
| Payroll Mobility Tax subsidies | 1,045 | 1,054 |
| MTA Aid Trust Account subsidies | 129 | 119 |
| Internet sales tax subsidies | 164 | 168 |
| Tax-supported subsidies — NYC and Local: | | |
| Mortgage Recording Tax subsidies | 177 | 363 |
| Urban Tax subsidies | 180 | 391 |
| Mansion Tax | 164 | 278 |
| Other subsidies: | | |
| Operating Assistance - 18-B program | 62 | 64 |
| Build America Bond subsidy | 40 | 39 |
| NYC Assistance Fund | 178 | 166 |
| Subtotal grants, appropriations and taxes | $ 2,988 | $ 3,436 |

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

## SIX-MONTH PERIODS ENDED JUNE 30, 2023 AND 2022

**($ In millions)**

| | Business-Type Activities | |
|---|---|---|
| | **June 30, 2023** | **June 30, 2022** |
| NON-OPERATING REVENUES (EXPENSES): | | |
| Connecticut Department of Transportation | $ 143 | $ 124 |
| Subsidies paid to Dutchess, Orange, and Rockland Counties | (2) | (3) |
| Interest on long-term debt (Note 2) | (884) | (900) |
| Station maintenance, operation and use assessments | 97 | 92 |
| Operating subsidies recoverable from NYC | 258 | 258 |
| Federal Transit Administration reimbursement related ARPA | 3 | 5,857 |
| Other net non-operating expenses | 157 | (21) |
| Net non-operating revenues | 2,760 | 8,843 |
| (LOSS) / GAIN BEFORE APPROPRIATIONS, GRANTS AND OTHER RECEIPTS EXTERNALLY RESTRICTED FOR CAPITAL PROJECTS | (2,728) | 3,586 |
| APPROPRIATIONS, GRANTS AND OTHER RECEIPTS EXTERNALLY RESTRICTED FOR CAPITAL PROJECTS | 1,381 | 1,855 |
| CHANGE IN NET POSITION | (1,347) | 5,441 |
| NET POSITION— Beginning of period | 16,917 | 9,143 |
| NET POSITION — End of period | $ 15,570 | $ 14,584 |

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
## SIX-MONTH PERIODS ENDED JUNE 30, 2023 AND 2022

**($ In millions)**

| | Business-Type Activities | |
|---|---|---|
| | **June 30, 2023** | **June 30, 2022** |
| CASH FLOWS FROM OPERATING ACTIVITIES: | | |
| Passenger receipts/tolls | $ 3,380 | $ 3,005 |
| Rents and other receipts | 471 | 408 |
| Payroll and related fringe benefits | (5,541) | (5,135) |
| Other operating expenses | (5,268) | (1,600) |
| Net cash used by operating activities | (6,958) | (3,322) |
| CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES: | | |
| Grants, appropriations, and taxes | 2,037 | 3,184 |
| Operating subsidies from CDOT | 118 | 79 |
| Subsidies paid to Dutchess, Orange, and Rockland Counties | (15) | (17) |
| Federal Transit Administration reimbursement related to COVID-19 | - | 9,461 |
| Other non-capital financing activities | (2) | - |
| Net cash provided by noncapital financing activities | 2,138 | 12,707 |
| CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES: | | |
| MTA bond proceeds | - | 675 |
| MTA Bridges and Tunnels bond proceeds | 2,997 | 1,748 |
| MTA bonds refunded/reissued | (1,102) | (233) |
| MTA Bridges and Tunnels bonds refunded/reissued | (1,023) | - |
| MTA anticipation notes redeemed | (800) | (6,139) |
| MTA credit facility refunded | - | (1,196) |
| Capital lease payments and terminations | - | 1 |
| Federal and local grants | 1,167 | 796 |
| Other capital financing activities | 4,044 | 1,304 |
| Payment for capital assets | (2,701) | (2,706) |
| Debt service payments | (1,213) | (1,099) |
| Internet and Mansion Tax | 320 | 395 |
| Receipts from leases | 29 | - |
| Payments from leases | (44) | - |
| Net cash provided by / (used by) capital and related financing activities | 1,674 | (6,454) |
| CASH FLOWS FROM INVESTING ACTIVITIES: | | |
| Purchase of long-term securities | (4,933) | (11,612) |
| Sales or maturities of long-term securities | 6,818 | 3,264 |
| Net sales or maturities of short-term securities | 1,760 | 6,392 |
| Earnings on investments | 260 | 23 |
| Net cash provided by / (used by) investing activities | 3,905 | (1,933) |
| NET INCREASE IN CASH | 759 | 998 |
| CASH — Beginning of period | 940 | 782 |
| CASH — End of period | $ 1,699 | $ 1,780 |

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**
**SIX-MONTH PERIODS ENDED JUNE 30, 2023 AND 2022**
**($ In millions)**

| | Business-Type Activities | |
|---|---|---|
| | **June 30, 2023** | **June 30, 2022** |
| RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES: | | |
| Operating loss (Note 2) | $ (5,488) | $ (5,257) |
| Adjustments to reconcile to net cash used in operating activities: | | |
| Depreciation and amortization | 1,774 | 1,606 |
| Net increase (decrease) in payables, accrued expenses, and other liabilities | (1,525) | 325 |
| Net decrease in deferred outflows related to pensions | (14) | - |
| Net increase in deferred outflow reltaed to OPEB | 1,319 | - |
| Net decrease in receivables | (2,173) | (44) |
| Net decrease in materials and supplies and prepaid expenses | (851) | 48 |
| NET CASH USED BY OPERATING ACTIVITIES | $ (6,958) | $ (3,322) |
| NONCASH INVESTING, CAPITAL AND RELATED FINANCING ACTIVITIES: | | |
| Noncash investing activities: | | |
| Interest expense includes amortization of net (premium) / discount (Note 2) | $ 157 | $ 139 |
| Interest expense which was capitalized | | |
| Total Noncash investing activities | 157 | 139 |
| Noncash capital and related financing activities: | | |
| Capital assets related liabilities | 376 | 305 |
| Interest expense for leases | 12 | - |
| Interest income from leases | 2 | - |
| Total Noncash capital and related financing activities | 390 | 305 |
| TOTAL NONCASH INVESTING, CAPITAL AND RELATED FINANCING ACTIVITIES | $ 547 | $ 444 |

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 | 1,536,398 | 1,474,725 |
| 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 | (777,037) | 1,163,400 |
| Other additions: | | |
| Total additions | 759,361 | 2,638,125 |
| **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 | 1,605,970 | 1,516,947 |
| Net (decrease) / increase in fiduciary net position | (846,609) | 1,121,178 |
| **NET POSITION:** | | |
| Restricted for Benefits: | | |
| Beginning of year | 10,188,886 | 9,067,708 |
| End of year | $ 9,342,277 | $ 10,188,886 |

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 JUNE 30, 2023 AND DECEMBER 31, 2022 AND FOR THE SIX-MONTH PERIODS ENDED JUNE 30, 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 June 30, 2023 and 2022 totaled $3.0 billion and $3.4 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 June 30th have been classified as current assets in the consolidated interim financial statements.

In accordance with the provisions of GASB Statement No. 72, *Fair Value Measurement and Application*, investments are recorded on the consolidated statement of net position at fair value, except for commercial paper, certificates of deposit, and repurchase agreements, which are recorded at amortized cost or contract value. All investment income, including changes in the fair value of investments, is reported as revenue on the consolidated statement of revenues, expenses and changes in net position. Fair values have been determined using quoted fair values at June 30, 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 June 30, 2023 and December 31, 2022 of $239 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 June 30, 2023, the MTA paid to Dutchess, Orange and Rockland Counties the 2021 excess amounts of MRT-1 and MRT-2 totaling $12.9.

- 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 $1.7 in the six months ended June 30, 2023 and $2.5 in the six months ended June 30, 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 June 30, 2023 and 2022 were $6.2 and $6.1, respectively. The amounts recovered for the periods ended June 30, 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 $152.2 million for the six months ended June 30, 2023 and $129.6 million for the six months ended June 30, 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 June 30, 2023, the balance of the assets in this program was $181.87.

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 June 30, 2023, restricted cash, primarily for capital projects, totaled $928.

Cash, including deposits in transit, consists of the following at June 30, 2023 and December 31, 2022 (in millions):

| | June 30, 2023 | | December 31, 2022 | |
|---|---|---|---|---|
| | Carrying Amount | Bank Balance | Carrying Amount | Bank Balance |
| **FDIC insured or collateralized deposits** | $ 73 | $ 95 | $ 117 | $ 116 |
| **Uninsured and not collateralized** | 1,626 | 1,807 | 823 | 801 |
| **Total Balance** | $ 1,699 | $ 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 statues 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 June 30, 2023 and December 31, 2022 (in millions):

| Investments by fair value level | June 30, 2023 | Fair Value Measurements Level 1 | Fair Value Measurements Level 2 | December 31, 2022 | Fair Value Measurements Level 1 | Fair Value Measurements Level 2 |
|---|---|---|---|---|---|---|
| Debt Securities: | | | | | | |
| U.S. treasury securities | $ 11,956 | $ 7,578 | $ 4,378 | $ 16,093 | $ 12,063 | $ 4,030 |
| U.S. government agency | 401 | - | 401 | 367 | - | 367 |
| Commercial paper | - | - | - | 300 | - | 300 |
| Asset-backed securities | 65 | - | 65 | 48 | - | 48 |
| Commercial mortgage-backed securities | 166 | - | 166 | 159 | - | 159 |
| Foreign bonds | 12 | 12 | - | 15 | 15 | - |
| Corporate bonds | 132 | 132 | - | 124 | 124 | - |
| Tax Benefit Lease Investments: | | | | | - | - |
| U.S. treasury securities | 142 | 142 | - | 144 | 127 | 17 |
| U.S. government agency | 119 | 65 | 54 | 116 | 64 | 52 |
| Repurchase agreements | 265 | 265 | - | 249 | 217 | 32 |
| Equity Securities | - | - | - | - | - | - |
| **Total investments by fair value level** | 13,258 | $ 8,194 | $ 5,064 | 17,615 | $ 12,610 | $ 5,005 |
| Financed Purchases | 108 | | | 104 | | |
| **Total Investments** | $ 13,366 | | | $ 17,719 | | |

Investments classified as Level 1 of the fair value hierarchy, totaling $8,194 and $12,610 as of June 30, 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 $455 and $419, U.S, treasury securities totaling $4,378 and $4,047, commercial paper totaling $0 and $300, asset-backed securities totaling $65 and $48, and commercial mortgage-backed securities totaling $166 and $159 as of June 30, 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 financed purchases transactions described in Note 9, 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 4.75% and 2.78% for the six months ended June 30, 2023 and year ended December 31, 2022, respectively.

**Credit Risk** — At June 30, 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 | June 30, 2023 | Percent of Portfolio | December 31, 2022 | Percent of Portfolio |
|---|---|---|---|---|
| A-1+ | $ 175 | 1% | $ 153 | 1% |
| A-1 | - | 0% | 300 | 2% |
| AAA | 299 | 2% | 217 | 1% |
| AA+ | 54 | 0% | 52 | 0% |
| AA | 34 | 0% | 33 | 0% |
| A | 73 | 2% | 69 | 1% |
| A- | 122 | 1% | 122 | 1% |
| BBB | 47 | 0% | 47 | 0% |
| B | - | 0% | - | 0% |
| Not Rated | 292 | 2% | 322 | 2% |
| U.S. Government | 12,162 | 92% | 16,300 | 92% |
| Total | 13,258 | 100% | 17,615 | 100% |
| Equities and Financed Purchases | 108 | | 104 | |
| Total investment | $ 13,366 | | $ 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.

| | June 30, 2023 | | December 31, 2022 | |
|---|---|---|---|---|
| | Fair Value | Duration | Fair Value | Duration |
| **(In millions)** | | **(in years)** | | **(in years)** |
| U.S. Treasuries | $ 11,955 | 4.93 | $ 16,093 | 4.95 |
| Federal Agencies | 401 | 5.60 | 367 | 5.75 |
| Tax benefits lease investments | 261 | 5.87 | 259 | 5.89 |
| Repurchase agreements | 265 | - | 250 | - |
| Commercial paper | 0 | - | 300 | - |
| Asset-backed securities [(1)] | 65 | 3.49 | 48 | 3.59 |
| Commercial mortgage-backed securities [(1)] | 166 | 5.77 | 159 | 5.07 |
| Foreign bonds [(1)] | 12 | 5.74 | 15 | 5.77 |
| Corporates [(1)] | 133 | 5.75 | 124 | 5.81 |
| Total fair value | 13,258 | | 17,615 | |
| Modified duration | | 4.89 | | 4.83 |
| Investments with no duration reported | 108 | | 104 | |
| Total investments | $ 13,366 | | $ 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.mta.info.

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

## *Benefits Provided*

### *1. Additional Plan —*

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

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

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

Participants who entered qualifying service before July 1, 1978 are not required to contribute. Participants who entered qualifying service on or after July 1, 1978, are required to contribute 3% of their wages. The MTA Long Island 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, 57/25Plan 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 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 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 5 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 5 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 ⅓ 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 ⅓ 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 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** | | | | |
|---|---|---|---|---|---|
| | **MNR Cash Balance Plan** | **Additional Plan** | **MaBSTOA Plan** | **MTA Defined Benefit Plan** | **TOTAL** |
| 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** | | | | |
|---|---|---|---|---|---|
| | **MNR Cash Balance Plan** | **Additional Plan** | **MaBSTOA Plan** | **MTA Defined Benefit Plan** | **TOTAL** |
| 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,** | **2022** | **2021** |
|---|---|---|
| ($ in millions) | 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 | $ 1,442.1 | $ 1,481.4 |

*MNR Cash Balance Plan's actual employer contribution for the years ended December 31, 2022 and 2021 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** | |
|---|---|---|---|---|
| **Pension Plan** | **Plan Measurement Date** | **Plan Valuation Date** | **Plan Measurement Date** | **Plan Valuation Date** |
| **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.

### *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:

| | Additional Plan | | MaBSTOA Plan | | MNR Cash Balance Plan | |
|---|---|---|---|---|---|---|
| **Valuation Date:** | **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 increses 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 |

| | MTA Defined Benefit Plan | | NYCERS | | NYSLERS | |
|---|---|---|---|---|---|---|
| **Valuation Date:** | **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 | 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:

| | Additional Plan | | MaBSTOA Plan | |
|---|---|---|---|---|
| Asset Class | 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% |
| | 100.00% | | 100.00% | |
| 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% |

| | MTA Defined Benefit Plan | | MNR Cash Balance Plan | |
|---|---|---|---|---|
| Asset Class | 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% | - | - |
| | 100.00% | | 100.00% | |
| 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%** |

| | NYCERS | | NYSLERS | |
|---|---|---|---|---|
| Asset Class | 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% |
| | 100.00% | | 100.00% | |
| 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 | |
| Pension Plan | Plan Measurement Date | Rate | Plan Measurement Date | Rate |
| **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** | $ 1,322,471 | $ 777,323 | $ 545,148 | $ 4,422,018 | $ 3,658,351 | $ 763,667 |

| | 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** | $ 1,357,323 | $ 760,690 | $ 596,633 | $ 4,246,386 | $ 3,306,616 | $ 939,770 |

| | 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** | $ 355 | $ 351 | $ 4 | $ 7,427,785 | $ 5,753,129 | $ 1,674,656 |

| | 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** | $ 378 | $ 394 | $ (16) | $ 6,950,035 | $ 5,012,765 | $ 1,937,270 |

## *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 |

| | 1% Decrease (2.0%) | Discount Rate (3.0%) | 1% Increase (4.0%) | 1% Decrease (2.0%) | Discount Rate (3.0%) | 1% Increase (4.0%) |
|---|---|---|---|---|---|---|
| | | (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 six-month period ended June 30, 2023 and year ended December 31, 2022, the MTA recognized pension expense related to each pension plan as follows (in $ thousands):

| **Pension Plan** | **June 30, 2023** | **December 31, 2022** |
|---|---|---|
| Additional Plan | $ 35,870 | $ 63,224 |
| MaBSTOA Plan | 80,066 | 132,278 |
| MNR Cash Balance plan | - | 3 |
| MTA Defined Benefit Plan | 175,199 | 385,288 |
| NYCERS | 357,372 | 453,150 |
| NYSLERS | 4,071 | 2,312 |
| **Total** | **$ 652,578** | **$ 1,036,255** |

For the six-month period ended June 30, 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):

| **For the Year Ended June 30, 2023** | **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 | $ 70,764 | $ 16,341 | $ 326,068 | $ 127,897 | $ 4 | $ 3 | $ 1,197,652 | $ 263,154 |

| **For the Year Ended June 30, 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 | 392,306 | - | 11,155 | - | 1,023,888 | - |
| Total | $ 1,512,535 | $ 557,870 | $ 59,989 | $ 90,051 | $ 3,167,012 | $ 1,055,316 |

| For the Year Ended December 31, 2022 | 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 | $ - | $ - | $ 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 |

| For the Year Ended December 31, 2022 | 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 | $ 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)**<br>**Pension Plan** | **Differences between expected and actual experience** | **Changes in proportion and differences between employer contributions and proportionate share of contributions** | **Changes in actuarial assumptions** |
|---|---|---|---|
| Additional Plan | 1.00 | N/A | 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 six-month period ended June 30, 2023 and year ended December 31, 2022, $1,023.9 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 |
| | $ (16,341) | $ 39,553 | $ (3) | $ 543,457 | $ 562,359 | $ (41,217) | $ 1,087,808 |

