The Long Island Rail Road Company Plan for Additional Pensions

(A Fiduciary Component Unit of the Metropolitan Transportation Authority)

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

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

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INDEPENDENT AUDITOR'S REPORT

To the Board of Administration of
The Long Island Rail Road Company Plan
for Additional Pensions:

Opinion

We have audited the accompanying statements of fiduciary net position of the Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan"), as of December 31, 2022 and 2021, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Additional Plan's basic financial statements as listed in the table of contents.

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

Basis for Opinion

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

Responsibilities of Management for the Financial Statements

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

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

Auditor's Responsibilities for the Audit of the Financial Statements

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

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

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

Required Supplementary Information

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

Deloitte & Touche LLP

September 27, 2023

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

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

OVERVIEW OF THE FINANCIAL STATEMENTS

Introduction—This management's discussion and analysis ("MD&A") of The Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan") financial performance for the years ended December 31, 2022 and 2021, provides an overview of the Additional Plan's financial activities. It is meant to assist the reader in understanding the Additional Plan's financial statements by providing an overview of the financial activities and the effects of significant changes, as well as a comparison with the prior year's activities and results. This discussion and analysis are intended to be read in conjunction with the Additional Plan document as well as the Additional Plan's financial statements. Additionally, an analysis of major economic factors and industry decisions that have contributed to significant changes is provided. It should be noted that for purposes of the MD&A, summaries of the financial statements and the various exhibits presented are extracted from the Additional Plan's financial statements, which are prepared in accordance with accounting principles generally accepted in the United States of America and is intended to be read in conjunction with the Plan's financial statements which begin on page 9.

Overview of Basic Financial Statements

The following discussion and analysis are intended to serve as an introduction to the Additional Plan's financial statements. The basic financial statements are:

- **The Statements of Fiduciary Net Position -** presents the financial position of the Additional Plan at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Additional Plan presently controls (assets), consumption of net assets by the Additional Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Additional Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Additional Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.

- **The Statements of Changes in Fiduciary Net Position** - present the results of activities during the year. All changes affecting the assets and liabilities of the Additional Plan are reflected on an accrual basis when the activity occurred regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.

- **The Notes to Financial Statements** - provides additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.

- **Required Supplementary Information** - as required by the Government Accounting Standards Board ("GASB") includes the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Investment returns.

The accompanying financial statements of the Additional Plan are presented in conformity with accounting principles generally accepted in the United States of America as prescribed by the GASB.

Financial Highlights

Financial Analysis
Fiduciary Net Position
As of December 31, 2022, 2021 and 2020
(Amounts in thousands)

				Increase / (Decrease)			
				2022-2021		2021-2020	
	2022	2021	2020	$	%	$	%
Cash	$ 697	$ 2,956	$ 1,480	$ (2,259)	(76)%	$ 1,476	100 %
Investments, at fair value	652,011	773,997	755,909	(121,986)	(16)%	18,089	2 %
Receivables	598	1,815	3,235	(1,217)	(67)%	(1,420)	(44)%
Total assets	653,306	778,768	760,623	(125,462)	-16%	18,145	2 %
Due to broker for securities purchased	611	984	542	(373)	(38)%	442	82 %
Forward Currency & Margin contracts	59	182	43	(123)	(68)%	139	323 %
Due to broker for investment fee	(19)	269	316	(288)	(107)%	(47)	(15)%
Due to broker for admin. fee	257	10	-	247	2,470 %	10	100%
Total liabilities	908	1,445	901	(537)	(37)%	544	60 %
Net position restricted for pensions	$ 652,398	$ 777,323	$ 759,722	$ (124,925)	(16)%	$ 17,601	2 %

December 31, 2022 versus December 31, 2021

The assets of the Additional Plan exceeded its liabilities by $652.4 million as of December 31, 2022. Net position restricted for pensions are held for the payment of future benefits to members and pensioners.

The Additional Plan's net position restricted for pensions decreased by $124.9 million during 2022, representing a decrease of 16% over 2021. This decrease is a result of investment activity and plan contributions net of benefit payments and expenses during 2022.

Investments at December 31, 2022 were $652.4 million representing a decrease of $122.0 million from 2021. The decrease was a result of the changes noted above together with regards to the underperformance of investment markets in 2022.

Payables for investments purchased at December 31, 2022, amounted to $0.6 million. Investments are purchased on a trade-date settlement basis and generate timing differences on settlement dates, like receivables for investments sold.

December 31, 2021 versus December 31, 2020

The assets of the Additional Plan exceeded its liabilities by $777.3 million as of December 31, 2021. Net position restricted for pensions are held for the payment of future benefits to members and pensioners.

The Additional Plan's net position restricted for pensions increased by $17.6 million during 2021, representing an increase of 2% over 2020. This increase is a result of investment activity and plan contributions net of benefit payments and expenses during 2021.

Investments at December 31, 2021 were $774.0 million representing an increase of $18.1 million from 2020. The increase was a result of the changes noted above together with the improved investment performance in 2021.

Payables for investments purchased at December 31, 2021, amounted to $1.0 million. Investments are purchased on a trade-date settlement basis and generate timing differences on settlement dates, like receivables for investments sold.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31, 2022, 2021 and 2020
(Amounts in thousands)

				Increase / (Decrease)			
				2022-2021		2021-2020	
	2022	2021	2020	$	%	$	%
Additions:							
Net investment (loss) / income	$ (51,214)	$ 96,215	$ 3,808	$ (147,429)	(153)%	$ 92,407	2,427 %
Employer contributions	70,763	70,553	68,723	210	0 %	1,830	3 %
Employee contributions	51	73	141	(22)	(30)%	(68)	(48)%
Total additions	19,600	166,841	72,672	(147,241)	(88)%	94,169	130 %
Deductions:							
Benefits paid directly to participants	143,764	148,630	152,924	$ (4,866)	(3)%	$ (4,294)	(3)%
Transfers	-	-	(878)	-	0 %	878	(100)%
Administrative expenses	761	610	612	151	25%	(2)	(0)%
Total deductions	144,525	149,240	152,658	(4,715)	(3)%	(3,418)	(2)%
Net (decrease) / increase	(124,925)	17,601	(79,986)	(142,526)	(810)%	$ 97,587	(122)%
Net position restricted for pensions							
Beginning of Year	777,323	759,722	839,708	17,601	2 %	(79,986)	(10)%
End of year	$ 652,398	$ 777,323	$ 759,722	$ (124,925)	(16)%	$ 17,601	2 %

December 31, 2022 versus December 31, 2021

At the end of 2022, the net investment income decreased by $147.4 million due to net investment losses of $51.2 million in 2022 versus net gain of $96.2 million experienced in 2021.

Employer and employee contributions for the year ended December 31, 2022 totaled $70.8 million, which represents an increase of 0.3% from 2021. This increase was the result of higher employer contributions made by the Plan in 2022.

Benefit payments for the year ended December 31, 2022 totaled $143.8 million, which was lower than benefit payments made in 2021 in the amount of $148.6 million, due to less Plan benefits paid out to existing retirees attaining age sixty-five in 2022.

December 31, 2021 versus December 31, 2020

At the end of 2021, the net investment income increased by $92.4 million 1 due to net investment gains of $96.2 million in 2021 versus net gain of $3.8 million experienced in 2020.