## *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:

| 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 -** 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.

| | **2022** | **2021** |
|---|---|---|
| | (In thousands) | |
| Employer 401K contributions | $3,833 | $3,939 |

## 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:
    - May 21, 2014 for Transport Workers Union ("TWU") Local 100;
    - September 24, 2014 for Amalgamated Transit Union ("ATU") Local 726;
    - October 29, 2014 for ATU Local 1056;
    - March 25, 2015 for Transportation Communication Union ("TCU"); and
    - 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:

| | Number of Participants | |
|---|---|---|
| | **July 1, 2021** | **July 1, 2019** |
| 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 | 117,691 | 120,768 |

**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) | **2021 Retirees** | **2020 Retirees** |
|---|---|---|
| Total blended premiums | $740,051 | $655,269 |
| Employment payment for retiree healthcare | 52,933 | 69,472 |
| **Net Payments** | $792,984 | $724,741 |

***(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).

| | NYSHIP | | TBTA | | Self-Insured | | Medicare |
|---|---|---|---|---|---|---|---|
| **Fiscal Year** | **< 65** | **> = 65** | **< 65** | **> = 65** | **< 65** | **> = 65** | **Part B Trend** |
| 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 (1.06%)** | **Discount Rate (2.06%)** | **1% Increase (3.06%)** |
| Net OPEB liability | $28,857,427 | $24,956,431 | $21,790,175 |

| **Measurement Date:** | | **December 31, 2020** | |
|---|---|---|---|
| | **1% Decrease (1.12%)** | **Discount Rate (2.12%)** | **1% Increase (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** |
| 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** |
| 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) :

| | **June 30, 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 | 2,165,680 | - | 846,299 | - |
| Total | **$ 5,763,578** | **$ 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 |
| | $ 902,872 |

## 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 June 30, 2023 (in millions):

| | Balance December 31, 2021 (Restated)* | Additions / Reclassifications | Deletions / Reclassifications | Balance December 31, 2022 | Additions / Reclassifications | Deletions / Reclassifications | Balance June 30, 2023 |
|---|---|---|---|---|---|---|---|
| Capital assets not being depreciated: | | | | | | | |
| Land | $ 249 | $ 82 | $ - | $ 331 | $ - | $ - | $ 331 |
| Construction work-in-progress | 23,377 | 6,415 | 7,195 | 22,597 | 2,414 | 11,179 | 13,832 |
| Total capital assets not being depreciated | 23,626 | 6,497 | 7,195 | 22,928 | 2,414 | 11,179 | 14,163 |
| Capital assets being depreciated: | | | | | | | |
| Buildings and structures | 22,485 | 2,794 | 5 | 25,274 | 8,260 | | 33,534 |
| Bridges and tunnels | 4,168 | 253 | - | 4,421 | 23 | | 4,444 |
| Equipment: | | | | | | | |
| Passenger cars and locomotives | 14,324 | 197 | 42 | 14,479 | 113 | 23 | 14,569 |
| Buses | 3,869 | 456 | 336 | 3,989 | 78 | 134 | 3,933 |
| Infrastructure | 30,520 | 2,134 | 14 | 32,640 | 2,306 | - | 34,946 |
| Other | 29,060 | 1,332 | 6 | 30,386 | 390 | 3 | 30,773 |
| Total capital assets being depreciated | 104,426 | 7,166 | 403 | 111,189 | 11,170 | 160 | 122,199 |
| Less accumulated depreciation: | | | | | | | |
| Buildings and structures | 9,259 | 632 | 2 | 9,889 | 366 | | 10,255 |
| Bridges and tunnels | 740 | 43 | - | 783 | 23 | | 806 |
| Equipment: | | | | | | | |
| Passenger cars and locomotives | 8,144 | 403 | 42 | 8,505 | 195 | 18 | 8,682 |
| Buses | 2,316 | 257 | 336 | 2,237 | 138 | 134 | 2,241 |
| Infrastructure | 12,598 | 981 | 12 | 13,567 | 495 | - | 14,062 |
| Other | 11,316 | 977 | 5 | 12,288 | 525 | 4 | 12,809 |
| Total accumulated depreciation | 44,373 | 3,293 | 397 | 47,269 | 1,742 | 156 | 48,855 |
| Total capital assets being depreciated - net | 60,053 | 3,873 | 6 | 63,920 | 9,428 | 4 | 73,344 |
| Capital assets - net | $ 83,679 | $ 10,370 | $ 7,201 | $ 86,848 | $ 11,842 | $ 11,183 | $ 87,507 |

| | Balance December 31, 2021 (Restated)* | Additions / Reclassifications | Deletions / Reclassifications | Balance December 31, 2022 | Additions / Reclassifications | Deletions / Reclassifications | Balance June 30, 2023 |
|---|---|---|---|---|---|---|---|
| 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 | 26 | - | 131 |
| Leased equipment and vehicles | 12 | 14 | - | 26 | 6 | - | 32 |
| Leased other | - | 1 | - | 1 | - | - | 1 |
| Total accumulated amortization | 64 | 68 | - | 132 | 32 | - | 164 |
| Right of Use Assets being amortized – net | 721 | (63) | - | 658 | (31) | - | 627 |
| Total Capital Assets, including Right of Use Assets, net of depreciation and amortization | $ 84,400 | $ 10,307 | $ 7,201 | $ 87,506 | $ 11,811 | $ 11,183 | $ 88,134 |

*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 June 30, 2023 and December 31, 2022, these retainage accounts, which are not included in these financial statements, totaled $143.3 and $155.0, respectively, including securities with a fair value of $81.2 and $131.1, respectively.

As of June 30, 2023, $63.4 billion is unexpended from the MTA's Capital Program (2005-2024) and $22.1 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 | June 30, 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 |
| | 79,242 | 29,778 | - | 1,829 | 27,949 |
| Net unamortized bond premium | - | 845 | - | 163 | 682 |
| | **79,242** | **30,623** | **-** | **1,992** | **28,631** |
| **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 | 32 | 8,892 |
| 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 |
| | 18,350 | 18,091 | 2,847 | 1,143 | 19,795 |
| Net unamortized bond premium | - | 1,689 | 162 | 155 | 1,696 |
| | **18,350** | **19,780** | **3,009** | **1,298** | **21,491** |
| **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 |
| | **1,220** | **890** | **-** | **1** | **889** |
| Total | **$ 98,812** | **$ 51,293** | **$ 3,009** | **$ 3,291** | **$ 51,011** |
| Current portion | | $ 4,800 | | | $ 3,855 |
| Long-term portion | | $ 46,493 | | | $ 47,156 |

| (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 |
| | 79,242 | 41,635 | 747 | 12,604 | 29,778 |
| Net unamortized bond premium | - | 1,158 | 74 | 387 | 845 |
| | **79,242** | **42,793** | **821** | **12,991** | **30,623** |
| **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 |
| | 15,503 | 11,617 | 6,804 | 330 | 18,091 |
| Net unamortized bond premium | - | 1,173 | 673 | 157 | 1,689 |
| | **15,503** | **12,790** | **7,477** | **487** | **19,780** |
| **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 |
| | **1,220** | **917** | **-** | **27** | **890** |
| Total | **$ 95,965** | **$ 56,500** | **$ 8,298** | **$ 13,505** | **$ 51,293** |
| Current portion | | $ 8,069 | | | $ 4,800 |
| Long-term portion | | $ 48,431 | | | $ 46,493 |

**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.

On June 22, 2023, MTA effectuated a mandatory tender and remarketed $75.560 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Series 2001C because the irrevocable direct-pay Letter of Credit (LOC) relating to the Series 2001C Bonds issued by State Street Bank and Trust Company, was expiring by its terms and was substituted with an irrevocable direct-pay LOC issued by Barclays Bank PLC. The LOC will expire on June 22, 2028.

On June 22, 2023, MTA effectuated a mandatory tender and remarketed $185.000 of Triborough Bridge and Tunnel Authority General Revenue Variable Rate Refunding Bonds, Subseries 2005B-3 because the irrevocable direct-pay LOC relating to the Subseries 2005B-3 Bonds issued by State Street Bank and Trust Company was expiring by its terms and was substituted with an irrevocable direct-pay LOC issued by Bank of America, N.A. The LOC will expire on June 22, 2027.

**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 June 30, 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) | June 30, 2023 | December 31, 2022 |
|---|---|---|
| **MTA Transit and Commuter Facilities:** | | |
| Transit Facilities Revenue Bonds | $ 176 | $ 79 |
| Commuter Facilities Revenue Bonds | 131 | 76 |
| Transit and Commuter Facilities Service Contract Bonds | (12) | - |
| **MTA Bridges and Tunnels:** | | |
| General Purpose Revenue Bonds | 85 | 160 |
| Special Obligation Subordinate Bonds | (4) | 43 |
| **Total** | $ 376 | $ 358 |

For the six months ended June 30, 2023, MTA refunding transactions decreased aggregate debt service payments by $201 and provided an economic gain of $166. For the six months ended June 30, 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 June 30, 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) | Net Present Value of Savings |
|---|---|---|---|---|---|
| Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Refunding Bonds | 2022B | 8/18/2022 | $ 1,119 | $ 174 | $ 135 |
| Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Green Bonds | 2022D | 9/15/2022 | 273 | 27 | 21 |
| Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Green Bonds | 2022E | 11/1/2022 | 742 | 391 | 64 |
| Total Bond Refunding Savings | | | $ 2,134 | $ 592 | $ 220 |

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 | June 30, 2023 |
|---|---|---|---|---|---|---|---|
| MTA: | | | | | | | |
| Transportation Revenue Bonds | $ 387 | $ (109) | $ (55) | $ 223 | $ (37) | $ (10) | $ 176 |
| State Service Contract Bonds | (12) | - | - | (12) | - | - | (12) |
| Dedicated Tax Fund Bonds | 189 | (2) | (16) | 171 | (35) | (5) | 131 |
| | 564 | (111) | (71) | 382 | (72) | (15) | 295 |
| **TBTA:** | | | | | | | |
| General Revenue Bonds | 154 | - | (16) | 138 | - | (53) | 85 |
| Subordinate Revenue Bonds | 22 | - | (2) | 20 | - | (24) | (4) |
| | 176 | - | (18) | 158 | - | (77) | 81 |
| **Total** | $ 740 | $ (111) | $ (89) | $ 540 | $ (72) | $ (92) | $ 376 |

**Debt Service Payments —** Future principal and interest debt service payments at June 30, 2023 are as follows:

| | MTA | | MTA BRIDGES AND TUNNELS | | Debt Service | |
|---|---|---|---|---|---|---|
| | Principal | Interest | Principal | Interest | Principal | Interest |
| 2023 | $ 3,620 | $ 1,287 | $ 235 | $ 461 | $ 3,855 | $ 1,748 |
| 2024 | $ 728 | $ 1,077 | $ 2,219 | $ 879 | 2,947 | 1,956 |
| 2025 | $ 675 | $ 991 | $ 611 | $ 778 | 1,286 | 1,769 |
| 2026 | $ 782 | $ 935 | $ 736 | $ 741 | 1,518 | 1,676 |
| 2027 | $ 773 | $ 932 | $ 930 | $ 710 | 1,703 | 1,642 |
| 2028-2032 | $ 5,196 | $ 3,928 | $ 3,838 | $ 3,085 | 9,034 | 7,013 |
| 2033-2037 | $ 4,843 | $ 3,121 | $ 1,839 | $ 2,572 | 6,682 | 5,693 |
| 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 | $ 19,796 | $ 13,953 | $ 48,548 | $ 30,148 |

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 June 30, 2023 are as follows (in millions):

| Year | Principal | Interest | Total |
|---|---|---|---|
| 2023 | $ 10 | $ 2 | $ 12 |
| 2024 | 9 | 2 | 11 |
| 2025 | 10 | 2 | 12 |
| 2026 | 7 | 1 | 8 |
| 2027 | 9 | 1 | 10 |
| 2028-2032 | 27 | 3 | 30 |
| 2033-2037 | 4 | 1 | 5 |
| 2038-2042 | 1 | 0 | 1 |
| **Total** | $ 77 | $ 12 | $ 89 |
| Current portion | $ 10 | | |
| Long-term portion | 67 | | |
| Total NYPA Loans Payable | $ 77 | | |

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 June 30, 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 | Barclays Bank | 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 | Bank of America, N.A. | 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 | UBS AG | LOC | 12/5/2025 |

**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 June 30, 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 June 30, 2023**

| Bond Resolution Credit | Underlying Bond Series | Type of Derivative | Cash Flow or Fair Value Hedge | Effective Methodology | Trade/Hedge Association Date | Notional Amount | Fair Value |
|---|---|---|---|---|---|---|---|
| **Cashflow Hedges** | | | | | | | |
| MTA Bridges and Tunnels Senior Revenue Bonds | 2018E & 2003B (Citi 2005B) | Libor Fixed Payer | Cash Flow | Synthetic Instrument/ Dollar Offset | 6/2/2005 | $ 185.000 | $ (5.503) |
| MTA Bridges and Tunnels Senior Revenue Bonds | 2005B-2,3,4 | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 6/2/2005 | 555.000 | (16.509) |
| MTA Bridges and Tunnels Senior Revenue Bonds | 2005A (COPS 2004A) | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 4/1/2016 | 15.515 | (0.292) |
| MTA Bridges and Tunnels Senior Revenue Bonds | 2001C (COPS 2004A) | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 12/5/2016 | 7.000 | (0.151) |
| MTA Dedicated Tax Fund Bonds | 2008A | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 3/8/2005 | 257.495 | (6.664) |
| MTA Transportation Revenue Bonds | 2002D-2 | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 7/11/2002 | 200.000 | (25.868) |
| MTA Transportation Revenue Bonds | 2005D & 2005E | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 9/10/2004 | 300.300 | (16.694) |
| MTA Transportation Revenue Bonds | 2012G | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 12/12/2007 | 355.075 | (25.236) |
| MTA Transportation Revenue Bonds | 2002G-1 (COPS 2004A) | Libor Fixed Payer | Cash Flow | Synthetic Instrument | 4/1/2016 | 46.805 | (0.088) |
| MTA Transportation Revenue Bonds | 2022E | Libor Fixed Payer | Cash Flow | Regression | 4/1/2016 | 88.330 | (2.457) |
| | | | | | **Total** | **$ 2,010.520** | **$ (99.462)** |

**Derivative Instruments - Summary Information as of December 31, 2022**

| Bond Resolution Credit | Underlying Bond Series | Type of Derivative | Cash Flow or Fair Value Hedge | Effective Methodology | Trade/Hedge Association Date | Notional Amount | Fair Value |
|---|---|---|---|---|---|---|---|
| **Cashflow Hedges** | | | | | | | |
| MTA Bridges and Tunnels Senior Revenue Bonds | 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 June 30, 2023 | | |
|---|---|---|---|---|---|
| | Classification | Amount (in millions) | Classification | Amount (in millions) | Notional (in millions) |
| **Government activities** | | | | | |
| Cash Flow hedges: | | | | | |
| Pay-fixed interest rate swaps | Deferred outflow of resources | $13.383 | Debt | $(99.462) | $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 June 30, 2023).

| Metropolitan Transportation Authority | | | | | | |
|---|---|---|---|---|---|---|
| **Related Bonds** | **Notional Amount as of 6/30/23** | **Effective Date** | **Maturity Date** | **Terms** | **Counterparty and Ratings(S&P / Moody's / Fitch)** | **Fair Value as of 6/30/23** |
| 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) | $ (25.868) |
| TRB 2005D & 2005E | 225.225 | 11/02/05 | 11/01/35 | Pay 3.561%; receive 67% 1M LIBOR | UBS AG (A+ / Aa3 / AA-) | (12.521) |
| TRB 2005E | 75.075 | 11/02/05 | 11/01/35 | Pay 3.561%; receive 67% 1M LIBOR | AIG Financial Products [1] (BBB+ / Baa2 / BBB+) | (4.173) |
| TRB 2012G | 355.075 | 11/15/12 | 11/01/32 | Pay 3.563%; receive 67% 1M LIBOR | JPMorgan Chase Bank, NA (A+ / Aa2 / AA) | (25.236) |
| 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) | (6.664) |
| **Total** | **$ 1,112.870** | | | | | **$ (74.462)** |

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

| MTA Bridges and Tunnels | | | | | | |
|---|---|---|---|---|---|---|
| Related Bonds | Notional Amount as of 6/30/23 | Effective Date | Maturity Date | Terms | Counterparty and Ratings (S&P / Moody's / Fitch) | Fair Value as of 6/30/23 |
| 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+) | $ (5.503) |
| 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) | (5.503) |
| 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-) | (5.503) |
| TBTA 2005B-4 | 185,000.000 | 07/07/05 | 01/01/32 | Pay 3.076%; receive 67% 1M LIBOR | UBS AG (A+ / Aa3 / AA-) | (5.504) |
| TRB 2002G-1 & 2022E, 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-) | (1.493) [3] |
| TRB 2002G-1 & 2022E, 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-) | (1.494) [3] |
| **Total** | **$ 897,650.000** | | | | | **$ (25.000)** |

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 June 30, 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 June 30, 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 | A+ | 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 | A+ | A2 | A+ | 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.;<br>JPMorgan Chase Bank, NA;<br>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.;<br>Citibank, N.A.;<br>JPMorgan Chase Bank, NA;<br>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;<br>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)<br>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 June 30, 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 June 30, 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.;<br>JPMorgan Chase Bank, NA;<br>UBS AG | Baa1/BBB+: $10 million<br>Baa2/BBB & below: Zero | Baa1/BBB+: $10 million<br>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<br>A1/A+: $5 million<br>A2/A: $2 million<br>A3/A-: $1 million<br>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.;<br>Citibank, N.A.;<br>JPMorgan Chase Bank, NA;<br>UBS AG | Baa1/BBB+: $30 million<br>Baa2/BBB: $15 million<br>Baa3/BBB- & below: Zero | A3/A-: $10 million<br>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;<br>Wells Fargo Bank, N.A. | Baa3/BBB- & below: Zero<br>(*note: only applicable as cure for Termination Event*) | Aa3/AA- & above: $15 million<br>A1/A+ to A3/A-: $5 million<br>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 | Variable-Rate Bonds | | | |
| June 30, 2023 | Principal | Interest | Net Swap Payments | Total |
| 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 | Variable-Rate Bonds | | | |
| June 30, 2023 | Principal | Interest | Net Swap Payments | Total |
| 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 100 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 six-month period ended June 30, 2023 and year ended December 31, 2022 is presented below (in thousands):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Lease Revenue | $15,301 | $47,079 |
| Interest Revenue | $3,458 | 8,652 |
| Other Variable Revenue | $8,238 | 7,351 |

The balance of lease receivable as of June 30, 2023 and December 31, 2022 are as follows (in thousands):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Lease Receivable – current | $35,693 | $41,470 |
| Lease Receivable – noncurrent | 253,279 | 284,778 |
| Total Lease Receivable | $288,972 | $326,248 |

MTA recognized $2,054 and $43 revenue associated with residual value of guarantees and termination penalties for the six-month period ended June 30, 2023 and year ended December 31, 2022, respectively.

The principal and interest requirements to maturity for the lease receivable subsequent to June 30, 2023, are as follows (in thousands):

| June 30, 2023 | Principal | Interest | Total |
|---|---|---|---|
| 2023 | $16,501 | $3,720 | $20,221 |
| 2024 | 37,746 | 6,798 | 44,544 |
| 2025 | 35,829 | 5,981 | 41,810 |
| 2026 | 34,099 | 5,175 | 39,273 |
| 2027 | 30,768 | 4,406 | 35,174 |
| 2028-2032 | 64,230 | 15,219 | 79,449 |
| 2033-2037 | 9,190 | 12,019 | 21,209 |
| 2038-2042 | 2,736 | 11,137 | 13,873 |
| Thereafter | 57,873 | 64,957 | 122,829 |
| Total | $288,972 | $129,412 | $418,382 |

**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 was $2,035 and $3,864 for the six-month period ended June 30, 2023 and year ended December 31, 2022, respectively. MTA recognized $1,885 and $0 expense attributable to residual value guarantees and termination penalties for the six-month period ended June 30, 2023 and year ended December 31, 2022, respectively.

The balance of lease payable as of June 30, 2023 and December 31, 2022 are as follows (in thousands):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Lease Payable – current | $40,702 | $44,607 |
| Lease Payable– noncurrent | 813,363 | 833,357 |
| Total Lease Payable | $854,065 | $877,964 |

The principal and interest requirements to maturity for the lease liability subsequent to June 30, 2023 are as follows (in thousands):

| June 30, 2023 | Principal | Interest | Total |
|---|---|---|---|
| 2023 | $21,529 | $31,735 | $53,264 |
| 2024 | 36,895 | 57,900 | 94,795 |
| 2025 | 33,511 | 58,452 | 91,963 |
| 2026 | 34,309 | 58,246 | 92,555 |
| 2027 | 28,171 | 57,849 | 86,020 |
| 2028-2032 | 157,675 | 286,817 | 444,492 |
| 2033-2037 | 138,951 | 215,411 | 354,362 |
| 2038-2042 | 117,691 | 148,518 | 266,209 |
| Thereafter | 285,333 | 151,391 | 436,724 |
| Total | $854,065 | $1,066,319 | $1,920,384 |

**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-sublease space from one another as necessary to satisfy actual occupancy needs. The agencies will be responsible for obligations under the lease based on such actual occupancy percentages. Actual occupancy percentages at 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 June 30, 2023, the market value of total collateral funds was $38.5.

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 June 30, 2023, the market value of total collateral funds was $54.2.

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 Note 8 for additional information.

**Financed Purchases Schedule**

| | For the period ended June 30, 2023 | | | |
|---|---|---|---|---|
| Description | December 31, 2022 | Increase | Decrease | June 30, 2023 |
| Met Life | 7 | - | - | 7 |
| Met Life Equity | 19 | - | - | 19 |
| Bank of New York | 22 | - | - | 22 |
| Bank of America | 38 | 2 | | 40 |
| Bank of America Equity | 16 | - | - | 16 |
| Met Life Equity | 68 | - | - | 68 |
| Total MTA Financed Purchase | $ 170 | $ 2 | $ - | $ 172 |
| Current Portion Financed Purchase | - | | | - |
| Long Term Portion Financed Purchase | $ 170 | | | $ 172 |

| 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 June 30, 2023:

| Year | ERY | WRY | Total |
|---|---|---|---|
| 2023 | $ 8 | $ 33 | $ 41 |
| 2024 | 8 | 36 | 44 |
| 2025 | 8 | 36 | 44 |
| 2026 | 8 | 36 | 44 |
| 2027 | 8 | 36 | 44 |
| Thereafter | 3,215 | 14,207 | 17,422 |
| Total | $ 3,255 | $ 14,384 | $ 17,639 |

## 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 June 30, 2023 and year ended December 31, 2022 is presented below (in millions):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Balance - beginning of year | $ 5,435 | $ 5,100 |
| Activity during the year: | | |
| Current year claims and changes in estimates | 419 | 867 |
| Claims paid | (287) | (532) |
| Balance - end of year | 5,567 | 5,435 |
| Less current portion | (598) | (567) |
| Long-term liability | $ 4,969 | $ 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 13).

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 $6 and $2 for the periods ended June 30, 2023 and 2022, respectively. A summary of the activity in pollution remediation liability at June 30, 2023 and December 31, 2022 were as follows:

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Balance at beginning of year | $ 156 | $ 145 |
| Current year expenses/changes in estimates | 6 | 26 |
| Current year payments | (1) | (15) |
| Balance at end of year | 161 | 156 |
| Less current portion | 40 | 40 |
| Long-term liability | $ 121 | $ 116 |

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 June 30, 2023 and December 31, 2022 are presented below:

| | Balance December 31, 2021 | Additions | Reductions | Balance December 31, 2022 | Additions | Reductions | Balance June 30, 2023 |
|---|---|---|---|---|---|---|---|
| **Non-current liabilities:** | (Restated) * | | | | | | |
| Contract retainage payable | $ 416 | $ 19 | $ - | 435 | $ 4 | $ - | $ 439 |
| Other long-term liabilities | 414 | - | (48) | 366 | 8 | - | 374 |
| **Total non-current liabilities** | **$ 830** | **$ 19** | **$ (48)** | **$ 801** | **$ 12** | **$ -** | **$ 813** |

* 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 $864 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 | JPMorgan | BOA_ Merrill | BOA_ Merrill | BOA_ Merrill | Cargill | Goldman Sachs | Goldman Sachs | Cargill |
|---|---|---|---|---|---|---|---|---|
| Trade Date | 7/27/2021 | 8/31/2021 | 9/29/2021 | 10/25/2021 | 11/30/2021 | 12/28/2021 | 1/25/2022 | 2/28/2022 |
| Effective Date | 7/1/2022 | 8/1/2022 | 9/1/2022 | 10/1/2022 | 11/1/2022 | 12/1/2022 | 1/1/2023 | 2/1/2023 |
| Termination Date | 6/30/2023 | 7/31/2023 | 8/31/2023 | 9/30/2023 | 10/31/2023 | 11/30/2023 | 12/31/2023 | 1/31/2024 |
| Price/Gal | $2.0505 | $2.0345 | $2.1459 | $2.2879 | $2.0100 | $2.2227 | $2.3615 | $2.5015 |
| Original Notional Quantity | 2,826,751 | 2,826,725 | 2,826,740 | 2,826,749 | 2,826,751 | 2,826,765 | 2,826,779 | 2,826,759 |

| Counterparty | Cargill | Cargill | Goldman Sachs | Goldman Sachs | BOA_ Merrill | BOA_ Merrill | Cargill | BOA_ Merrill |
|---|---|---|---|---|---|---|---|---|
| Trade Date | 3/31/2022 | 4/28/2022 | 5/31/2022 | 6/27/2022 | 7/25/2022 | 8/29/2022 | 9/29/2022 | 10/25/2022 |
| Effective Date | 3/1/2023 | 4/1/2023 | 5/1/2023 | 6/1/2023 | 7/1/2023 | 8/1/2023 | 9/1/2023 | 10/1/2023 |
| Termination Date | 2/29/2024 | 3/31/2024 | 4/30/2024 | 5/31/2024 | 6/30/2024 | 7/31/2024 | 8/31/2024 | 9/30/2024 |
| Price/Gal | $2.7469 | $2.8675 | $2.9450 | $3.0195 | $2.8739 | $2.9620 | $2.6846 | $2.7422 |
| Original Notional Quantity | 2,826,761 | 2,826,752 | 2,826,757 | 2,826,738 | 2,826,751 | 2,826,725 | 2,826,740 | 2,826,749 |

| Counterparty | BOA_ Merrill | Goldman Sachs | Cargill | Cargill | Cargill | Goldman Sachs | JPMorgan | Goldman Sachs |
|---|---|---|---|---|---|---|---|---|
| Trade Date | 11/30/2022 | 12/28/2022 | 1/31/2023 | 2/28/2023 | 3/29/2023 | 4/24/2023 | 5/30/2023 | 6/27/2023 |
| Effective Date | 11/1/2023 | 12/1/2023 | 1/1/2024 | 2/1/2024 | 3/1/2024 | 4/1/2024 | 5/1/2024 | 6/1/2024 |
| Termination Date | 10/31/2024 | 11/1/2024 | 12/31/2024 | 1/31/2025 | 2/28/2025 | 3/31/2025 | 4/30/2025 | 5/31/2025 |
| Price/Gal | $2.7624 | $2.7030 | $2.6867 | $2.5711 | $2.4373 | $2.4357 | $2.2500 | $2.2942 |
| Original Notional Quantity | 2,826,751 | 2,826,765 | 2,826,779 | 2,826,759 | 1,633,857 | 2,462,350 | 2,636,717 | 2,636,709 |

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 June 30, 2023, the total outstanding notional value of the ULSD contracts was 50.5 million gallons with a negative fair value of $14.3. 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).

| June 30, 2023 | MTA | Metro - North Railroad | Long Island Railroad | New York City Transit Authority | Triborough Bridge and Tunnel Authority | Eliminations | Consolidated Total |
|---|---|---|---|---|---|---|---|
| Current assets | $ 12,402 | $ 448 | $ 621 | $ 761 | $ 913 | $ (147) | $ 14,998 |
| Capital assets | 14,312 | 7,012 | 10,604 | 48,362 | 7,845 | (1) | 88,134 |
| Other Assets | 29,053 | 90 | 71 | 44 | 1,310 | (27,235) | 3,333 |
| Intercompany receivables | 378 | 569 | 625 | 4,311 | 10,570 | (16,453) | - |
| Deferred outflows of resources | 2,601 | 740 | 919 | 4,840 | 368 | (66) | 9,402 |
| **Total assets and deferred outflows of resources** | **$ 58,746** | **$ 8,859** | **$ 12,840** | **$ 58,318** | **$ 21,006** | **$ (43,902)** | **$ 115,867** |
| Current liabilities | $ 6,740 | $ 363 | $ 288 | $ 2,114 | $ 830 | $ (194) | $ 10,141 |
| Non-current liabilities | 30,554 | 2,693 | 3,992 | 26,385 | 22,516 | (26) | 86,114 |
| Intercompany payables | 15,347 | 134 | 51 | 399 | 499 | (16,430) | - |
| Deferred inflows of resources | 580 | 474 | 819 | 1,935 | 234 | - | 4,042 |
| **Total liabilities and deferred inflows of resources** | **$ 53,221** | **$ 3,664** | **$ 5,150** | **$ 30,833** | **$ 24,079** | **$ (16,650)** | **$ 100,297** |
| Net investment in capital assets | $ (19,279) | $ 6,785 | $ 10,548 | $ 47,927 | $ (6,794) | $ (420) | $ 38,767 |
| Restricted | 3,446 | - | - | - | 798 | (451) | 3,793 |
| Unrestricted | 21,358 | (1,590) | (2,858) | (20,442) | 2,923 | (26,381) | (26,990) |
| **Total net position** | **$ 5,525** | **$ 5,195** | **$ 7,690** | **$ 27,485** | **$ (3,073)** | **$ (27,252)** | **$ 15,570** |
| **For the period ended June 30, 2023** | | | | | | | |
| Fare revenue | $ 89 | $ 263 | $ 263 | $ 1,612 | $ - | $ - | $ 2,227 |
| Vehicle toll revenue | - | - | - | - | 1,177 | - | 1,177 |
| Rents, freight and other revenue | 30 | 18 | 13 | 290 | 12 | (20) | 343 |
| **Total operating revenue** | **119** | **281** | **276** | **1,902** | **1,189** | **(20)** | **3,747** |
| Total labor expenses | 630 | 526 | 661 | 3,569 | 110 | - | 5,496 |
| Total non-labor expenses | 373 | 213 | 204 | 1,089 | 112 | (26) | 1,965 |
| Depreciation and amortization | 125 | 162 | 281 | 1,097 | 109 | - | 1,774 |
| **Total operating expenses** | **1,128** | **901** | **1,146** | **5,755** | **331** | **(26)** | **9,235** |
| **Operating (deficit) surplus** | **(1,009)** | **(620)** | **(870)** | **(3,853)** | **858** | **6** | **(5,488)** |
| Subsidies and grants | 407 | - | - | 87 | 4 | (218) | 280 |
| Tax revenue | 2,334 | - | - | 1,223 | - | (849) | 2,708 |
| Interagency subsidy | 660 | 465 | 582 | 211 | - | (1,918) | - |
| Interest expense | (610) | (4) | (1) | (56) | (206) | (7) | (884) |
| Other | 87 | 146 | (1) | 134 | (492) | 782 | 656 |
| **Total non-operating revenues (expenses)** | **2,878** | **607** | **580** | **1,599** | **(694)** | **(2,210)** | **2,760** |
| **Gain (Loss) before appropriations** | 1,869 | (13) | (290) | (2,254) | 164 | (2,204) | (2,728) |
| **Appropriations, grants and other receipts externally restricted for capital projects** | (1,420) | 246 | 413 | 624 | (465) | 1,983 | 1,381 |
| **Change in net position** | 449 | 233 | 123 | (1,630) | (301) | (221) | (1,347) |
| **Net position, beginning of period** | 5,076 | 4,962 | 7,567 | 29,115 | (2,772) | (27,031) | 16,917 |
| **Net position, end of period** | **$ 5,525** | **$ 5,195** | **$ 7,690** | **$ 27,485** | **$ (3,073)** | **$ (27,252)** | **$ 15,570** |
| **For the period ended June 30, 2023** | | | | | | | |
| **Net cash (used by) / provided by operating activities** | $ (2,944) | $ (592) | $ (1,647) | $ (2,754) | $ 979 | $ - | $ (6,958) |
| **Net cash provided by / (used by) non-capital financing activities** | 2,788 | 584 | 1,612 | 2,099 | (244) | (4,701) | 2,138 |
| **Net cash (used by) / provided by capital and related financing activities** | (2,708) | 8 | 36 | (532) | 1,559 | 3,311 | 1,674 |
| **Net cash provided by / (used by) investing activities** | 3,617 | - | - | 1,191 | (2,293) | 1,390 | 3,905 |
| **Cash at beginning of period** | 882 | 19 | 5 | 25 | 9 | - | 940 |
| **Cash at end of period** | **$ 1,635** | **$ 19** | **$ 6** | **$ 29** | **$ 10** | **$ -** | **$ 1,699** |

| December 31, 2022 | MTA | Metro-North Railroad | Long Island Railroad | New York City Transit Authority | Triborough Bridge and Tunnel Authority | Eliminations | Consolidated Total |
|---|---|---|---|---|---|---|---|
| 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 June 30, 2022** | | | | | | | |
| Fare revenue | $ 77 | $ 195 | $ 205 | $ 1,392 | $ - | $ - | $ 1,869 |
| Vehicle toll revenue | - | - | - | - | 1,133 | - | 1,133 |
| Rents, freight and other revenue | 34 | 17 | 16 | 263 | 11 | (18) | 323 |
| **Total operating revenue** | **111** | **212** | **221** | **1,655** | **1,144** | **(18)** | **3,325** |
| | | | | | | | |
| Total labor expenses | 579 | 486 | 594 | 3,437 | 111 | - | 5,207 |
| Total non-labor expenses | 275 | 206 | 202 | 993 | 110 | (17) | 1,769 |
| Depreciation and amortization | 48 | 151 | 245 | 1,064 | 98 | - | 1,606 |
| **Total operating expenses** | **902** | **843** | **1,041** | **5,494** | **319** | **(17)** | **8,582** |
| | | | | | | | |
| **Operating (deficit) surplus** | **(791)** | **(631)** | **(820)** | **(3,839)** | **825** | **(1)** | **(5,257)** |
| | | | | | | | |
| Subsidies and grants | 521 | 124 | - | 201 | 4 | (202) | 648 |
| Tax revenue | 2,528 | - | - | 1,785 | 249 | (1,395) | 3,167 |
| Interagency subsidy | 605 | 25 | (47) | 198 | - | (781) | - |
| Interest expense | (727) | - | - | (4) | (170) | 1 | (900) |
| Other | 4,627 | - | - | 1 | - | 1,300 | 5,928 |
| **Total non-operating revenues (expenses)** | **7,554** | **149** | **(47)** | **2,181** | **83** | **(1,077)** | **8,843** |
| | | | | | | | |
| **Gain (Loss) before appropriations** | 6,763 | (482) | (867) | (1,658) | 908 | (1,078) | 3,586 |
| **Appropriations, grants and other receipts externally restricted for capital projects** | (452) | 441 | 554 | 554 | (813) | 1,571 | 1,855 |
| **Change in net position** | 6,311 | (41) | (313) | (1,104) | 95 | 493 | 5,441 |
| **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** | **$ (2,463)** | **$ 4,061** | **$ 6,127** | **$ 23,546** | **$ (2,543)** | **$ (14,144)** | **$ 14,584** |
| | | | | | | | |
| **For the period ended June 30, 2022** | | | | | | | |
| **Net cash (used in) / provided by operating activities** | $ (735) | $ (442) | $ (495) | $ (2,656) | $ 1,006 | $ - | $ (3,322) |
| **Net cash provided by / (used in) non-capital financing activities** | 13,713 | 163 | 150 | 2,794 | 1,063 | (5,176) | 12,707 |
| **Net cash (used in) / provided by capital and related financing activities** | (8,417) | (47) | (24) | (505) | (441) | 2,980 | (6,454) |
| **Net cash provided by / (used in) investing activities** | (3,570) | 327 | 369 | 366 | (1,621) | 2,196 | (1,933) |
| **Cash at beginning of period** | 515 | 17 | 5 | 28 | 217 | - | 782 |
| **Cash at end of period** | **$ 1,506** | **$ 18** | **$ 5** | **$ 27** | **$ 224** | **$ -** | **$ 1,780** |

## 18. SUBSEQUENT EVENTS

On July 6, 2023, MTA issued $600 of Triborough Bridge and Tunnel Authority Payroll Mobility Tax Senior Lien Green Bonds, Series 2023B. Proceeds from the transaction were used to finance approved transit and commuter projects and to refinance $193.565 MTA Transportation Revenue Variable Rate Bonds, Subseries 2015E-2.