Employer and employee contributions for the year ended December 31, 2021 totaled $70.6 million, which represents an increase of 3% from 2020. This increase was the result of higher employer contributions made by the Plan in 2021.

Benefit payments for the year ended December 31, 2021 totaled $148.6 million, which was lower than benefit payments made in 2020 in the amount of $152.9 million, due to less Plan benefits paid out to existing retirees attaining age sixty-five in 2021.

Economic Factors

Market Overview – 2022

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

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

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

Macro Themes

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

United States

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

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

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

International Developed

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

Emerging Markets

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

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

Commodities

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

<u>Market Outlook - 2023</u>

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

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

CONTACT INFORMATION

This financial report is designed to provide a general overview of the Long Island Rail Road Company for Additional Pensions' finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Metropolitan Transportation Authority, Deputy Chief, Controller's Office, 2 Broadway, 15th Floor, New York, NY 10004.

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THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

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

	2022	2021
ASSETS:		
Cash	$ 697	$ 2,956
Investments at fair value (notes 2 and 3):		
Investments measured at readily determined fair value	200,019	194,633
Investments measured at net asset value	451,992	579,364
Total investments	652,011	773,997
Receivables:		
Participant and union contributions	-	(20)
Other receivables	23	64
Due from the MTA DB Plan for employer contributions	-	1,295
Securities sold	175	138
Accrued interest and dividends	400	338
Total receivables	598	1,815
Total assets	653,306	778,768
LIABILITIES:		
Due to broker for securities purchased	611	984
Forward Currency & Margin contracts	59	182
Due to broker for investment fees	(19)	269
Due to broker for administrative expenses	257	10
Total liabilities	908	1,445
NET POSITION RESTRICTED FOR PENSIONS	$ 652,398	$ 777,323

See notes to financial statements.

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(Amounts in thousands)

	2022	2021
ADDITIONS:		
Investment income:		
Net realized and unrealized (losses) / gains	$ (56,789)	$ 93,217
Interest income	8,067	8,132
Dividend income	1,774	1,361
Total investment (loss) / income	(46,948)	102,710
Less investment expenses	(4,266)	(6,495)
Total net investment (loss) / income	(51,214)	96,215
Contributions (Note 5):		
Employer	70,763	70,553
Participant and union	51	73
Total contributions	70,814	70,626
Total additions	19,600	166,841
DEDUCTIONS:		
Benefits paid to participants	143,764	148,630
Administrative expenses	761	610
Total deductions	144,525	149,240
NET (DECREASE) / INCREASE IN NET POSITION	(124,925)	17,601
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	777,323	759,722
End of year	$ 652,398	$ 777,323

See notes to financial statements.

1. PLAN DESCRIPTION

The Long Island Rail Road Company Plan for Additional Pensions (the "Additional Plan") is a single employer defined benefit plan administered by the Board of Pension Managers. The following brief description of the Additional Plan is provided for general information purposes only. Participants should refer to the Additional Plan document for more complete information.

General - Effective July 1, 1971, The Long Island Rail Road Company (the "Company") adopted two fully integrated defined benefit pension plans, The Long Island Rail Road Company Pension Plan (the "Plan") and the Additional Plan. These plans cover employees hired before January 1, 1988. Effective January 1, 1989, the Plan was amended to limit the accrual of credited service time and determination of average earnings through December 31, 1988. All pension plan benefits were frozen as of that date by virtue of a Plan amendment. All benefit accruals subsequent to that date are provided under the Additional Plan, which was amended to provide for accruals on and after January 1, 1989. The Additional Plan benefits are now the total benefit that would have been paid previously from the sum of the two plans reduced by any portion of benefits that a participant received from the frozen pension plan benefits. The total benefits payable to participants have not been changed. These financial statements do not include any amounts related to the Plan, as all Plan assets were transferred into the MTA Defined Benefit Pension Plan, effective October 2, 2006.

Both Company's pension plans are governmental plans and, accordingly, are not subject to funding and other requirements of the Employee Retirement Income Security Act of 1974 ("ERISA").

The Metropolitan Transportation Authority Defined Benefit Pension Plan and The Long Island Rail Road Company Plan for Additional Pensions comprise the Metropolitan Transportation Authority's Master Trust. The MTA Master Trust is governed by the Board of Pension Managers (the "Board"). The Board has contracted with JP Morgan Chase, as the Trustee for the Trust, and has provided the Master Trust Investment Guidelines to the respective Trustee. These guidelines provide the specific goals and objectives of the Trust as well as the allowable investments permitted under the Trust. Under the Investment Guidelines, the Trustee is permitted to invest in commingled funds on behalf of the Master Trust.

The total asset allocation of the 2022 Master Trust is 90.45% for the Metropolitan Transportation Authority Defined Benefit Pension Plan and 9.55% for the Long Island Rail Road Company Plan for Additional Pensions for the year ended December 31, 2022.

The total asset allocation of the 2021 Master Trust is 89.23% for the Metropolitan Transportation Authority Defined Benefit Pension Plan and 10.77% for the Long Island Rail Road Company Plan for Additional Pensions for the year ended December 31, 2021.

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Pension Benefits - All full-time employees who were hired before January 1, 1988, are eligible for Additional Plan membership. At January 1, 2022 and 2021, the most recent valuation date, the Additional Plan's membership consisted of the following:

	January 1 2022	**January 1 2021**
Active plan members	15	23
Terminated vested & other inactives	15	19
Retirees and beneficiaries receiving benefits	5,122	5,298
Total	5,152	5,340

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

Benefit and contribution provisions, which are based on the point in time at which participants last entered qualifying service and their length of credited service, are established by, and may only be amended by the Company, subject to the obligations of the Company under its collective bargaining agreements. The Company's Board of Directors must approve all amendments. The Additional Plan has both contributory and non-contributory requirements, with retirement ages varying from 50 to 65 depending upon a participant's length of credited service. Pension benefits payable to age 65, where eligible, are calculated as 2% of the employee's applicable final average earnings for each year of qualifying service up to 25 years plus 1.5% of applicable final average earnings for each year of qualifying service in excess of 25 years. For pension benefits payable at and after age 65, regardless of whether benefits commenced before or after the employee attained age 65, benefits are calculated in the same manner as pension benefits payable prior to age 65 except that the amount so determined is reduced by a percentage of the employee's annuity (not including any supplemental annuity) value at age 65 under the Federal Railroad Retirement Act.

The reduction of pension benefits for amounts payable under the Federal Railroad Retirement Act is as follows:

(i) 25% for an employee who had 20 years credited service prior to July 1, 1974,
(ii) 50% for any other employee first employed before July 1, 1974, and
(iii) 100% for any employee first employed on or after July 1, 1974.

Beginning in 1999, for all represented employees who were hired between July 1, 1974, and December 31, 1987, who were employees after January 1, 1999, and were not retired when their collective bargaining agreement was ratified and approved by MTA Board after that date, the offset of Railroad Retirement Benefits is reduced to 50% (under the Additional Plan). For all management employees who were hired between July 1, 1974, and December 31, 1987, and who were employees on September 30, 1999, the offset of Railroad Retirement Benefits was reduced to 50% (under the Additional Plan).