On July 19, 2023, MTA extended its irrevocable direct-pay LOC issued by Barclays Bank PLC that is associated with Transportation Revenue Variable Rate Refunding Bonds, Subseries 2012G-1 for three years to July 17, 2026.

On July 19, 2023, MTA extended its irrevocable direct-pay LOC issued by Barclays Bank PLC that is associated with Triborough Bridge and Tunnel Authority General Revenue Variable Rate Bonds, Series 2005A for four years to July 19, 2028.

On July 28, 2023, MTA executed a 2,636,706 gallon ultra-low sulfur diesel fuel hedge at an all-in price of $2.5468 (whole dollars) per gallon. The hedge covers the period from July 2024 through June 2025.

On August 6, 2023, toll increases of 6% went into effect on bridges and tunnels. On August 20, 2023, fare increases went into effect across MTA subways, buses, and commuter railroads. With additional funding from New York State, the MTA was able to keep the fare increase to 4%. This was the first fare increase since 2019 and the first increase in the base subway and bus fare since 2015. Before the COVID-19 pandemic, implementation of fare increases occurred every two years. Due to additional funding from New York State, the MTA was able to delay the 2021 scheduled fare increase. With ridership growing, the MTA is expected to return to regular fare increases, which will allow the MTA to maintain current service levels and increase service frequency.

On August 17, 2023, MTA issued $370.030 of Triborough Bridge and Tunnel Authority General Revenue Bonds, Series 2023B, consisting of Subseries 2023B-1 and General Revenue Refunding Bonds, Subseries 2023B-2. Proceeds from the 2023B-1 transaction were used to finance bridge and tunnel projects in the MTA Bridges and Tunnels Capital Program and to pay certain financing, legal and miscellaneous expenses associated with the Subseries 2023B-1 Bonds. Proceeds from Subseries 2023B-2 will be used to refund certain outstanding bonds of MTA Bridges and Tunnels and to pay certain financing, legal and miscellaneous expenses associated with the subseries 2023B-2 Bonds.

On August 29, 2023, MTA executed a 2,636,714 gallon ultra-low sulfur diesel fuel hedge at an all-in price of $2.5697 (whole dollars) per gallon. The hedge covers the period from August 2024 through July 2025.

On September 26, 2023, MTA executed a 2,636,696 gallon ultra-low sulfur diesel fuel hedge at an all-in price of $2.6525 (whole dollars) per gallon. The hedge covers the period from September 2024 through August 2025.

*******

## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

**($ in thousands)**

**Additional Plan**

| Plan Measurement Date (December 31): | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|---|---|---|
| **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.

## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

**($ in thousands)**

| | MaBSTOA Plan | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Plan Measurement Date (December 31):** | **2021** | **2020** | **2019** | **2018** | **2017** | **2016** | **2015** | **2014** |
| **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.

DRAFT



## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

($ in thousands)

| | MNR Cash Balance Plan | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Plan Measurement Date (December 31): | **2021** | **2020** | **2019** | **2018** | **2017** | **2016** | **2015** | **2014** |
| Total pension liability: | | | | | | | | |
| Interest | $ 11 | | $ 18 | $ 20 | $ 21 | $ 24 | $ 29 | $ 32 |
| Effect of economic / demographic (gains) or losses | (11) | 10 | 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.

## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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

**($ in thousands)**

| | MTA Defined Benefit Plan | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Plan Measurement Date (December 31):** | **2021** | **2020** | **2019** | **2018** | **2017** | **2016** | **2015** | **2014** |
| **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)**

| | NYCERS Plan | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Plan Measurement Date: | **June 30, 2022** | **June 30, 2021** | **June 30, 2020** | **June 30, 2019** | **June 30, 2018** | **June 30, 2017** | **June 30, 2016** | **June 30, 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 |
| 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 |
| 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% |

| | NYSLERS Plan | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Plan Measurement Date: | **March 31, 2022** | **March 31, 2021** | **March 31, 2020** | **March 31, 2019** | **March 31, 2018** | **March 31, 2017** | **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 |
| MTA's actual covered payroll | $ 110,702 | $ 102,838 | $ 105,457 | $ 109,252 | $ 105,269 | $ 96,583 | $ 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.

DRAFT



## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| **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, (continued)

| ($ 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 | Entry Age Normal Cost | Entry Age Normal Cost | 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 | Entry Age Normal Cost | Entry Age Normal Cost | 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. | 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. | 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) | | |
|---|---|---|---|
| **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 |

DRAFT

## 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 |

DRAFT



## 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 |

## 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. |

## 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. |

**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 Unfundeds. | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. |
| **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 Yeat 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 | Entry Age Normal Cost | Entry Age Normal Cost | Entry Age Normal Cost |
| **Amortization method:** | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. | Increasing Dollar for Initial Unfunded; Level Dollar for Post 2010 Unfundeds. |
| **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:** | 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% | 3.80% |
| **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) | 1,917,814 |
| **Total OPEB liability—beginning** | 24,409,581 | 21,531,473 | 19,933,888 | 20,705,068 | 18,787,254 |
| **Total OPEB liability—ending (a)** | 24,956,514 | 24,409,581 | 21,531,473 | 19,933,888 | 20,705,068 |
| **Plan fiduciary net position:** | | | | | |
| Employer contributions | 792,984 | 387,371 | 730,677 | 691,122 | 650,994 |
| Member contributions | | - | - | - | - |
| 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 | $ 20,334,716 |
| **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 | $ 5,394,332 |
| **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 | Entry Age Normal | Entry Age Normal | Entry Age Normal | Entry Age Normal |
| Amortization method | Level percentage of payroll | Level percentage of payroll | Level percentage of payroll | Level percentage of payroll | Level percentage of payroll |
| Normal cost increase factor | 4.25% | 4.25% | 4.50% | 4.50% | 4.50% |
| Investment rate of return | 2.06% | 2.12% | 5.75% | 6.50% | 6.50% |
| Salary increases | 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. |

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: Defined Benefit Pension Plan | Pension Funds: LIRR Company Plan for Additional Pensions | Pension Funds: MaBSTOA Plan | Other Employee Benefit Trust Fund: Other Post-employment Benefits Plan | Total |
|---|---|---|---|---|---|
| **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 | |
|---|---|---|---|---|---|
| | Defined Benefit Pension Plan | LIRR Company Plan for Additional Pensions | MaBSTOA Plan | Other Post-employment Benefits Plan | Total |
| **ASSETS:** | | | | | |
| Cash | $ 24,495 | $ 2,956 | $ 11,821 | $ 107 | $ 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 | $ 107 | $ 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 | 24 | 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 | 24 | 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 | 83 |
| Total net position | 5,753,129 | 777,323 | 3,658,351 | 83 | 10,188,886 |
| Total liabilities and net position | $ 5,769,264 | $ 778,768 | $ 3,676,134 | $ 107 | $ 10,224,273 |

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

DRAFT



**(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 | |
|---|---|---|---|---|---|
| | Defined Benefit Pension Plan | LIRR Additional Plan | MaBSTOA Plan | Other Post-employment Benefit Plan | Total |
| **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**

| ($ in thousands) | Pension Funds | | | Other Employee Benefit Trust Fund | |
|---|---|---|---|---|---|
| | Defined Benefit Pension Plan | LIRR Additional Plan | MaBSTOA Plan | Other Post-employment Benefits Plan | Total |
| **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 JUNE 30, 2023
**($ in millions)**

| Category | Financial Plan Actual | Statement GAAP Actual | Variance |
|---|---|---|---|
| REVENUE: | | | |
| Farebox revenue | $ 2,156 | $ 2,227 | $ 71 |
| Vehicle toll revenue | 1,109 | 1,177 | 68 |
| Other operating revenue | 397 | 343 | (54) |
| Total revenue | 3,662 | 3,747 | 85 |
| OPERATING EXPENSES: | | | |
| Labor: | | | |
| Payroll | 2,900 | 2,804 | (96) |
| Overtime | 441 | 560 | 119 |
| Health and welfare | 829 | 772 | (57) |
| Pensions | 678 | 668 | (10) |
| Other fringe benefits | 537 | 531 | (6) |
| Postemployment benefits | 418 | 409 | (9) |
| Reimbursable overhead | (219) | (248) | (29) |
| Total labor expenses | 5,584 | 5,496 | (88) |
| Non-labor: | | | |
| Electric power | 320 | 263 | (57) |
| Fuel | 131 | 123 | (8) |
| Insurance | 31 | 22 | (9) |
| Claims | 224 | 174 | (50) |
| Paratransit service contracts | 234 | 252 | 18 |
| Maintenance and other operating contracts | 464 | 340 | (124) |
| Professional service contract | 294 | 337 | 43 |
| Pollution remediation project costs | - | 6 | 6 |
| Materials and supplies | 343 | 313 | (30) |
| Other business expenses | 128 | 135 | 7 |
| Total non-labor expenses | 2,169 | 1,965 | (204) |
| Depreciation and amortization | 1,610 | 1,774 | 164 |
| Other Expenses Adjustment | 3 | - | (3) |
| Total operating expenses | 9,366 | 9,235 | (131) |
| NET OPERATING LOSS | $ (5,704) | $ (5,488) | $ 216 |

**(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 JUNE 30, 2023**
**($ in millions)**

| Accrued Subsidies | Financial Plan Actual | Financial Statement GAAP Actual | Variance | |
|---|---|---|---|---|
| Mass transportation operating assistance | $ 538 | $ 552 | $ 14 | {3} |
| Mass transit trust fund subsidies | 298 | 297 | (1) | {1} |
| Mortgage recording tax 1 and 2 | 317 | 177 | (140) | {1} |
| MRT transfer | | (2) | (2) | {1} |
| Urban tax | 250 | 180 | (70) | {1} |
| State and local operating assistance | 68 | 62 | (6) | {1} |
| Station maintenance | 95 | 97 | 2 | {1} |
| Connecticut Department of Transportation (CDOT) | 127 | 143 | 16 | {1} |
| Subsidy from New York City for MTA Bus and SIRTOA | 287 | 258 | (29) | {1} |
| Build American Bonds Subsidy | - | 40 | 40 | {1} |
| Mobility tax | 1,038 | 1,174 | 136 | {1} |
| Assistance Fund (For hire vehicle) | 170 | 178 | 8 | {1} |
| Real Property Transfer Tax Surcharge (Mansion Tax) | 156 | 164 | 8 | {1} |
| Internet Marketplace Tax | 164 | 164 | - | {1} |
| Transfer to Central Business District Capital Lockbox | (320) | - | 320 | {1} |
| Other non-operating income | - | 160 | 160 | {2} |
| **Total accrued subsidies** | **3,188** | **3,644** | **456** | |
| Net operating deficit before subsidies and debt service | (5,704) | (5,488) | 216 | |
| Debt Service | (1,533) | (884) | 649 | |
| Conversion to Cash basis: Depreciation | 1,611 | - | (1,611) | |
| Conversion to Cash basis: GASB 68 pension adjustment | 27 | - | (27) | |
| Conversion to Cash basis: Pollution & Remediation | 1 | - | (1) | |
| **Total net operating surplus/(deficit) before appropriations, grants and other receipts restricted for capital projects** | **$ (2,410)** | **$ (2,728)** | **$ (318)** | |

{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 JUNE 30, 2023**
**($ in millions)**

| | | | |
|---|---|---|---|
| **Financial Plan Actual Operating Loss at June 30, 2023** | | | **$ (5,704)** |
| **The Financial Plan Actual Includes:** | | | |
| **1** | Lower Other operating revenue | | 85 |
| **2** | Higher labor expense primarily from higher payroll expense projections | | 88 |
| **3** | Higher non-labor expense primarily from higher professional service contract expense | | 204 |
| **4** | Other expense adjustments | | (161) |
| **Total operating reconciling items** | | | **216** |
| **Financial Statements Operating Loss at June 30, 2023** | | | **(5,488)** |
| **Financial Plan Deficit after Subsidies and Debt Service** | | | **(2,410)** |
| **The Audited Financial Statements Includes:** | | | |
| **1** | Debt service bond principal payments | | 649 |
| **2** | Adjustments for non-cash liabilities: | | |
| | Depreciation | (1,611) | |
| | Unfunded GASB No. 68 pension adjustment | (27) | |
| | Other non-cash liability adjustment | (1) | (1,639) |
| **The Financial Statement includes:** | | | |
| **3** | Higher subsidies and other non-operating revenues and expenses | | 456 |
| **4** | Total operating reconciling items (from above) | | 216 |
| **Financial Statement Loss Before Capital Appropriations** | | | **$ (2,728)** |

# 2021 Inspection Deloitte & Touche LLP

(Headquartered in New York, New York)

November 4, 2022

THIS IS A PUBLIC VERSION OF A PCAOB INSPECTION REPORT

PORTIONS OF THE COMPLETE REPORT ARE OMITTED FROM THIS DOCUMENT IN ORDER TO COMPLY WITH SECTIONS 104(g)(2) AND 105(b)(5)(A) OF THE SARBANES-OXLEY ACT OF 2002

PCAOB RELEASE NO. 104-2022-219

PCAOB
PUBLIC COMPANY ACCOUNTING OVERSIGHT BOARD

# EXECUTIVE SUMMARY

Our 2021 inspection report on Deloitte & Touche LLP provides information on our inspection to assess the firm's compliance with Public Company Accounting Oversight Board (PCAOB) standards and rules and other applicable regulatory and professional requirements. This executive summary offers a high-level overview of:

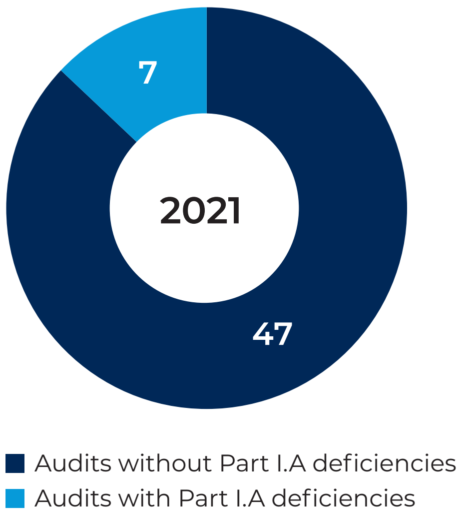
- Part I.A of the report, which discusses deficiencies ("Part I.A deficiencies") in certain issuer audits that were of such significance that we believe the firm, at the time it issued its audit report(s), had not obtained sufficient appropriate audit evidence to support its opinion(s) on the issuer's financial statements and/or internal control over financial reporting (ICFR); and

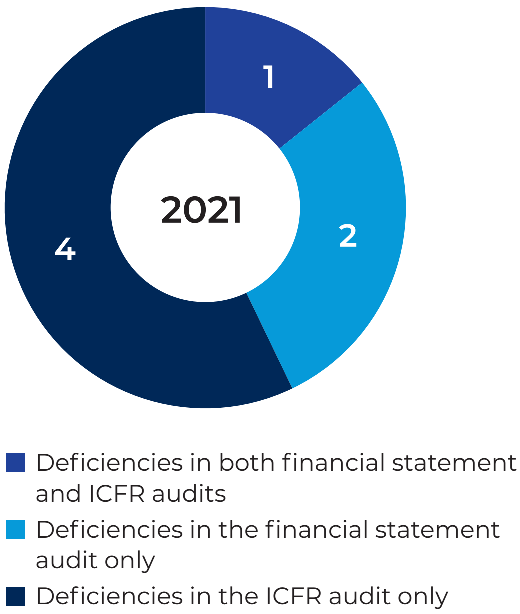
- Part I.B of the report, which discusses deficiencies that do not relate directly to the sufficiency or appropriateness of evidence the firm obtained to support its opinion(s) but nevertheless relate to instances of non-compliance with PCAOB standards or rules.