For participants, the Additional Plan has both non-contributory and contributory requirements. Participants who entered qualifying service before July 1, 1978 are not required to contribute.

Participants who entered qualifying service on or after July 1, 1978, are required to contribute 3% of their wages to the Additional Plan. The Company contributes additional amounts based on actuarially determined amounts that are designed to accumulate sufficient assets to pay benefits when due.

Death and Disability Benefits - Participants who become disabled after accumulating 10 years of credited service and who meet the requirements as described in the Additional Plan receive a disability benefit. Disability pension benefits are calculated based on the participant's qualifying service and a percentage of final average compensation reduced by the full amount of benefit under the Federal Railroad Retirement Act.

Survivorship benefits are paid to the participant's spouse when a survivorship option is elected or when an active participant has not divested his or her spouse of benefits. The survivorship benefit is payable at the time of death or when the vested participant would have attained an eligible age. The amount payable is in the form of an annuity. A lump sum death benefit no greater than $5,000 is payable upon death on behalf of a non-vested participant or vested participant whose pension rights were waived.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The Additional Plan's financial statements are prepared on the accrual basis of accounting under which deductions are recorded when the liability is incurred, and revenues are recognized in the accounting period in which they are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Contributions from members are recorded when the employer makes payroll deductions from plan members. Employer contributions are recognized when due in accordance with the terms of the Plan. Additions to the Plan consist of contributions (member and employer) and net investment income. Investment purchases and sales are recorded as of trade date.

For financial reporting purposes, The Additional Plan adheres to accounting principles generally accepted in the United States of America. The Additional Plan applies all applicable pronouncements of the Governmental Accounting Standards Board ("GASB").

New Accounting Standards Adopted – The Plan adopted the following GASB Statement for the year ended December 31, 2022:

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

- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan
- The applicability of Statements No.73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements

- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments.

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

Recent Accounting Pronouncements—Not yet adopted but currently being evaluated

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

Use of Management's Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates include fair value of investments, the annual required contribution, and the Net Pension liability.

Payment of Benefits - Benefits are recorded when paid.

Investment and Administrative Expenses - Investment and administrative expenses are paid by the Additional Plan assets and accordingly are reflected in the accompanying financial statements.

Income Tax Status - The Additional Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) of the Internal Revenue Code. Accordingly, the Additional Plan is tax-exempt and is not subject to the provisions of ERISA.

3. CASH AND INVESTMENTS

Investment Policy - The Plan's policy statement is issued for the guidance of fiduciaries, including the members of the Board and investment managers, in the course of investing the assets of the Trust. The investments of the Trust will be made for the exclusive benefit of the Plan participants and their beneficiaries. Policy guidelines may be amended by the Board upon consideration of the advice and recommendations of the investment professionals.

In order to have a reasonable probability of achieving the target return at an acceptable risk level, the Board has adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on, at least, a quarterly basis and will be readjusted when an asset class weighting is outside its target range. The following was the MTA Defined Benefit Pension Plan Board adopted asset allocation policy, which includes assets of the Additional Plan, as of December 31, 2022.

Asset Class	**Target Allocation (%)**	**Target Range (%)**	**Policy Benchmark**
Equities	29.0	24-34	
Domestic Large Cap	10.0	5-15	S&P 500
Domestic Small Cap	5.5	2-10	Russell 2000
International Developed Markets Equities	10.0	5-15	MSCI EAFE
Emerging Markets Equities	3.5	2-6	MSCI Emerging Markets
Fixed Income	15.0	9-21	Manager Specific
Global Asset Allocation*	20.0	15-33	50% World Equity/ 50% Citigroup WGBI unhedged
Opportunistic Investments	6.0	0-15	Manager Specific
Absolute Return	15.0	10-22	Manager Specific
Real Assets	5.0	0-10	Manager Specific
Real Estate	3.0	0-10	Manager Specific
Private Equity	7.0	0-10	Manager Specific
Total	**100.0**		

* The Global Asset Allocation managers will invest across numerous liquid asset classes including: stocks, bonds, commodities, TIPS and REITs.

Investment Objective - The investment objective of the funds is to achieve consistent positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation.

Investment Guidelines - The Board of Pension Managers executes investment management agreements with professional investment management firms to manage the assets of the Plan. The fund managers must adhere to guidelines that have been established to limit exposure to risk.

All Securities managers shall be registered advisors under the Investment Advisors Act of 1940.

The overall capital structure targets and permissible ranges for eligible asset classes of the Trust are detailed within the Investment Policy Statement. Full discretion, within the parameters of the guidelines described herein and in any individual investment policy associated with that allocation, is granted to the investment managers regarding the asset allocation, the selection of securities, and the timing of transactions. It is anticipated that the majority of investment managers will be funded through commingled funds, however, in some cases (likely equity and fixed income mandates) separate account vehicles may be utilized. For separate accounts, individual manager guidelines and/or exemptions are specified in each approved investment management agreement ("IMA"). Should there be conflicts, the individual manager guidelines set forth in the IMA supersede the general guidelines in the Investment Policy Statement. For commingled funds, investment guidelines and/or exemptions are specified in such vehicle's offering documents. Should there be conflicts, the individual vehicle's investment guidelines supersede the general guidelines in the Investment Policy Statement.

Individual investment manager benchmarks and performance requirements are specified within the Investment Policy Statement. Performance of the Trust will be evaluated on a regular basis. Evaluation will include the degree to which performance results meet the goals and objectives as herewith set forth. Toward that end, the following standards will be used in evaluating investment performance:

1. The compliance of each investment manager with the guidelines as expressed herein, and
2. The extent to which the total rate of return performance of the Trust achieves or exceeds the targeted goals.

Fixed Income Managers - Investment managers may not purchase inverse floating rate bonds, structured notes, commodities, securities on margin, sell short, lend securities, invest in private placements (other than 144A Privates), real estate investments, and oil, gas and mineral exploration investments without the written consent of the Board of Managers. The fixed-income portion of the Additional Plan's assets shall be invested in marketable, fixed income securities. The following are acceptable:

- Domestic fixed income investments are permitted, subject to the guidelines reflected in Investment Policy Statement. Yankee bonds, which are dollar denominated foreign securities, may be held by each domestic manager in proportions which each manager shall deem appropriate.

- International fixed income securities are permitted, subject to the guidelines reflected in Investment Policy Statement. Generally defined, the Citigroup World Government Bond Index represents the opportunity set for international developed markets. The J.P. Morgan Emerging Markets Bond Index-Global represents the opportunity set for international emerging markets denominated in USD. The J.P. Morgan GBI-EM Global Diversified Index represents the opportunity set for international emerging markets denominated in local currency. These index references are guidelines and do not prohibit investment in securities outside those indexes.

- Investment managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments regardless of the classifications provided by rating agencies.

- The average duration (interest rate sensitivity) of an actively managed fixed income portfolio shall range within two years of the benchmark's duration.

- For domestic fixed income portfolios, individual manager account for the securities of an individual issuer, excepting the U.S. government and U.S. government agencies, shall not constitute more than 5% at market at any time.

- For international bond portfolios, individual manager account for the securities of any non-governmental issuer shall not constitute more than 5% at market at any time.