If we include a deficiency in this report — other than those deficiencies for audits with incorrect opinions on the financial statements and/or ICFR — it does not necessarily mean that the issuer's financial statements are materially misstated or that undisclosed material weaknesses in ICFR exist. If we include a deficiency in Part I.A or Part I.B of this report, it does not necessarily mean that the firm has not addressed the deficiency.

## Overview of the 2021 Deficiencies Included in Part I

Seven of the 54 audits we reviewed in 2021 are included in Part I.A of this report due to the significance of the deficiencies identified. The identified deficiencies primarily related to the firm's testing of controls over and substantive testing of inventory.



The most common Part I.A deficiencies in 2021 related to testing the design or operating effectiveness of controls selected for testing and testing controls over the accuracy and completeness of data or reports used in the operation of controls.

Other deficiencies identified during the 2021 inspection that do not relate directly to the sufficiency or appropriateness of evidence the firm obtained to support its opinion(s), which appear in Part I.B, related to management representation letters, retention of audit documentation, audit committee communications, the firm's audit report, and critical audit matters.

# TABLE OF CONTENTS

# 2021 INSPECTION

In the 2021 inspection of Deloitte & Touche LLP, the PCAOB assessed the firm's compliance with laws, rules, and professional standards applicable to the audits of public companies.

We selected for review 54 audits of issuers with fiscal years generally ending in 2020. For each issuer audit selected, we reviewed a portion of the audit. We also evaluated elements of the firm's system of quality control.

We also selected for review two reviews of interim financial information ("interim reviews"). Our reviews were performed to gain a timely understanding of emerging financial reporting and auditing risks associated with issuers that were formed by mergers between non-public operating companies and special purpose acquisition companies (SPACs). We did not identify any instances of non-compliance with PCAOB standards related to the interim reviews that we reviewed.

## What's Included in this Inspection Report

This report includes the following sections:

- **Overview of the 2021 Inspection and Historical Data by Inspection Year:** Information on our inspection, historical data, and common deficiencies.
- **Part I – Inspection Observations:**
    - o **Part I.A:** Deficiencies that were of such significance that we believe the firm, at the time it issued its audit report(s), had not obtained sufficient appropriate audit evidence to support its opinion(s) on the issuer's financial statements and/or ICFR.
    - o **Part I.B:** Deficiencies that do not relate directly to the sufficiency or appropriateness of evidence the firm obtained to support its opinion(s) but nevertheless relate to instances of non-compliance with PCAOB standards or rules.
- **Part II – Observations Related to Quality Control:** Criticisms of, or potential defects in, the firm's system of quality control. Section 104(g)(2) of the Sarbanes-Oxley Act ("Act") restricts us from publicly disclosing Part II deficiencies unless the firm does not address the criticisms or potential defects to the Board's satisfaction no later than 12 months after the issuance of this report.
- **Appendix A – Firm's Response to the Draft Inspection Report:** The firm's response to a draft of this report, excluding any portion granted confidential treatment.

## 2021 Inspection Approach

In selecting issuer audits for review, we use both risk-based and random methods of selection. We make the majority of our selections based on (1) our internal evaluation of audits we believe have a heightened risk of material misstatement, including those with challenging audit areas, and (2) other risk-based characteristics, including issuer and firm considerations. We also select audits randomly to provide an element of unpredictability.

When we review an audit, we do not review every aspect of the audit. Rather, we generally focus our attention on audit areas we believe to be of greater complexity, areas of greater significance or with a heightened risk of material misstatement to the issuer's financial statements, and areas of recurring deficiencies. We may also select some audit areas for review in a manner designed to incorporate unpredictability.

Our selection of audits for review does not constitute a representative sample of the firm's total population of issuer audits. Additionally, our inspection findings are specific to the particular portions of the issuer audits reviewed. They are not an assessment of all of the firm's audit work nor of all of the audit procedures performed for the audits reviewed.

Our target team performs inspection procedures in areas of current audit risk and emerging topics and focuses its reviews primarily on evaluating the firm's procedures related to that risk or topic. In 2021, our target team focused primarily on audit areas affected by COVID-19, such as fraud and going concern, and on interim reviews of issuers that were formed by mergers between non-public operating companies and SPACs.[1]

For the interim reviews, similar to our approach for reviewing audits, our target team did not review every aspect of the interim review. Rather, its review procedures focused on a portion of the firm's procedures.

View the details on the scope of our inspections and our inspections procedures.

[1] Refer to Observations From the Target Team's 2021 Inspections for observations from the target team reviews.

# OVERVIEW OF THE 2021 INSPECTION AND HISTORICAL DATA BY INSPECTION YEAR

The following information provides an overview of our 2021 inspection as well as data from the previous two inspections. We use a combination of risk-based and random methods to select audits for review and to identify areas on which we focus our review. Because our inspection process evolves over time, it can, and often does, focus on a different mix of audits and audit areas from year to year and firm to firm. As a result of this variation, we caution that our inspection results are not necessarily comparable over time or among firms.

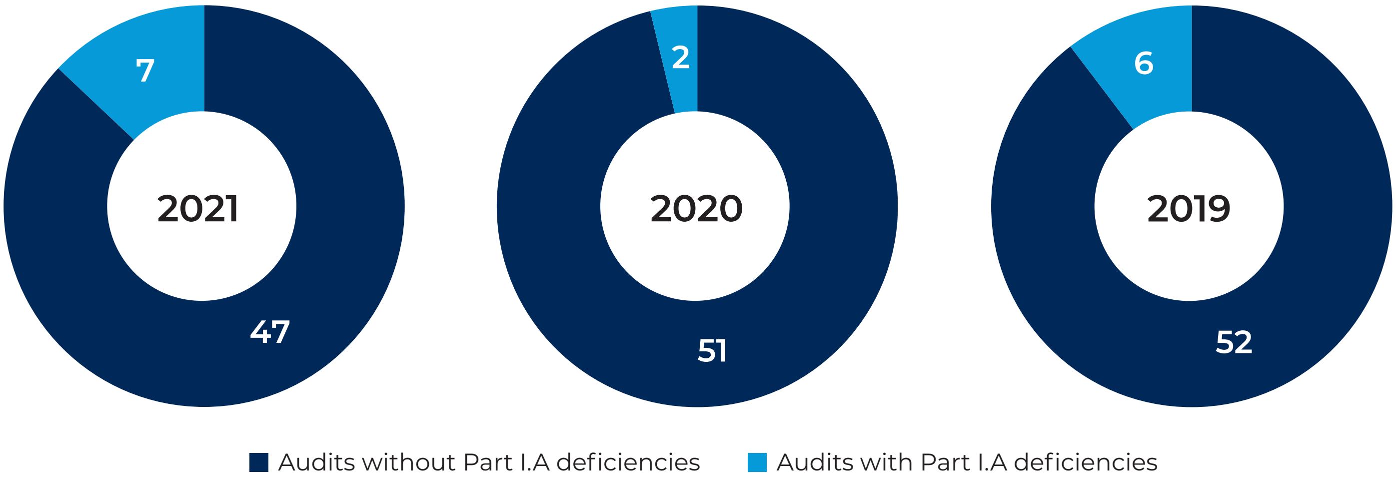
## Audits Selected for Review

| | 2021 | 2020 | 2019 |
|---|---|---|---|
| **Total audits reviewed** | | | |
| **Total audits reviewed** | 54 | 53 | 58 |
| **Selection method** | | | |
| **Risk-based selections** | 25 | 37 | 39 |
| **Random selections** | 25 | 13 | 13 |
| **Target team selections**[2] | 4 | 3 | 6 |
| **Total audits reviewed** | **54** | **53** | **58** |
| **Principal auditor** | | | |
| **Audits in which the firm was the principal auditor** | 54 | 53 | 55 |
| **Audits in which the firm was not the principal auditor** | 0 | 0 | 3 |
| **Total audits reviewed** | **54** | **53** | **58** |
| **Audit type** | | | |
| **Integrated audits of financial statements and ICFR** | 43 | 50 | 47 |
| **Financial statement audits only** | 11 | 3 | 11 |
| **Total audits reviewed** | **54** | **53** | **58** |

[2] For further information on the target team's activities in 2020 and 2019, refer to those inspection reports.

## Part I.A Deficiencies in Audits Reviewed

In 2021, four of the seven audits appearing in Part I.A were selected for review using risk-based criteria. In 2020, both of the audits appearing in Part I.A were selected for review randomly. In 2019, five of the six audits appearing in Part I.A were selected for review using risk-based criteria.

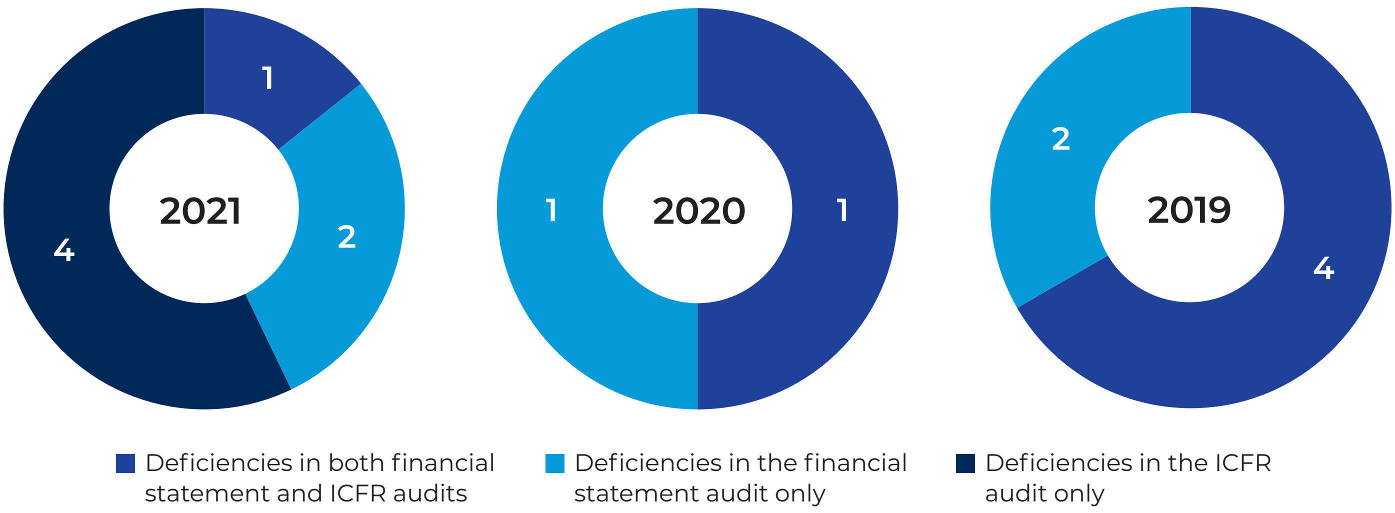



If we include a deficiency in Part I.A of our report, it does not necessarily mean that the firm has not addressed the deficiency. In many cases, the firm has performed remedial actions after the deficiency was identified. Depending on the circumstances, remedial actions may include performing additional audit procedures, informing management of the issuer of the need for changes to the financial statements or reporting on ICFR, or taking steps to prevent reliance on prior audit reports.

Our inspection normally includes a review, on a sample basis, of the adequacy of a firm's remedial actions, either with respect to previously identified deficiencies or deficiencies identified during the current inspection. If a firm does not take appropriate actions to address deficiencies, we may criticize its system of quality control or pursue a disciplinary action.

If we include a deficiency in our report — other than those deficiencies for audits with incorrect opinions on the financial statements and/or ICFR — it does not necessarily mean that the issuer's financial statements are materially misstated or that undisclosed material weaknesses in ICFR exist. It is often not possible for us to reach a conclusion on those points based on our inspection procedures and related findings because, for example, we have only the information that the auditor retained and the issuer's public disclosures. We do not have direct access to the issuer's management, underlying books and records, and other information.

## Audits Affected by the Deficiencies Identified in Part I.A




Our 2021 inspection procedures involved one audit of an issuer that was formed by a merger between a non-public operating company and a SPAC for which the issuer, unrelated to our review, restated its financial statements to correct a misstatement and the firm revised and reissued its report on the financial statements.

The following tables and graphs summarize inspection-related information, by inspection year, for 2021 and the previous two inspections. We caution against making any comparison of the data provided without reading the descriptions of the underlying deficiencies in each respective inspection report.

## Most Frequently Identified Part I.A Deficiencies

| Deficiencies in audits of financial statements | Audits with Part I.A deficiencies | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Did not perform sufficient testing related to an account or significant portion of an account or to address an identified risk | 1 | 1 | 3 |
| Did not sufficiently evaluate the appropriateness of the issuer's accounting method or disclosure for one or more transactions or accounts | 1 | 0 | 0 |
| Did not perform sufficient procedures to address a going concern issue | 1 | 0 | 0 |

| Deficiencies in ICFR audits | Audits with Part I.A deficiencies | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Did not perform sufficient testing of the design and/or operating effectiveness of controls selected for testing | 4 | 1 | 4 |
| Did not identify and/or sufficiently test controls over the accuracy and completeness of data or reports that the issuer used in the operation of controls | 2 | 1 | 0 |
| Did not identify and test any controls that addressed the risks related to a significant account or relevant assertion | 1 | 1 | 1 |

## Audit Areas Most Frequently Reviewed

This table reflects the five audit areas we have selected most frequently for review in each inspection year (and the related Part I.A deficiencies). For the issuer audits selected for review, we selected these areas because they were generally significant to the issuer's financial statements, may have included complex issues for auditors, and/or involved complex judgments in (1) estimating and auditing the reported value of related accounts and disclosures and (2) implementing and auditing the related controls.

| 2021 | | | 2020 | | | 2019 | | |
|---|---|---|---|---|---|---|---|---|
| Audit area | Audits reviewed | Audits with Part I.A deficiencies | Audit area | Audits reviewed | Audits with Part I.A deficiencies | Audit area | Audits reviewed | Audits with Part I.A deficiencies |
| **Revenue and related accounts** | 31 | 1 | **Revenue and related accounts** | 41 | 2 | **Revenue and related accounts** | 43 | 2 |
| **Long-lived assets** | 17 | 0 | **Inventory** | 17 | 0 | **Business combinations** | 14 | 0 |
| **Accruals and other liabilities** | 14 | 0 | **Goodwill and intangible assets** | 16 | 0 | **Goodwill and intangible assets** | 14 | 1 |
| **Goodwill and intangible assets** | 13 | 0 | **Going concern** | 14 | 0 | **Inventory** | 10 | 2 |
| **Debt** | 12 | 0 | **Leases** | 12 | 0 | **Long-lived assets** | 8 | 1 |

## Audit Areas with Frequent Part I.A Deficiencies

This table reflects the audit areas with the most frequently identified Part I.A deficiencies in each inspection year with the corresponding results for the other two years presented.

| Audit area | 2021 | | 2020 | | 2019 | |
|---|---|---|---|---|---|---|
| | Audits with Part I.A deficiencies | Audits reviewed | Audits with Part I.A deficiencies | Audits reviewed | Audits with Part I.A deficiencies | Audits reviewed |
| **Inventory** | 2 | 6 | 0 | 17 | 2 | 10 |
| **Revenue and related accounts** | 1 | 31 | 2 | 41 | 2 | 43 |

**Inventory:** The deficiencies in 2021 primarily related to substantive testing of inventory and testing controls over the existence of inventory, including cycle-count controls. The deficiencies in 2019 related to testing controls over the existence of inventory and the resulting overreliance on controls when performing substantive testing.

**Revenue and related accounts:** The deficiency in 2021 related to testing controls over revenue. The deficiencies in 2020 related to substantive testing of revenue and accounts receivable and testing controls over revenue. The deficiencies in 2019 related to substantive testing of revenue, including a chargeback accrual, and testing controls over this accrual.