Equity Investment Managers - The equities investment managers may not purchase commodities, securities on margin, sell short, lend securities, invest in private placements, real estate investments, oil, gas and mineral exploration investments, and nominally public issues without the written consent of the Board of Managers. The manager may purchase Rule 144A securities provided such securities are judged by the manager to be liquid and don't in the aggregate exceed 10% of the market value of the portfolio. The manager shall also be able to purchase securities if such securities are convertible into publicly traded equities.

- Domestic equity investments are permitted, subject to the guidelines. American Depository Receipts (ADRs), which are dollar denominated foreign securities traded on the domestic U.S. stock exchanges (e.g., Reuters, Nestle, Sony) may be held by each domestic stock manager in proportions which each manager shall deem appropriate.

- International equities are permitted, subject to the guidelines. Generally defined, the Morgan Stanley EAFE (Europe, Australasia, and the Far East) Index represents the opportunity set for international developed markets. The Morgan Stanley Emerging Markets Free Index represents the opportunity set for international emerging markets. These index references are guidelines and do not prohibit investment in securities outside those indexes.

- The equity specialists may vary equity commitment from 90% to 100% of assets under management.

- Individual manager account may hold no more than 8% at market or 1.5x the manager's benchmark weight (whichever is greater) of any single company's stock.

Overlay Managers

- For a variety of reasons, the investment program may carry large amounts of cash throughout the year. In order to achieve the actuarial assumed returns on the total investment program, the Board may retain a futures overlay manager. The overlay manager shall use exchange traded futures contracts to expose the cash to the long-term target asset allocation.

- In addition, the overlay manager may be utilized for the following:
  a) Expose un-invested assets of domestic and international equity investment managers to their respective equity benchmarks through the use of futures contracts,
  b) Assist the Board in rebalancing, transitions, and/or gaining exposure to approved asset classes,
  c) Provide the market (or "beta") exposures in a portable alpha program.
  d) The overlay manager shall ensure that all futures positions are fully collateralized, and the manager is prohibited from leveraging any portion of the portfolio.

Alternative Investments Managers

Alternative investments are broadly categorized into the following categories:

- Opportunistic
- Real assets
- Real estate
- Absolute return
- Private equity

Common features of alternative investments are limited liquidity, the use of derivatives, leverage and shorting, lower regulatory oversight, limited transparency, and high fees. Compensating for these risks, these investments offer the potential of diversification and/or higher rates of return over time.

Derivatives Policy

Where appropriate, investment managers may use derivative securities for the following reasons:

- Hedging. To the extent that the portfolio is exposed to clearly defined risks and there are derivative contracts that can be used to reduce those risks, the investment managers are permitted to use such derivatives for hedging purposes, including cross-hedging of currency exposures.

- Creation of Market Exposures. Investment managers are permitted to use derivatives to replicate the risk/return profile of an asset or asset class provided that the guidelines for the investment manager allow for such exposures to be created with the underlying assets themselves.

- Management of Country and Asset Allocation Exposure. Investment managers charged with tactically changing the exposure of their portfolio to different countries and/or asset classes are permitted to use derivative contracts for these purposes.

- Additional uses of derivatives shall be approved by the Board or set forth in the individual investment guidelines or the offering documents prior to implementation and shall be restricted to those specific investment managers.

Ineligible Investments (Separately Managed Accounts) - Unless specifically approved by the Board or set forth in the individual investment guidelines, certain securities, strategies, and investments are ineligible for inclusion within separately managed accounts. Among these are:

- Privately placed or other non-marketable debt, except securities issued under Rule 144a,
- Lettered, legend or other so-called restricted stock,
- Commodities
- Short sales, and,
- Direct investments in private placements, real estate, oil and gas and venture capital, or funds comprised thereof.

Exceptions:

The Board of Managers, in recognition of the benefits of commingled funds as investment vehicles (i.e., the ability to diversify more extensively than in a small, direct investment account and the lower costs which can be associated with these funds) may, from time to time, allow investment in such funds. The Board recognizes that it cannot give specific policy directives to a fund whose policies are already established; therefore, the Board is relying on the investment consultant to assess and monitor the investment policies of any funds used by the Plan to ascertain whether they are appropriate.

Investment Valuation - Investments primarily include money market funds, equity securities, United States government securities, corporate bonds and debentures, asset backed securities, mortgage and commercial backed securities, mutual and commingled funds. All investments are registered with securities held by the trustee under a grantor trust, in the name of the Additional Plan. The values of Additional Plan investments are adjusted to fair value as of the last business day of each month based on quoted market prices or net asset value, which is determined to be a practical expedient for measuring fair value, except for certain cash equivalents, which are stated at cost and approximate market value. Purchases and sales of securities are recorded on a trade-date basis.

Income Recognition - Gains or losses from investment transactions are recognized on a trade date basis. Such investment gains or losses are determined using the average cost method. Dividend income is recorded on the ex-dividend date and interest income is recorded on the accrual basis.

Risks and Uncertainties—The Plan's investments are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities and level of uncertainty related to changes in the value of investment securities, it is possible that changes in risks in the near term would materially affect the amounts reported in the Plan's financial statements.

The financial markets, both domestically and internationally, have demonstrated significant volatility on a daily basis, which affects the valuation of investments. The Plan utilizes asset allocation strategies that are intended to optimize investment returns over time in accordance with investment objectives and with acceptable levels of risk.

LIRRD Additional Pension Plan
Investments measured by fair value level
(In thousands)

	2022			
	December 31, 2022	Quoted Price in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity Securities:				
Separate account large-cap equity funds	$ 65,960	65,960	-	-
Separate account small-cap equity funds	36,035	36,035	-	-
Separate account small-Real Estate Investments Trusts	5,963	5,963	-	-
Separate account - International equity funds	20,084	20,084	-	-
Total equity investments	128,042	128,042	-	-
Debt Securities				
Mutual fund	32,956	32,956	-	-
Separate account - opportunistic credit/Private debt	7,197	-	7,197	-
Separate account debt funds	31,824	-	31,824	-
Total debt investments	71,977	32,956	39,021	-
Total investments by fair value	$ 200,019	160,998	39,021	-

LIRRD Additional Pension Plan
Investments measured at NAV
(In thousands)

	2022			
	December 31, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity Securities:				
Comingled large cap equity funds	$ 25,749	$ -	Daily	None
Comingled international equity funds	50,368	-	Daily	None
Comingled emerging market equity funds	26,258	-	Daily, monthly	None
Total equity investments measured at the NAV	102,375	-		
Debt Securities				
Comingled debt funds	63,031	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	63,031	-		
Absolute return:				
Direct lending	19,631	4,386	Bi-annually	60 plus days
Distressed securities	3,082	-	Not eligible	N/A
Credit long	5,932	-	Quarterly	3-30 days
Credit long/short	84	-	Quarterly	3-60 days
Hedge Funds of funds	45,245	-	Quarterly	3-60 days
Event driven	98	217	Quarterly, Bi-annually	60-120 days
Multistrategy	634	-	Quarterly	3-60 days
Risk parity	13,074	-	Monthly	3-30 days
Total absolute return measured at the NAV	87,780	4,603		
Private equity - private equity partnerships	43,957	27,884	Not eligible	N/A
Comingled real estate funds	111,846	-	Not eligible	N/A
Real assets:				
Energy	10,832	4,320	Not eligible	N/A
Infrastructure	2,029	508	Not eligible	N/A
Shipping	794	194	Not eligible	N/A
Total real assets measured at the NAV	13,655	5,022		
Short term investments measured at the NAV	29,348			
Total investments measured at the NAV	$ 451,992	$ 37,509		
Total investments	$ 652,011			