## Auditing Standards Associated with Identified Part I.A Deficiencies

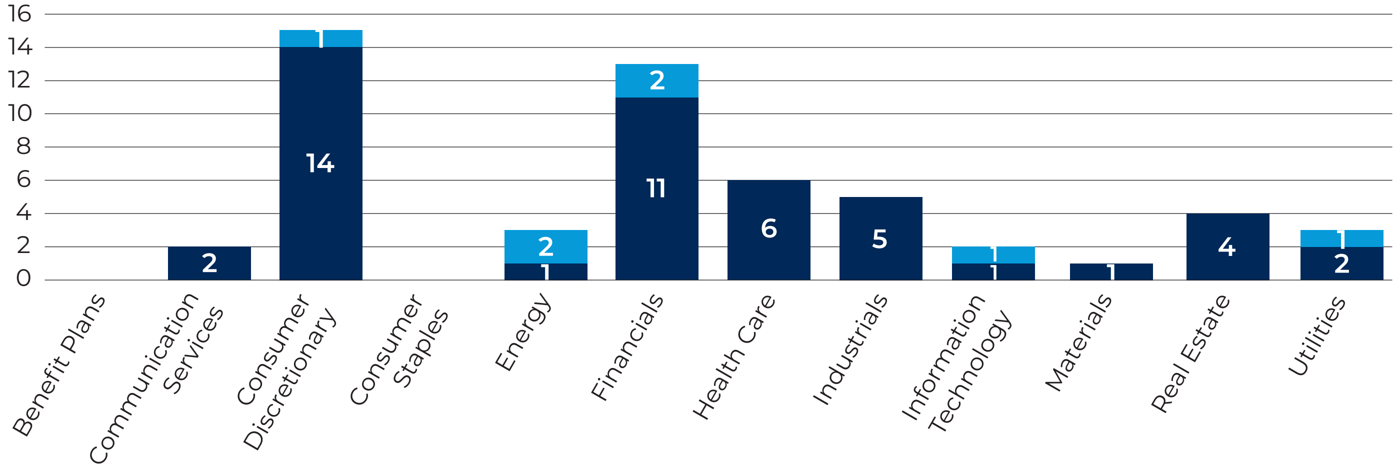
The following lists the auditing standards referenced in Part I.A of the 2021 and the previous two inspection reports, and the number of times that the standard is cited in Part I.A.

| PCAOB Auditing Standards | 2021 | 2020 | 2019 |
|---|---|---|---|
| **AS 1105, *Audit Evidence*** | 1 | 0 | 0 |
| **AS 2101, *Audit Planning*** | 0 | 1 | 0 |
| **AS 2201, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements*** | 7 | 6 | 9 |
| **AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*** | 1 | 2 | 3 |
| **AS 2305, *Substantive Analytical Procedures*** | 0 | 1 | 0 |
| **AS 2315, *Audit Sampling*** | 0 | 0 | 2 |
| **AS 2415, *Consideration of an Entity's Ability to Continue as a Going Concern*** | 1 | 0 | 0 |
| **AS 2501, *Auditing Accounting Estimates* (effective for fiscal years ending before December 15, 2020)** | 0 | 0 | 2 |
| **AS 2510, *Auditing Inventories*** | 0 | 0 | 1 |
| **AS 2810, *Evaluating Audit Results*** | 1 | 0 | 1 |

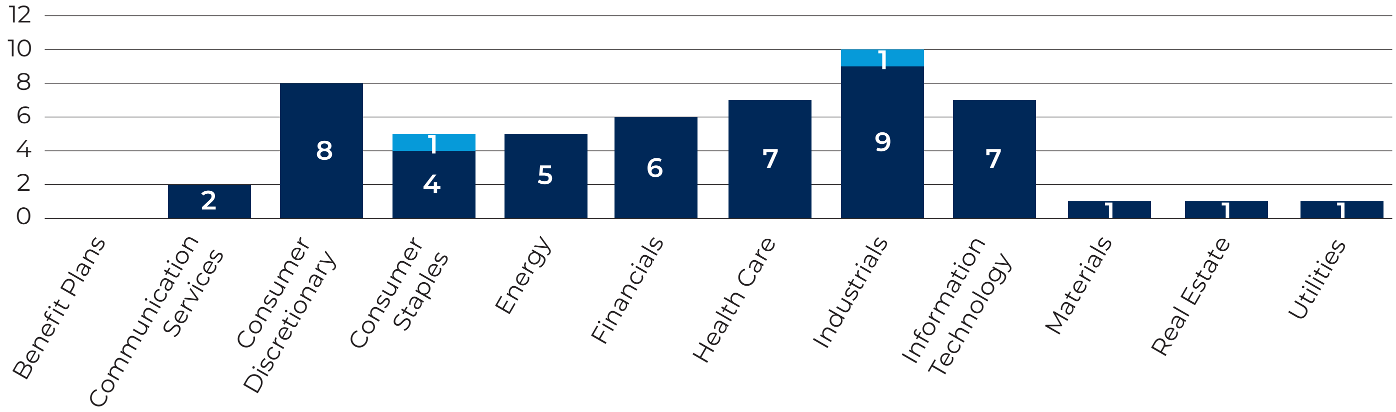
# Inspection Results by Issuer Industry Sector

The majority of industry sector data is based on Global Industry Classification Standard (GICS) data obtained from Standard & Poor's (S&P). In instances where GICS data for an issuer is not available from S&P, classifications are assigned based upon North American Industry Classification System data.

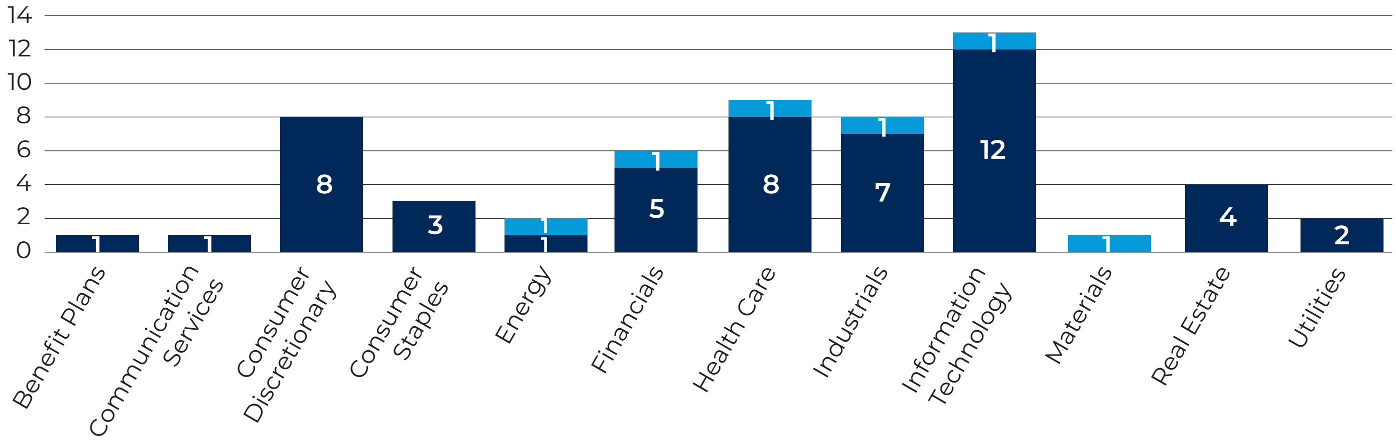
## 2021




## 2020



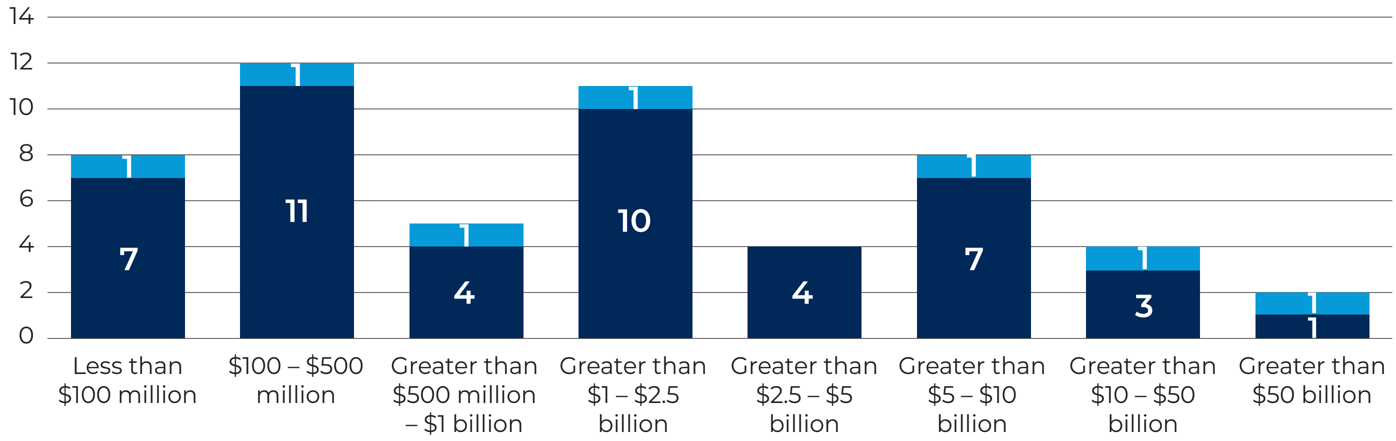

## 2019



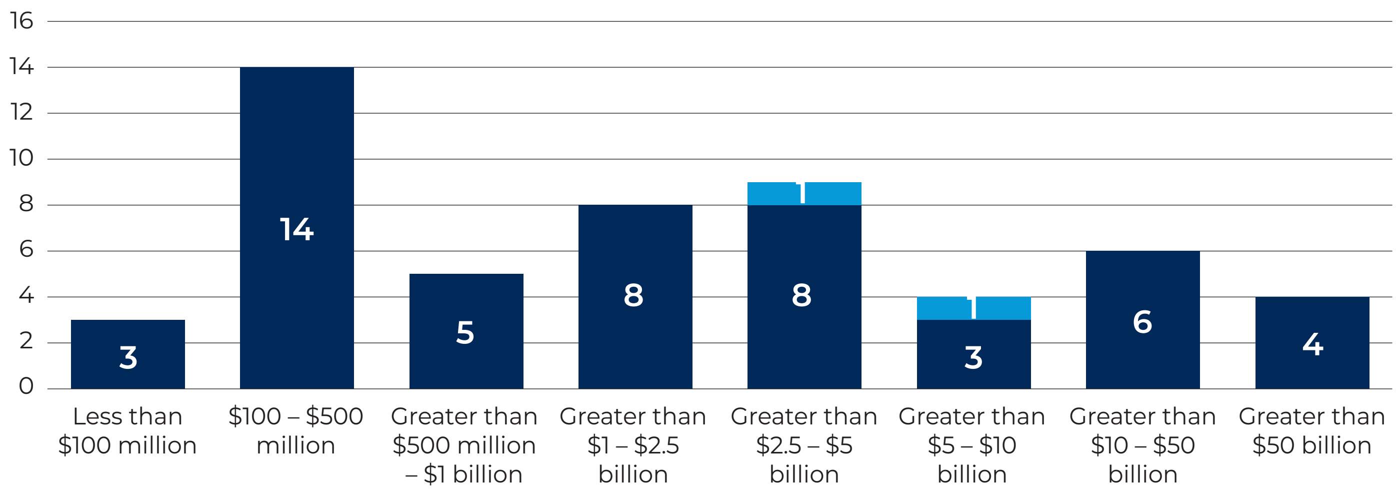

Audits without Part I.A deficiencies    Audits with Part I.A deficiencies

# Inspection Results by Issuer Revenue Range

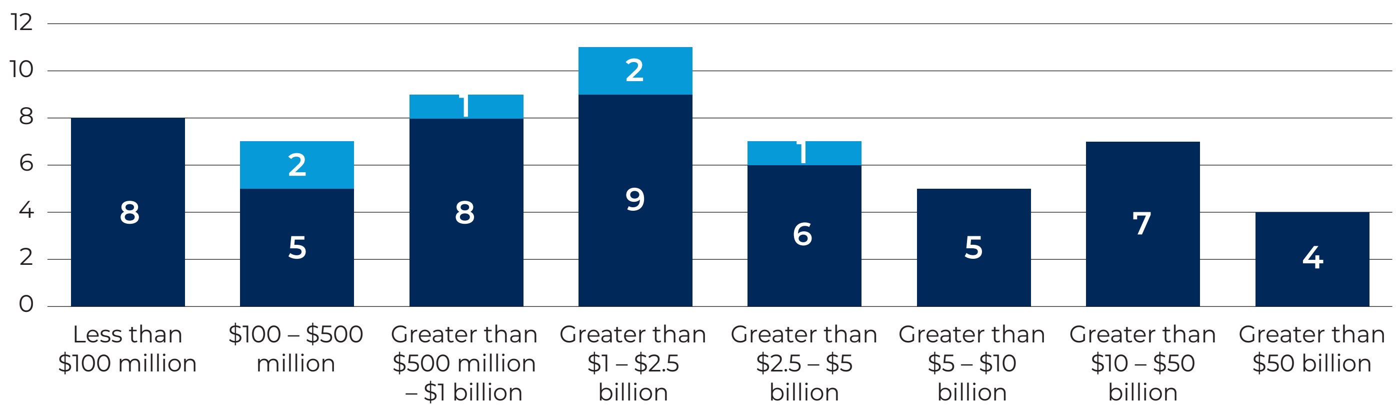
## 2021




## 2020




## 2019




■ Audits without Part I.A deficiencies ■ Audits with Part I.A deficiencies

# Classification of Audits with Part I.A Deficiencies

Within Part I.A of this report, we classify each issuer audit in one of the categories discussed below based on the Part I.A deficiency or deficiencies identified in our review.

The purpose of this classification system is to group and present issuer audits by the number of Part I.A deficiencies we identified within the audit as well as to highlight audits with an incorrect opinion on the financial statements and/or ICFR.

## Audits with an Incorrect Opinion on the Financial Statements and/or ICFR

This classification includes instances where a deficiency was identified in connection with our inspection and, as a result, an issuer's financial statements were determined to be materially misstated, and the issuer restated its financial statements. It also includes instances where a deficiency was identified in connection with our inspection and, as a result, an issuer's ICFR was determined to be ineffective, or there were additional material weaknesses that the firm did not identify, and the firm withdrew its opinion, or revised its report, on ICFR. This classification does not include instances where, unrelated to our review, an issuer restated its financial statements and/or an issuer's ICFR was determined to be ineffective. We include any deficiencies identified in connection with our reviews of these audits in the audits with multiple deficiencies or audits with a single deficiency classification below.

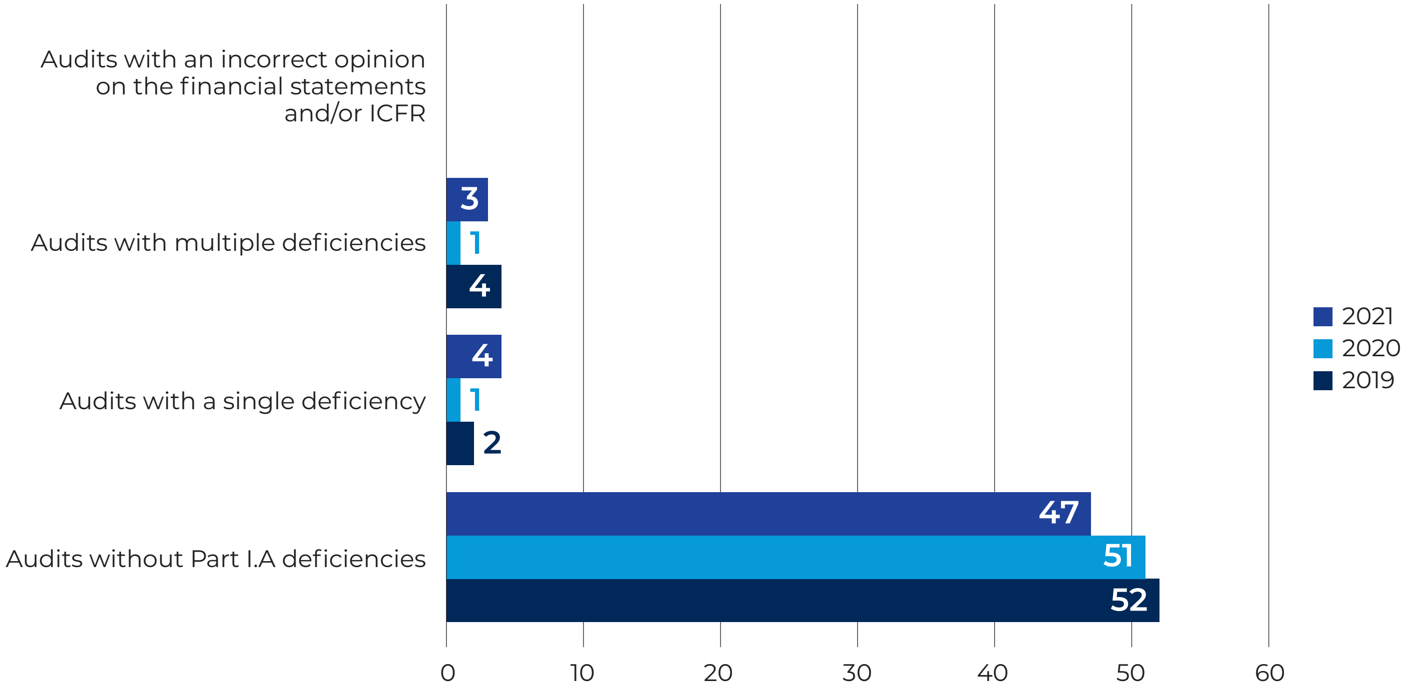
## Audits with Multiple Deficiencies

This classification includes instances where multiple deficiencies were identified that related to a combination of one or more financial statement accounts, disclosures, and/or important controls in an ICFR audit.

## Audits with a Single Deficiency

This classification includes instances where a single deficiency was identified that related to a financial statement account or disclosure or to an important control in an ICFR audit.

# Number of Audits in Each Category



# PART I: INSPECTION OBSERVATIONS

Part I.A of our report discusses deficiencies that were of such significance that we believe the firm, at the time it issued its audit report(s), had not obtained sufficient appropriate audit evidence to support its opinion(s) on the issuer's financial statements and/or ICFR.

Part I.B discusses deficiencies that do not relate directly to the sufficiency or appropriateness of evidence the firm obtained to support its opinion(s) but nevertheless relate to instances of non-compliance with PCAOB standards or rules.

Consistent with the Act, it is the Board's assessment that nothing in Part I of this report deals with a criticism of, or potential defect in, the firm's quality control system. We discuss any such criticisms or potential defects in Part II. Further, you should not infer from any Part I deficiency, or combination of deficiencies, that we identified a quality control finding in Part II.

# PART I.A: AUDITS WITH UNSUPPORTED OPINIONS

This section of our report discusses the deficiencies identified, by specific issuer audit reviewed, in the audit work supporting the firm's opinion(s) on the issuer's financial statements and/or ICFR.

We identify each issuer by a letter (e.g., Issuer A) and industry sector. Each deficiency could relate to several auditing standards, but we reference the PCAOB standard(s) that most directly relates to the requirement with which the firm did not comply.

We present issuer audits below within their respective deficiency classifications (as discussed previously). Within the classifications, we generally present the audits based on our assessment as to the relative significance of the identified deficiencies, taking into account the significance of the financial statement accounts and/or disclosures affected, and/or the nature or extent of the deficiencies.

## Audits with an Incorrect Opinion on the Financial Statements and/or ICFR

None

## Audits with Multiple Deficiencies

### Issuer A – Information Technology

#### Type of audit and related area affected

In our review, we identified deficiencies in the financial statement and ICFR audits related to **Inventory**.

#### Description of the deficiencies identified

With respect to work-in-process inventory at one of the issuer's business units, which the firm designated as subject to more extensive audit procedures, the following deficiencies were identified:

- The firm did not identify and test any controls over this inventory. (AS 2201.39)
- The firm did not perform any substantive procedures to test this inventory. (AS 2301.08)

The firm designated certain of the issuer's other business units as subject to less extensive audit procedures. With respect to these business units, the firm selected for testing a control that included quarterly reviews of financial information, including inventory. The firm did not evaluate the specific review procedures that the control owners performed to determine whether items identified for follow up were appropriately resolved. (AS 2201.42 and .44)

## Issuer B – Consumer Discretionary

### Type of audit and related area affected

In our review, we identified deficiencies in the ICFR audit related to **Inventory**.

### Description of the deficiencies identified

The issuer performed cycle counts of certain inventory held at various locations. The firm selected for testing a control that consisted of the issuer's reviews of the cycle-count results. The firm did not evaluate the review procedures that the control owners performed, including the procedures to identify items for follow up and the procedures to determine whether those items were appropriately resolved. (AS 2201.42 and .44) In addition, the firm did not identify and test any controls over the accuracy and completeness of the reports that the control owners used in the operation of this control. (AS 2201.39)

## Issuer C – Financials

### Type of audit and related area affected

In our review, we identified deficiencies in the ICFR audit related to the **Allowance for Credit Losses (ACL)**.

### Description of the deficiencies identified

The firm selected for testing controls that consisted of the issuer's validation of the models that the issuer used to estimate the quantitative component of the ACL for loans collectively evaluated for impairment. As part of the review to validate these models, the control owners performed various tests of (1) the models, such as sensitivity analyses and benchmark comparisons to other models, and (2) the data used to develop the models and any underlying assumptions. The firm did not evaluate the specific review procedures that the control owners performed to (1) conduct, and evaluate the results of, these tests and (2) verify the accuracy and completeness of the data the control owners used in these tests. (AS 2201.42 and .44)

# Audits with a Single Deficiency

## Issuer D – Energy

### Type of audit and related area affected

In our review, we identified a deficiency in the financial statement audit related to **Warrants**.

### Description of the deficiency identified

During the audit, the firm did not identify, and appropriately address, that the issuer's accounting for warrants as equity was not in conformity with FASB ASC Topic 815, Derivatives and Hedging. (AS 2810.30)

Unrelated to our review, the issuer reevaluated its accounting for these warrants and concluded that a material misstatement existed that had not been previously identified. The issuer subsequently corrected this misstatement in a restatement of its financial statements, and the firm revised and reissued its report on the financial statements.

## Issuer E – Financials

### Type of audit and related area affected

In our review, we identified a deficiency in the ICFR audit related to **Derivatives**.

### Description of the deficiency identified

The issuer used models to value certain derivatives. The firm selected for testing a control that consisted of the issuer's review of the fair values determined by these models. The firm did not evaluate the specific review procedures the control owner performed to assess the reasonableness of the resulting fair values for certain of these derivatives. (AS 2201.42 and .44)

## Issuer F – Utilities

### Type of audit and related area affected

In our review, we identified a deficiency in the ICFR audit related to **Revenue**.

### Description of the deficiency identified

The issuer generated certain revenue from the sale of electricity. The firm selected for testing a control over the volumes of electricity delivered that consisted of the issuer's comparison of adjusted monthly volumes to the corresponding prior-period adjusted volumes. The firm did not test the aspect of this control that addressed the accuracy and completeness of the information the issuer used to calculate the adjustments to the volumes delivered. (AS 2201.42 and .44)

## Issuer G – Energy

### Type of audit and related area affected

In our review, we identified a deficiency in the financial statement audit related to **Going Concern**.

### Description of the deficiency identified

In evaluating whether there was substantial doubt about the issuer's ability to continue as a going concern, the firm did not sufficiently test the reliability of the issuer's forecasted cash outflows that the firm used in its evaluation. The firm compared the forecasted cash outflows to the issuer's current-year cash outflows, adjusted for certain one-time charges, but did not perform any procedures to evaluate whether those adjusted current-year cash outflows would be representative of future cash outflows. Further, the firm also considered in its evaluation the amount of credit that the issuer expected to have available but did not perform any procedures to evaluate whether this expected amount was reasonable. (AS 1105.04 and .06; AS 2415.03)

# PART I.B: OTHER INSTANCES OF NON-COMPLIANCE WITH PCAOB STANDARDS OR RULES

This section of our report discusses any deficiencies we identified that do not relate directly to the sufficiency or appropriateness of evidence the firm obtained to support its opinion(s) but nevertheless relate to instances of non-compliance with PCAOB standards or rules.

When we review an audit, we do not review every aspect of the audit. As a result, the areas below were not necessarily reviewed on every audit. In some cases, we assess the firm's compliance with specific PCAOB standards or rules on other audits that were not reviewed and include any instances of non-compliance below.

The deficiencies below are presented in numerical order based on the PCAOB standard or rule with which the firm did not comply. We identified the following deficiencies:

- In one of 10 audits reviewed, the firm's foreign affiliates had obtained letters of representation from management for certain of the issuer's non-U.S. components, but the firm, as the principal auditor, did not review and retain one of these letters. In this instance, the firm was non-compliant with AS 1205, *Part of the Audit Performed by Other Independent Auditors*.
- In two of 54 audits reviewed, the firm did not include all relevant work papers in the final set of audit documentation it was required to assemble. In these instances, the firm was non-compliant with AS 1215, *Audit Documentation*.
- In one audit reviewed, the firm did not document in its work papers that it had provided the management representation letter to the issuer's audit committee. In this instance, the firm was non-compliant with AS 1301, *Communications with Audit Committees*.
- In one of 13 audits reviewed, the year the firm began serving consecutively as the company's auditor that was included in the firm's audit report was incorrect. In this instance, the firm was non-compliant with AS 3101, *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*.
- In three of 46 audits reviewed, the engagement team performed procedures to determine whether or not matters were critical audit matters but did not include in those procedures one or more matters that were communicated to the issuer's audit committee and that related to accounts or disclosures that were material to the financial statements. In these instances, the firm was non-compliant with AS 3101, *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*. These instances of non-compliance do not necessarily mean that other critical audit matters should have been communicated in the auditor's report.

# PART II: OBSERVATIONS RELATED TO QUALITY CONTROL

Part II of our report discusses criticisms of, and potential defects in, the firm's system of quality control.

We include deficiencies in Part II if an analysis of the inspection results, including the results of the reviews of individual audits, indicates that the firm's system of quality control does not provide reasonable assurance that firm personnel will comply with applicable professional standards and requirements. Generally, the report's description of quality control criticisms is based on observations from our inspection procedures.

This report does not reflect changes or improvements to the firm's system of quality control that the firm may have made subsequent to the period covered by our inspection. The Board does consider such changes or improvements in assessing whether the firm has satisfactorily addressed the quality control criticisms or defects no later than 12 months after the issuance of this report.

When we issue our reports, we do not make public criticisms of, and potential defects in, the firm's system of quality control, to the extent any are identified. If a firm does not address to the Board's satisfaction any criticism of, or potential defect in, the firm's system of quality control within 12 months after the issuance of our report, we will make public any such deficiency.

# APPENDIX A: FIRM'S RESPONSE TO THE DRAFT INSPECTION REPORT

Pursuant to Section 104(f) of the Act, 15 U.S.C. § 7214(f), and PCAOB Rule 4007(a), the firm provided a written response to a draft of this report. Pursuant to Section 104(f) of the Act and PCAOB Rule 4007(b), the firm's response, excluding any portion granted confidential treatment, is attached hereto and made part of this final inspection report.

The Board does not make public any of a firm's comments that address a nonpublic portion of the report unless a firm specifically requests otherwise. In some cases, the result may be that none of a firm's response is made publicly available.

In addition, pursuant to Section 104(f) of the Act, 15 U.S.C. § 7214(f), and PCAOB Rule 4007(b), if a firm requests, and the Board grants, confidential treatment for any of the firm's comments on a draft report, the Board does not include those comments in the final report. The Board routinely grants confidential treatment, if requested, for any portion of a firm's response that addresses any point in the draft that the Board omits from, or any inaccurate statement in the draft that the Board corrects in, the final report.

Deloitte.

30 Rockefeller Plaza
New York, NY 10112
USA

October 12, 2022

Mr. George Botic
Director
Division of Registration and Inspections
Public Company Accounting Oversight Board
1666 K Street NW
Washington, DC 20006

Re: Deloitte & Touche LLP – Response to Part I of Draft Report on 2021 Inspection (PUBLIC)

Dear Mr. Botic:

Deloitte & Touche LLP is pleased to submit this response to Part I of the Public Company Accounting Oversight Board's (the PCAOB) draft report on the 2021 Inspection of Deloitte & Touche LLP (the Draft Report). We believe that the PCAOB's inspection process serves an important role in the achievement of our shared objectives of improving audit quality and serving investors and the public interest. We are committed to continuing to work with the PCAOB to further strengthen trust in the integrity of the independent audit.

We have evaluated the matters identified by the PCAOB's inspection team for each of the issuer audits described in Part I of the Draft Report and have taken actions as appropriate in accordance with PCAOB standards to comply with our professional responsibilities under AS 2901, *Consideration of Omitted Procedures After the Report Date,* and AS 2905, *Subsequent Discovery of Facts Existing at the Date of the Auditor's Report.*

Executing high-quality audits is our number one priority. We are dedicated to continuous improvement at all levels of our organization and unwavering in our efforts to enhance quality at every step of the audit process. In order to drive continuous improvements in quality, we are digitizing the audit, transforming the way we work, and fostering the development of our people, to fulfill our role of providing high-quality audit and assurance services to the capital markets. Our quality is underpinned by a strong system of quality control that continues to be enhanced by the implementation of International Standard on Quality Management (ISQM) 1. We are confident that our ongoing digital transformation, inclusive of the investments we are making in our audit and assurance processes, our people, and our technology, are resulting in significant, sustainable enhancements to our audit quality.

Sincerely,

Lara Abrash      Joseph B. Ucuzoglu

Lara Abrash
Chair and Chief Executive Officer
Deloitte & Touche LLP

Joseph B. Ucuzoglu
Chief Executive Officer
Deloitte

**THE METROPOLITAN TRANSPORTATION AUTHORITY**

**AUDIT COMMITTEE**

This Charter for the Audit Committee was adopted by the Board Chair and a majority of the members of the Board of the Metropolitan Transportation Authority, a public benefit corporation established under the laws of the State of New York (together with any other entity or corporation for which the members of the Metropolitan Transportation Authority serve as a board of directors, the "MTA"), as amended on March 21, 2018.

## I. PURPOSE

The Audit Committee (the "Committee") shall assist and provide guidance to the Board Chair and the Board in monitoring and overseeing (a) the conduct of the MTA's financial reporting process, the application of accounting principles, and the engagement of the MTA's outside accountants; (b) the MTA's internal controls and risk management systems; and (c) general matters relating to legal, regulatory and ethical compliance at the MTA (hereinafter referred to as the "Purpose").

## II. COMMITTEE AUTHORITY

The Committee's role is one of oversight. In carrying out this oversight function, the chairperson of the Committee (the "Committee Chair") and the vice-chairperson of the Committee (the "Committee Vice-Chair") shall have additional responsibilities, as set forth in Section VI of this Charter. The Committee Chair and/or the Committee Vice-Chair regularly shall report to the entire Committee their findings with respect to these additional responsibilities and refer to the entire Committee for its consideration any matter relating thereto as the Committee Chair and/or the Committee Vice-Chair deem necessary or appropriate. MTA Audit Services' and Corporate Compliance's organizational independence is derived from their reporting structure as they report to the MTA Audit Committee and MTA Board Chair.

Notwithstanding these oversight responsibilities, the MTA and each of its subsidiary corporations and affiliates are responsible for preparing their own financial statements and the respective outside auditors are responsible for auditing the respective financial statements. The Committee, the Committee Chair, and the Committee Vice-Chair recognize that the Auditor General and the outside auditors have more time, knowledge and detailed information about the MTA and each of its subsidiary corporations and affiliates than do Committee members. Consequently, in carrying out its oversight responsibilities, no member of the Committee shall be deemed to provide (i) any expert or special assurance as to the financial statements of the MTA or of any subsidiary corporation or affiliate or (ii) any professional certification as to the work of any outside auditor.

In discharging its role, the Committee is empowered to investigate any matter brought to its attention. To facilitate any such investigation, the Committee Chairman and/or Vice Chairman shall have access to all books, records, facilities and staff of the MTA (including any of its subsidiary corporations or affiliates).

The foregoing is not intended to alter or curtail existing rights of individual board members to access books, records or staff in connection with the performance of their fiduciary duties as board members. With the prior approval of the Board Chair or a majority of the Board, the Committee may retain, compensate and/or terminate outside counsel, auditors or other experts as it deems necessary and will receive adequate funding from the MTA to engage such advisors in accordance with MTA procedures. A majority vote during a Board meeting at which a quorum is present shall constitute such approval by the Board.

## III. COMMITTEE MEMBERSHIP

The Committee shall consist of at least 3 or more members of the Board, appointed by the Board Chair. If not otherwise a member of the Committee, each Vice-Chair of the Board shall be an ex officio member of the Committee. The Board Chair shall appoint the chairperson and vice chairperson of the Committee. In the absence of the chairperson at a meeting of the Committee, the vice chairperson shall chair such meeting. In the absence of the chairperson and the vice chairperson, the Board Chair shall appoint a temporary chairperson to chair such meeting. A member of the Committee may be removed, for cause or without cause, by the Board Chair.

At least one committee member shall have accounting or financial management expertise. No member of the Committee shall be employed by (a) the MTA, or (b) a private entity that does, or is likely to do, business with the MTA.

## IV. COMMITTEE MEETINGS

The Committee shall meet on a regularly-scheduled basis at least 4 times per year, and more frequently as circumstances dictate. The Committee will cause to be kept adequate minutes of all its proceedings and records of any action taken and will report on its proceedings and any action taken to the next full meeting of the Board. Committee members will be furnished with copies of the minutes of each meeting. Meetings of the Committee shall be open to the public, and the Committee shall be governed by the rules regarding public meetings set forth in the applicable provisions of the Public Authorities Law and Article 7 of the Public Officers Law that relate to public notice, public speaking and the conduct of executive session. The Committee may form and assign responsibilities to subcommittees when appropriate.

The Committee may request that any member of the Board, the Auditor General, the Chief Compliance Officer, any officer or staff of the MTA, or any other persons whose advice and counsel are sought by the Committee, attend any meeting of the Committee to provide such pertinent information at the Committee requests. The Auditor General shall (1) furnish the Committee with all material information pertinent to matters appearing on the Committee agenda relating to the Purpose, (2) provide the chairperson of the Committee with all information regarding the Purpose that is material to the Committee's monitoring and oversight of the Purpose, and (3) inform the chairperson of the Committee of any matters not already on the Committee agenda that should be added to the agenda in order for the Committee to be adequately monitoring and overseeing the Purpose.

## V. COMMITTEE REPORTS

The chairperson of the Committee shall report on the Committee's proceedings, and any recommendations made.

## VI. KEY RESPONSIBILITIES OF COMMITTEE CHAIR AND VICE-CHAIR

The following responsibilities are set forth as a guide. The Committee chairperson and the Committee Vice-chairperson are authorized to carry out these and such other responsibilities assigned by the Committee, the Board Chair or the Board, from time to time, and take any actions reasonably related to the mandate of this Charter.