LIRRD Additional Pension Plan
Investments measured by fair value level
(In thousands)

	2021			
	December 31, 2021	**Quoted Price in Active Markets for Identical Assets Level 1**	**Significant Other Observable Inputs Level 2**	**Significant Unobservable Inputs Level 3**
Equity Securities:				
Separate account large-cap equity funds	$ 59,067	59,067	-	-
Separate account small-cap equity funds	44,634	44,634	-	-
Separate account small-Real Estate Investments Trusts	8,947	8,947	-	-
Total equity investments	112,648	112,648	-	-
Debt Securities				
Mutual fund	31,294	31,294	-	-
Separate account - opportunistic credit/Private debt	9,540	-	9,540	-
Separate account debt funds	41,151	-	41,151	-
Total debt investments	81,985	31,294	50,691	-
Total investments by fair value	$ 194,633	143,942	50,691	-

LIRRD Additional Pension Plan
Investments measured at NAV
(In thousands)

	2021			
	December 31, 2021	**Unfunded Commitments**	**Redemption Frequency**	**Redemption Notice Period**
Equity Securities:				
Comingled large cap equity funds	$ 32,521	$ -	Daily	None
Comingled international equity funds	94,642	-	Daily	None
Comingled emerging market equity funds	38,355	-	Daily, monthly	None
Total equity investments measured at the NAV	165,518	-		
Debt Securities				
Comingled debt funds	42,492	-	Daily, monthly, quarterly	None
Total debt investments measured at the NAV	42,492	-		
Absolute return:				
Direct lending	21,326	3,944	Bi-annually	60 plus days
Distressed securities	4,132	-	Not eligible	N/A
Credit long	6,705	-	Quarterly	3-30 days
Credit long/short	139	-	Quarterly	3-60 days
Hedge Funds of funds	50,577	-	Quarterly	3-60 days
Event driven	379	244	Quarterly, Bi-annually	60-120 days
Multistrategy	1,146	-	Quarterly	3-60 days
Risk parity	18,892	-	Monthly	3-30 days
Total absolute return measured at the NAV	103,296	4,188		
Private equity - private equity partnerships	52,255	25,355	Not eligible	N/A
Comingled real estate funds	112,098	-	Not eligible	N/A
Real assets:				
Energy	15,310	4,703	Not eligible	N/A
Infrastructure	2,743	573	Not eligible	N/A
Shipping	2,349	219	Not eligible	N/A
Total real assets measured at the NAV	20,402	5,495		
Short term investments measured at the NAV	83,303			
Total investments measured at the NAV	$ 579,364	$ 35,038		
Total investments	$ 773,997			

Concentration of Credit Risk—Individual investments held by the Additional Plan that represent 5% or more of the Additional Plan's net assets available for benefits at December 31, 2022 and 2021 is as follows:

(Amount in thousands)

	2022	**2021**
Investments at fair value as determined by quoted market prices:		
JPMCB Strategic Property Fund	$ 85,195	$ 81,418
JP Morgan Chase (STIF)	-	83,303
Robert W. Baird & Company	-	41,151
Blackrock Hedge Index	35,232	-
Rhumbline Core Bond	33,854	-
Rhumbline Large Cap Equity	42,145	-

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

(Amount in thousands) **Quality Rating—S&P**	**2022 Fair Value**	**Percentage of Fixed Income Portfolio**	**2021 Fair Value**	**Percentage of Fixed Income Portfolio**
AAA	$ 3,185	8.36 %	$ 3,685	7.51 %
AA	8,353	21.94	8,481	17.29
A	2,455	6.44	3,953	8.06
BBB	9,697	25.47	12,284	25.05
BB	457	1.20	1,086	2.21
B	-	-	99	0.20
CCC	86	0.23	325	0.66
Not rated	6,442	16.92	7,033	14.34
Total credit risk debt securities	30,675	80.56	36,945	75.32
U.S. Government bonds*	7,401	19.44	12,100	24.68
Total fixed income securities	$ 38,076	100.00 %	$ 49,046	100.00 %
Other securities not rated — equity, international funds and foreign corporate bonds	613,935		724,951	
Total investments	$ 652,011		$ 773,997	

* U.S. Treasury Bonds, Notes and Treasury-inflation protected securities are obligations of the U.S. government or explicitly guaranteed by the U.S. government and therefore not considered to have a credit risk.

Custodial Credit Risk - Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Custodial credit risk is the risk that, in the event of a failure of the counterparty, the Additional Plan will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Additional Plan and are held by either the counterparty or the counterparty's trust department or agent but not in the Additional Plan's name.

Consistent with the Additional Plan's trust custodial administration agreement, the investments are held by the Additional Plan's custodian and registered in the Additional Plan's name.

Interest Rate Risk Exceptions - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of interest rate risk. The greater the duration of a bond or portfolio of bonds, the greater its price volatility will be in response to a change in interest rate risk and vice-versa. Duration is an indicator of bond price's sensitivity to 100-basis point change in interest rates. The lengths of investment maturities (in years), as of December 31, 2022 and 2021 is as follows:

	2022		2021	
Investment Fund (In thousands)	**Fair Value**	**Duration**	**Fair Value**	**Duration**
JP Morgan Chase	$ 38,076	6.57	$ 49,046	6.24
Total fixed income securities	38,076		49,046	
Portfolio modified duration		6.57		6.24
Investments with no duration reported	613,935		724,951	
Total investments	$ 652,011		$ 773,997	

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Each investment manager, through the purchase of units in a commingled investment trust fund or international equity mutual fund establishes investments in international equities. The Additional Plan also holds investments in American Depository Receipts ("ADRs"), which are denominated in US dollars and accounted for at fair value.

The Plan did not have any foreign currency exposures as of December 31, 2022 and 2021.

Additional Information - The Additional Plan is part of the MTA Master Trust of which the Additional Plan participates on a percentage basis. JP Morgan Chase is the trustee of the MTA Master Trust. The percentage of the Additional Plan ownership for the year ended December 31, 2022 and 2021 was 9.55% and 10.77%, respectively.

(In thousands)	**December 31, 2022**		**December 31, 2021**	
	Master Trust Total	**Additional Plan**	**Master Trust Total**	**Additional Plan**
Total Investments:				
Investments measured at readily determined fair value	$ 2,093,923	$ 200,019	$ 1,807,598	$ 194,633
Investments measured at the net asset value	3,839,843	366,797	4,624,540	497,947
Total investments measured at fair value	$ 5,933,766	$ 566,816	$ 6,432,138	$ 692,580

There is an additional investment which reside outside of the Master Trust and are presented within these financial statements.

4. NET PENSION LIABILITY

The components of the net pension liability of the Plan at December 31, 2022 and 2021 was as follows (in thousands):

	2022	2021
Total pension liability	$ 1,258,877	$ 1,322,471
Fiduciary net position	652,398	777,323
Net pension liability	$ 606,479	$ 545,148
Fiduciary net position as a percentage of the total pension liability	51.82 %	58.78 %

Actuarial Methods and Assumptions - The total pension liability as of December 31, 2022 and 2021 was determined by an actuarial valuation date of January 1, 2022 and 2021, that was updated to roll forward the total pension liability to year-end. Actuarial valuations are performed annually as of January 1.

Discount Rate - The discount rate used to measure the total liability as of December 31, 2022 and 2021 was 6.50%. The projection of cash flows used to determine the discount rate assumed that plan contributions will be made in accordance with the Employer funding policy as projected by the Plan's actuary. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current and inactive plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate - The following presents the net pension liability of the Plan in 2022 and 2021, calculated using the discount rate of 6.50%; as well as what the Plan's net pension would be if it were calculated using a discount rate that is 1-percentage point lower (5.50%) or 1-percentage point higher (7.50%) than the current rate:

2022 **(In thousands)**	**Decrease** **5.50%**	**Discount Rate** **6.50%**	**Increase** **7.50%**
Net pension liability	$ 703,189	$ 606,479	$ 522,065

2021 **(In thousands)**	**Decrease** **5.50%**	**Discount Rate** **6.50%**	**Increase** **7.50%**
Net pension liability	$ 648,472	$ 545,148	$ 455,156

Additional information of the latest actuarial valuation follows:

Valuation date	January 1, 2022
Valuation timing	Actuarially determined contributions calculated as of December 31, for the fiscal year and discounted to July 1 to reflect monthly payments throughout the year.
Actuarial cost method	Entry age normal.
Amortization method	Period specified in current valuation report (closed 11-year period beginning January 1, 2022) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 refecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial assumptions:	
Investment rate of return	6.5%, net of investment expenses
Projected salary increases	3.0%
Inflation/Railroad Retirement wage base	2.25%; 3.25%

Valuation date	January 1, 2021
Valuation timing	Actuarially determined contributions calculated as of December 31, for the fiscal year and discounted to July 1 to reflect monthly payments throughout the year.
Actuarial cost method	Entry age normal.
Amortization method	Period specified in current valuation report (closed 12-year period beginning January 1, 2021) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 refecting mortality improvement on a generational basis using Scale MP-2021.
Actuarial assumptions:	
Investment rate of return	6.5%, net of investment expenses
Projected salary increases	3.0%
Inflation/Railroad Retirement wage base	2.25%; 3.25%

Calculation on Money-Weighted Rate of Return - The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the middle of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

2022 - Schedule of Calculations of Money-Weighted Rate of Return
(Amounts in thousands)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning value—January 1, 2022	$ 777,323	12.00	1.00	$ 722,879
Monthly net external cash flows:				
January	(12,040)	12.00	1.00	(11,196)
February	(6,115)	11.00	0.92	(5,719)
March	(6,115)	10.00	0.83	(5,757)
April	(6,115)	9.00	0.75	(5,790)
May	(6,115)	8.00	0.67	(5,824)
June	(6,115)	7.00	0.58	(5,862)
July	(6,115)	6.00	0.50	(5,896)
August	(6,115)	5.00	0.42	(5,931)
September	(6,115)	4.00	0.33	(5,970)
October	(6,115)	3.00	0.25	(6,005)
November	(6,115)	2.00	0.17	(6,040)
December	(526)	1.00	0.08	(491)
Ending Value—December 31, 2022				$ 652,398
Money—Weighted Rate of Return	(7.00)%			

2021 - Schedule of Calculations of Money-Weighted Rate of Return
(Amounts in thousands)

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning value—January 1, 2021	$ 760,689	12.00	1.00	$ 862,394
Monthly net external cash flows:				
January	(12,431)	12.00	1.00	(14,092)
February	(6,872)	11.00	0.92	(7,713)
March	(6,872)	10.00	0.83	(7,627)
April	(6,872)	9.00	0.75	(7,551)
May	(6,872)	8.00	0.67	(7,475)
June	(6,872)	7.00	0.58	(7,391)
July	(6,872)	6.00	0.50	(7,317)
August	(6,872)	5.00	0.42	(7,244)
September	(6,872)	4.00	0.33	(7,163)
October	(6,872)	3.00	0.25	(7,091)
November	(6,872)	2.00	0.17	(7,020)
December	2,538	2.71	0.23	2,613
Ending Value—December 31, 2021				$ 777,323
Money—Weighted Rate of Return	13.37 %			

Calculation on Long-Term Expected Rate of Return - The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are as of December 31, 2022 and 2021.

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2022

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	2.27%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	2.51%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	1.58%
US High Yield Bonds	ICE BofA US High Yield	3.00%	4.40%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.79%
Private Credit	CDL Index	7.00%	6.99%
Emerging Market Bonds	JPM EMBI Plus	2.00%	4.99%
US Large Cap Equity	S&P 500	18.00%	5.64%
US Small Cap Equity	Russell 2000	7.00%	7.25%
Foreign Developed Equity	MSCI EAFE NR	12.00%	6.90%
Emerging Market Equity	MSCI EM NR	4.50%	9.58%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	9.81%
US REITs	FTSE Nareit All Equity REITs	1.00%	6.71%
Private Real Estate Property	NCREIF Property	4.00%	4.86%
Private Equity	Cambridge Private Equity	7.00%	10.74%
Commodities	Bloomberg Commodity	4.00%	2.96%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	4.52%
Assumed Inflation - Mean			2.33%
Assumed Inflation - Standard Deviation			1.41%
Portfolio Nominal Mean Return			8.08%
Portfolio Standard Deviation			12.42%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 Investment Policy

SCHEDULE OF LONG TERM EXPECTED RATE OF RETURN FOR 2021

Asset Class	Index	Target Allocation*	Real Rate of Return
US Core Fixed Income (Aggregate)	Bloomberg Barclays Aggregate	10.50%	1.39%
US Long (11-30 Year) Treasury Bonds	Bloomberg US Treasury Long Treasury	2.00%	1.16%
US TIPS (Inflation-Indexed Bonds)	Bloomberg US Treasury US TIPS	2.00%	0.60%
US High Yield Bonds	ICE BofA US High Yield	3.00%	3.92%
US Bank/Leveraged Loans	Credit Suisse Leveraged Loan	1.50%	3.49%
Private Credit	CDL Index	7.00%	6.93%
Emerging Market Bonds	JPM EMBI Plus	2.00%	3.98%
US Large Caps	S&P 500	18.00%	4.94%
US Small Caps	Russell 2000	7.00%	6.73%
Foreigh Developed Equity	MSCI EAFE NR	12.00%	6.27%
Emerging Market Equity	MSCI EM NR	4.50%	8.82%
Emerging Markets Small Cap Equity	MSCI EM Small NR	1.50%	8.89%
US REITs	FTSE Nareit All Equity REITs	1.00%	5.60%
Private Real Estate Property	NCREIF Property	4.00%	4.61%
Private Equity	Cambridge Private Equity	7.00%	10.36%
Commodities	Bloomberg Commodity	4.00%	1.99%
Hedge Funds - MultiStrategy	HFRI: Fund Wtd Composite	13.00%	3.73%
Assumed Inflation - Mean			2.30%
Assumed Inflation - Standard Deviation			1.23%
Portfolio Nominal Mean Return			7.39%
Portfolio Standard Deviation			12.15%
Long-Term Expected Rate of Return selected by MTA			6.50%

* Based on October 2021 Investment Policy

5. CONTRIBUTIONS

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

Upon termination of employment before retirement, vested participants who have been required to contribute must choose to: (1) receive a refund of their own contributions, including accumulated interest at rates established by the Company's Board of Managers of Pensions (1.5% in 2022 and 2021), or (2) leave their contributions in the Additional Plan until they retire and become entitled to the pension benefits. Non-vested participants who have been required to contribute will receive a refund of their own contributions, including accumulated interest at rates established by the Company's Board of Managers of Pensions (1.5% in 2022 and 2021).