To assist the Committee in fulfilling its purpose, the Committee chairperson and/or the Committee Vice-chairperson shall:

***Auditors, Financial Statements & Accounting Policies:***

1. review and discuss with the Auditor General, the relevant MTA employees, the outside auditor, and the internal auditors any audit problems or difficulties encountered in the course of audit work, including any restrictions on the scope of activities or access to required information and advise the Committee as to how to resolve any disagreements regarding financial reporting;

2. review and discuss with the Auditor General and outside auditor significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas, and recent professional and regulatory pronouncements, and understand their impact on the financial statements;

3. inquire as to the outside auditor's view of the accounting treatment related to significant new transactions or other significant matters or events not in the ordinary course of business;

4. review and discuss with the Auditor General, the relevant MTA employees, and the outside auditor and any material financial or non-financial arrangements that do not appear on the financial statements of the MTA (or of any subsidiary corporation or affiliate);

5. review and discuss with the Auditor General and the outside auditor: (i) any accounting adjustments that were noted or proposed by the auditors but were "passed" (as immaterial or otherwise), (ii) any communications between the audit team and the audit firm's national office respecting auditing or accounting issues presented by the engagement and (iii) any "management" or "internal control" letter issued, or proposed to be issued, by any outside auditor to the MTA (including to any subsidiary corporation or affiliate);

6. review with the Auditor General and the outside auditor the periodic financial statements and footnotes of the MTA (and of each subsidiary corporation or affiliate, as applicable) and discussing the adequacy of the system of internal controls and the appropriateness of

the accounting principles used, and the judgments made, in the preparation of such periodic financial statements;

7. meet annually (or more frequently if necessary) with each respective outside auditor (without the Auditor General or any other officers or staff of the MTA present) to discuss the periodic financial statements of the MTA (and of each subsidiary corporation or affiliate, as applicable);

***Internal Controls & Risk Management:***

8. together with the Auditor General and the Chief Compliance Officer, review, discuss and (if necessary) investigate compliance with MTA policies and/or refer instances of non-compliance to the MTA Inspector General for investigation;

9. review and discuss with the Auditor General, the Chief Compliance Officer, the relevant employees of the MTA, and the outside auditor: (i) any significant deficiencies in the design or operation of the internal controls of the MTA, including information technology security and system controls (ii) any fraud, whether or not material, involving MTA and (iii) related findings and recommendations of the outside auditors together with management's responses;

10. review the scope of the external auditors' assessment of internal controls over financial reporting, and obtain reports on significant findings and recommendations, together with management's responses;

11. review and discuss with the Auditor General, the Chief Compliance Officer, the relevant MTA employees, and the outside auditor the MTA's risk assessment and risk management systems, and oversee the underlying policies with respect to risk assessment and risk management;

12. together with the Auditor General and the Chief Compliance Officer, serve as the point of contact for the MTA Inspector General, including by reviewing all reports and draft reports delivered to the MTA by the MTA Inspector General, and being available to meet with the MTA Inspector General as part of the Inspector General's audits of the MTA's books and records;

13. recognizing the statutory obligations of the MTA Inspector General, and without denigrating from those obligations, seek to communicate with the MTA Inspector General with respect to any matter the Committee Chair and/or Vice Chair, the entire Committee, the Board Chair, the Board or the MTA Inspector General deem appropriate;

***Miscellaneous:***

14. submit to the entire Committee for its consideration any matters (including matters relating to the foregoing) that the Committee Chair and/or Committee Vice-Chair deem should appropriately be considered by the entire Committee; and

15. report regularly to the Committee on the findings and recommendations of the Committee Chair and the Committee Vice-Chair relating to the forgoing, and on any other matters the

Committee Chair and/or the Committee Vice-Chair deem appropriate or the Committee, the Board Chair or the Board request.

## VII. KEY RESPONSIBILITIES OF THE COMMITTEE

The following responsibilities are set forth as a guide with the understanding that the Committee may diverge as appropriate given the circumstances. The Committee is authorized to carry out these and such other responsibilities assigned by the Board Chair or the Board, from time to time, and take any actions reasonably related to the mandate of this Charter.

To fulfill its purpose, the Committee shall:

***Auditors, Financial Reporting & Accounting Policies***:

1. in consultation with the Auditor General and the officer primarily responsible for the finances of the MTA and each subsidiary corporation and affiliate, oversee the work of the MTA's outside auditor and provide guidance to the Board Chair and the Board with respect to the appointment (and if appropriate dismissal), evaluation, compensation of the outside MTA's auditors;

2. review and provide guidance to the Board with respect to pre-approving all auditing and non-auditing services provided by the outside auditor to the MTA;

3. provide guidance to the Board with respect to, and approve, the annual audit plan and any subsequent major changes to it and the risk assessment as proposed by the Auditor General in consultation with the MTA Chairman/CEO and the President of each subsidiary and affiliated corporation;

4. review and discuss with the Auditor General, relevant MTA employees, and the outside auditor: (i) any significant audit findings during the year, including the status of previous audit recommendations; (ii) internal audit's activity's performance relative to its plan; (iii) any changes required in the scope of the audit plan; (iv) the audit budget and staffing; and (v) the coordination of audit efforts, status of the internal audit plan and the adequacy of internal audit resources (both numbers and capabilities);

5. on a regular basis, meet with the external auditors to discuss any matters that the committee or internal audit believes should be discussed;

6. review the external auditors' proposed audit scope and approach, including coordination of audit effort with internal audit;

7. review and discuss with the Auditor General, relevant MTA employees, and the outside auditor accounting policies that may be viewed as critical, all matters required to be communicated to the committee under generally accepted auditing standards, as well as any recent or proposed significant changes in MTA accounting policies; and inquire as to the outside auditors' views as to the application of accounting principles;

8. monitor the consistency and comparability of the financial reporting processes of the MTA;

9. monitor the integrity, consistency and comparability of the financial reports and other financial information provided by the MTA to any other governmental or regulatory body, the public or other users thereof, including reconciliations where necessary;

10. review and provide guidance to the Board with respect to the appointment, compensation, and (if necessary) dismissal of the Auditor General;

11. at least annually, review with the Auditor General a report by the outside auditor describing: (i) such outside auditor's internal quality-control procedures; (ii) any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, regarding one or more independent audits carried out by the firm, and any steps taken to deal with any such issues; and (iii) all relationships between the outside auditor and the MTA (or any subsidiary corporation or affiliate);

12. on an annual basis, in each case together with the Auditor General: (i) review a formal written statement from the outside auditor delineating all relationships between such outside auditor and the MTA; (ii) actively engage in a dialogue with the outside auditor with respect to any disclosed relationships or services that may impact the objectivity and independence of such outside auditor and take appropriate action in response to such outside auditor's report to satisfy itself of such auditor's independence; (iii) consider whether, in the interest of assuring continuing independence of the outside auditor, the MTA's respective outside auditors should be rotated; and (iv) set clear hiring policies for employees or former employees of the outside auditors;

***Internal Controls & Risk Management:***

13. review and discuss with the Auditor General, the Chief Compliance Officer, the relevant MTA employees, and the outside auditor the adequacy of the MTA's internal and disclosure controls and procedures;

14. together with the Chief Compliance Officer, review and discuss with the relevant MTA employees, and the outside auditor any significant risks or exposures and assess the steps such employees have taken to minimize such risks;

15. review periodically with the Chief Compliance Officer and the General Counsels of the MTA and each subsidiary corporation and affiliate: (i) legal and regulatory matters that may have a material impact on the financial statements of the MTA (or any subsidiary corporation of affiliate); and (ii) the scope and effectiveness of compliance policies and programs;

***Ethics & Conflicts of Interests****:*

16. together with the Chief Compliance Officer, review periodically with the relevant MTA employees (i) the process for communicating the code of conduct to company personnel; (ii) the level of compliance with all applicable ethics codes, guidelines, and regulations; and, (iii) the performance of the MTA Ethics and Compliance programs;

***Miscellaneous:***

17. set the annual work plan for the Committee;

18. conduct an annual self-evaluation of the performance of the Committee, including its effectiveness and compliance with this Charter;

19. review and reassess the adequacy of this Charter annually;

20. approve the internal audit charter;

21. consider any matter referred to the entire Committee by the Committee Chair and/or Vice-Chair; and

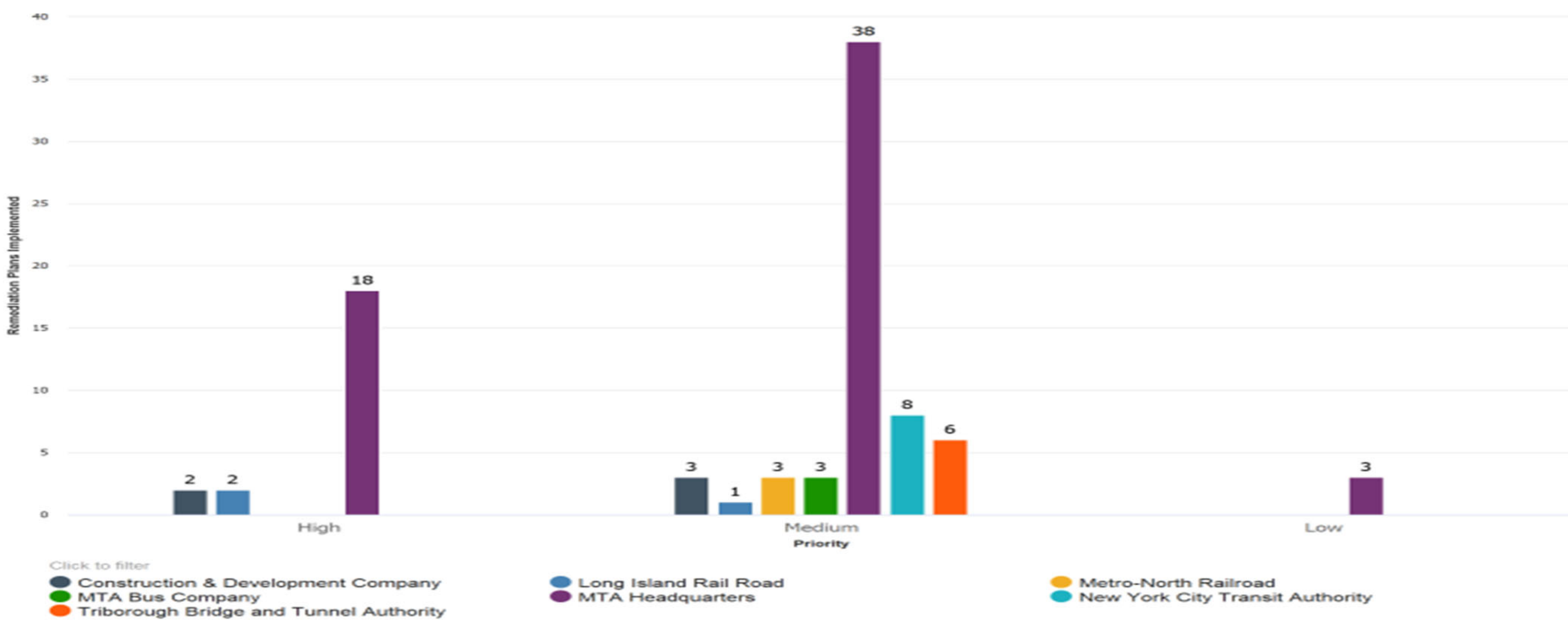
22. report regularly to the Board on Committee findings and recommendations and any other matters the Committee deems appropriate, or the Board Chair or the Board request.

# MTA
# CORPORATE COMPLIANCE

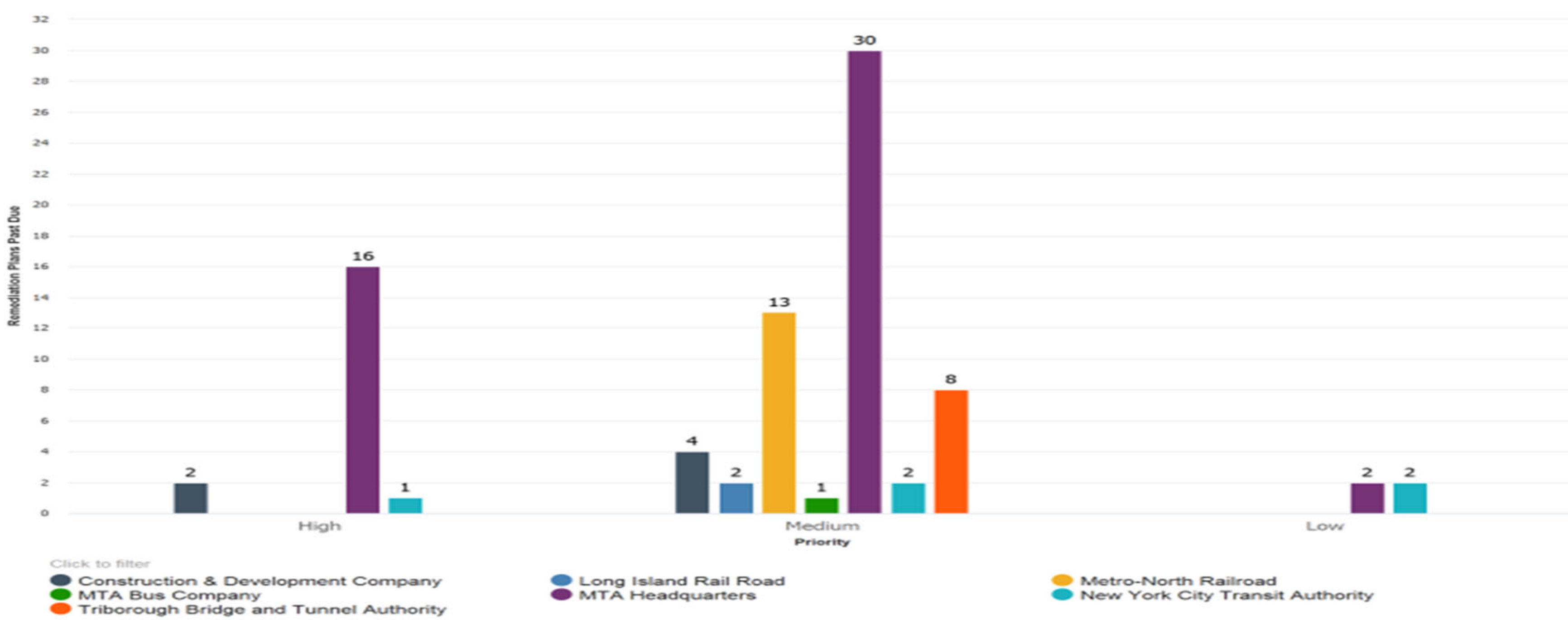
## Remediation Plans Monitoring
## Six Months Past Due

Report to the Audit Committee
October 2023

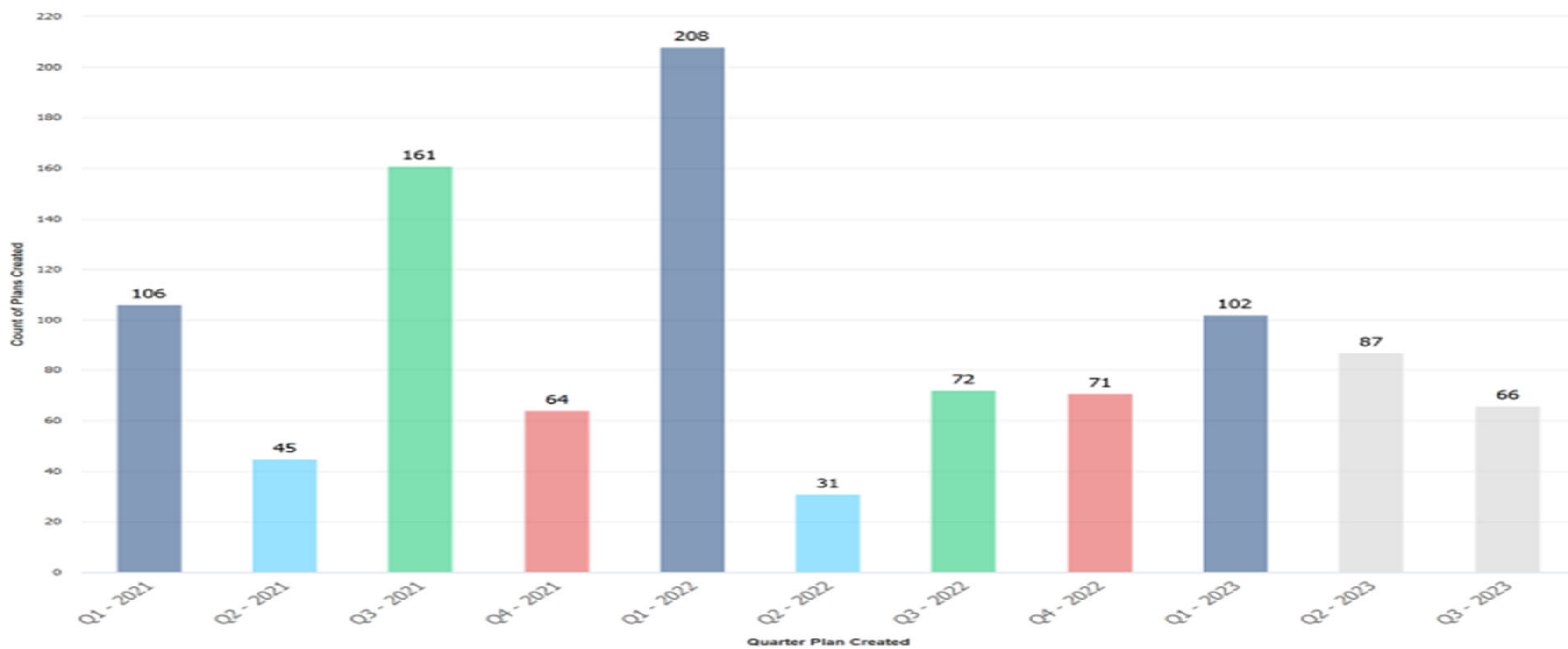
# Remediation Plans Implemented Awaiting Closure By Agency & Priority



# Remediation Plans Six Months Past Due by Agency & Priority



# Remediation Plans Open Trending By Quarter



# Remediation Plans Closed Trending By Quarter