The Company performs a public service of providing essential passenger transportation between New York City and Long Island. Substantial deficits result from providing these services and the Company expects that such deficits will continue in the foreseeable future. Funding for the Additional Plan by the Company is provided by MTA, which obtains the required funds from New York State, federal grants, the sale of bonds to the public and other sources. Certain funding by MTA is made to the Company on a discretionary basis. The continuance of the Company's funding for the Additional Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

6. ACTUARIAL METHODS AND ASSUMPTIONS

A. ACTUARIAL VALUATION METHOD

The Plan's actuarial cost method is the Entry Age Normal method. Under this method, a projected benefit is determined at each active participant's assumed retirement age assuming future compensation increases. The plan's normal cost is the sum of each active participant's annual cost for the current year of service determined such that, if it were calculated as a level percentage of compensation each year, it would accumulate at the valuation interest rate over his total prior and future years of service to the assumed retirement date into an amount sufficient to fund the projected benefit. The plan's accrued liability is the (a) present value of each active participant's benefits plus (b) the present value of each inactive participant's future benefits, less (c) the present value of each active participant's normal costs attributable to all future years of service.

B. ASSET VALUATION METHOD

The Asset Valuation method smooths gains and losses over a 5-year period. The formula for the asset valuation method is as follows:

Actuarial Value of Assets = $MV_t - 0.8*UR_1 - 0.6*UR_2 - 0.4*UR_3 - 0.2*UR_4$

Where:

MV_t = Market Value of assets as of the valuation date.

UR_n = Unexpected return during the nth year preceding the valuation date. The unexpected return for a year equals the total investment return minus the total expected return. The total expected return equals the market value of assets at the beginning of the year plus the weighted net cash flow during the year multiplied by the expected rate of return.

The resulting value cannot be less than 80% or greater than 120% of the market value of assets.

C. ACTUARIAL ASSUMPTIONS

The assumptions described below were primarily determined based on an experience analysis covering the period from January 1, 2006 to December 31, 2011, with certain economic assumptions modified subsequently based on an experience analysis covering the period from January 1, 2012 to December 31, 2017. The postretirement mortality assumption is based on an experience analysis covering the period from January 1, 2015 to December 31, 2020.

Interest - 6.50% per annum, compounded annually, net of investment expenses.

Salary Scale - Salaries are assumed to increase 3.00% per year.

Valuation Compensation - The valuation compensation is equal to the annualized base salary as of December 31, 2021 as provided by MTA, adjusted for wage increases granted after the valuation date but retroactive to earlier periods, projected six months at the assumed rate of salary increase. Retroactive wage adjustments are 2.5% for all union members.

Overtime/Unused Vacation Pay - Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.

Railroad Retirement Wage Base - 3.25% per year.

Consumer Price Index - 2.25% per year.

Provision for Expenses - Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years reported administrate expenses and are assumed payable in the middle of the plan year.

Termination - Withdrawal rates vary by age. Illustrative rates are shown below:

Age	Rate	Age	Rate
20	2.12 %	45	0.96 %
25	1.64	50	0.80
30	1.44	55	0.60
35	1.36	60	0.00
40	1.16	65	0.00

Terminated vested participants are assumed to retire upon first eligibility or attained age, if later.

Retirement - Assumed retirement age varies by year of eligibility.

Eligibility Period	Rate of Retirement
First year	40 %
Years 2–4	33
Year 5	37
Years 6–7	35
Years 8–9	33
Years 10–15	55
Years 16 and above	100

Mortality - Preretirement and postretirement annuitant rates are projected on a generational basis using Scale MP-2021. As a generational table, it reflects mortality improvements both before and after the measurement date.

- **Preretirement**: Pri-2012 Employee mortality table with blue collar adjustments multiplied by 97% for males and 100% for females.
- **Postretirement**: Pri-2012 Retiree mortality table with blue collar adjustments multiplied by 97% for males and 100% for females.

Marriage - 80% of employees are assumed to be married with wives 3 years younger than husbands.

Interest on Employee Contributions - Assumed to be 3.5% per year for future years.

Railroad Offset - The Railroad offset at retirement is based on the sum of Tier 1 and Tier 2 Railroad benefits and is estimated for active members, current retirees under age 65, and current beneficiaries of members under age 65. The offsets for Railroad Retirement benefits are assumed to occur at the member's age of 65. The estimated benefits are based on a member's compensation at retirement. For inactive participants, compensation is estimated based on the benefit provided and estimated service at retirement. For the Tier 1 offset, the Primary Insurance Amount assumes that an individual would continue to earn compensation at the level in effect at his date of termination until attaining eligibility for Railroad benefits and is further increased by 2% per year from the date of termination to age 65. In addition, the estimated Tier 1 offset for inactive members currently less than age 65 is reduced by 10% to reflect, on average, the adjustment for Social Security benefits.

Benefits Not Valued - Disability benefits since all active plan participants are eligible for retirement. COVID-19 Accidental Death Benefit is assumed to have an insignificant cost.

D. CHANGES IN ACTUARIAL ASSUMPTIONS

This valuation reflects the adoption of updated mortality assumptions based on an experience analysis covering the period from January 1, 2015 to December 31, 2020.

7. PLAN TERMINATION

While the Company expects to continue the Additional Plan indefinitely, it may, subject to its collective bargaining agreements, amend, restrict, or terminate the Additional Plan at any time. In the event of termination, all participants will become fully vested to the extent of their then accrued benefits based on their compensation and service up to the date of termination. The net assets of the

Additional Plan will be allocated to provide benefits in accordance with the disposition of the Additional Plan assets in a prescribed manner as defined in the Additional Plan document.

8. COMMINGLING OF PENSION ASSETS FOR INVESTMENT PURPOSES

On July 26, 2006, the MTA Board passed a resolution to transfer the responsibilities for the administration of the Additional Plan to the MTA Defined Benefit Pension Plan ("MTA DB") with no changes in the pension and death benefits and appeal rights provided by the Additional Plan. The trust agreement under the Additional Plan was replaced by the MTA Master Trust Agreement, which allows for the commingling of pension assets for investment purposes under the management of the MTA DB's Board of Managers of Pensions. The Additional Plan and Trust Agreements were amended in September 2006 and all Plan assets were commingled into the MTA Master Trust for investment purposes, effective October 2, 2006.

9. CUSTODIAL AND OTHER PROFESSIONAL SERVICES

JP Morgan Chase Bank is the custodian of plan assets and provides cash receipt and disbursement services to the Additional Plan. New England Pension Consultants reviews the Additional Plan's portfolio, the investment policies as stipulated by the Investment Committee and the performance of the Investment Managers. Actuarial services were provided to the Additional Plan by Milliman Inc.

10. SUBSEQUENT EVENTS

On January 17, 2023 and January 24, 2023, MTA prepaid the 2023 and 2024 projected Actuarially Determined Contributions ("ADCs") to the MTA Master Trust. The prepayment amounts allocated to the Long Island Rail Road Additional Pension Plan for each year were $71.74 million and $68.66 million, respectively.

* * * * *

REQUIRED SUPPLEMENTAL SCHEDULES

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

(In thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:									
Service cost	$ 146	$ 260	$ 453	$ 621	$ 1,057	$ 1,874	$ 2,752	$ 3,441	$ 3,813
Interest	81,371	83,489	86,918	93,413	97,611	101,477	104,093	106,987	110,036
Changes of benefit terms	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(1,347)	3,729	10,428	13,455	213	1,890	15,801	6,735	-
Changes of assumptions	-	26,300	-	50,191	-	-	-	-	-
Benefit payments and withdrawals	(143,764)	(148,630)	(152,046)	(157,254)	(159,565)	(159,717)	(158,593)	(157,071)	(156,974)
Net change in total pension liability	(63,594)	(34,852)	(54,247)	426	(60,684)	(54,476)	(35,947)	(39,908)	(43,125)
Total pension liability—beginning	1,322,471	1,357,323	1,411,570	1,411,144	1,471,828	1,526,304	1,562,251	1,602,159	1,645,284
Total pension liability—ending (a)	1,258,877	1,322,471	1,357,323	1,411,570	1,411,144	1,471,828	1,526,304	1,562,251	1,602,159
Plan fiduciary net position:									
Employer contributions	70,763	70,553	68,724	62,774	59,500	76,523	81,100	100,000	407,513
Non-Employer contributions	-	-	-	-	-	145,000	70,000	-	-
Member contributions	51	73	140	249	333	760	884	1,108	1,304
Net investment income	(51,214)	95,247	3,056	116,092	(31,098)	112,614	58,239	527	21,231
Benefit payments and withdrawals	(143,764)	(148,630)	(152,046)	(157,254)	(159,565)	(159,717)	(158,593)	(157,071)	(156,974)
Administrative expenses	(761)	(610)	(612)	(718)	(1,180)	(1,070)	(611)	(1,218)	(975)
Net change in plan fiduciary net position	(124,925)	16,633	(80,739)	21,143	(132,010)	174,110	51,019	(56,654)	272,099
Plan fiduciary net position—beginning (*)	777,323	760,690	840,460	819,317	951,327	777,217	726,198	782,852	510,753
Plan fiduciary net position—ending (b)	652,398	777,323	759,721	840,460	819,317	951,327	777,217	726,198	782,852
Employer's net pension liability—ending (a)-(b)	$ 606,479	$ 545,148	$ 597,602	$ 571,110	$ 591,827	$ 520,501	$ 749,087	$ 836,053	$ 819,307
Plan fiduciary net position as a percentage of the total pension liability	51.82 %	58.78 %	55.97 %	59.54 %	58.06 %	64.64 %	50.92 %	46.48 %	48.86 %
Covered-employee payroll	$ 2,043	$ 1,995	$ 3,509	$ 5,210	$ 7,894	$ 11,046	$ 18,216	$ 25,712	$ 29,334
Employer's net pension liability as a percentage of covered-employee payroll	29,685.69 %	27,330.07 %	17,029.25 %	10,961.80 %	7,496.90 %	4,711.97 %	4,112.20 %	3,251.65 %	2,793.05 %

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.
(*) 2021 Plan fiduciary net position - beginning is adjusted for the Plan's 2020 Q4 Private Markets values

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

SCHEDULE II

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF EMPLOYER CONTRIBUTIONS
FOR THE YEARS ENDED DECEMBER 31
(In thousands)

Year Ending December 31	Actuarially Determined Contribution	Actual Employer Contribution *	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2013	$ 119,325	$ 199,336	$ (80,011)	$ 33,043	603.26 %
2014	$ 112,513	$ 407,513	$ (295,000)	$ 37,886	1,075.63 %
2015	$ 82,382	$ 100,000	$ (17,618)	$ 25,712	388.93 %
2016	$ 83,183	$ 151,100	$ (67,917)	$ 18,216	829.48 %
2017	$ 76,523	$ 221,523	$ (145,000)	$ 11,046	2,005.39 %
2018	$ 59,196	$ 59,500	$ (304)	$ 7,894	753.71 %
2019	$ 62,774	$ 62,774	$ -	$ 5,210	1,204.87 %
2020	$ 68,723	$ 68,724	$ (1)	$ 3,509	1,958.35 %
2021	$ 70,553	$ 70,553	$ -	$ 1,995	3,537.06 %
2022	$ 70,764	$ 70,764	$ -	$ 2,043	3,463.73 %

* Employer contributions include amounts from both employer and non-employer contributing entities.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF EMPLOYER CONTRIBUTIONS

SCHEDULE II

Note to Schedule II:
The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan are as follows:

Valuation Dates	January 1, 2022	January 1, 2021	January 1, 2020	January 1, 2019
Actuarial cost method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method
Amortization method	Period specified in current valuation report (closed 11-year period from January 1, 2021) with level dollar payments.	Period specified in current valuation report (closed 12-year period from January 1, 2021) with level dollar payments.	Period specified in current valuation report (closed 13-year period from January 1, 2020) with level dollar payments.	Period specified in current valuation report (closed 14-year period from January 1, 2019) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Interest rate	Net rate of 6.5% for 2022, per annum, net of investment expenses	Net rate of 6.5% for 2021, per annum, net of investment expenses	Net rate of 6.5% for 2020, per annum, net of investment expenses	Net rate of 6.5% for 2019, per annum, net of investment expenses
Inflation	2.25% per annum	2.25% per annum	2.25% per annum	2.25% per annum
Railroad retirement wage base	3.25% per year	3.25% per year	3.25% per year	3.25% per year
Mortality	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecting mortality improvement on a generational basis using Scale MP-2021.	Based on experience of all MTA-sponsored pension plan members from January 1, 2015 - December 31, 2020 reflecti mortality improvement on a generational basis using Scale MP-2021.	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA
Separations other than for normal retirement	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Rates of normal retirement	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.
Salary increases	3.0% per year	3.0% per year	3.0% per year	3.0% per year
Overtime	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.
Provision for expenses	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years' reported administrative expenses and are assumed payable in the middle of the plan year.	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years' reported administrative expenses and are assumed payable in the middle of the plan year.	Estimated administrative expenses are added to the normal cost. Administrative expenses are based on the average of the prior two years' reported administrative expenses and are assumed payable in the middle of the plan year.	The provision for administrative expenses was modified to equal an average of the prior three years.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Note to Schedule II:
The more significant actuarial assumptions and methods used in the calculation of employer contributions to the Plan are as follows:

Valuation Dates	January 1, 2018	January 1, 2017	January 1, 2016	January 1, 2015	January 1, 2014
Actuarial cost method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method	Entry Age Cost Method
Amortization method	Period specified in current valuation report (closed 15-year period from January 1, 2018) with level dollar payments.	Period specified in current valuation report (closed 16-year period from January 1, 2017) with level dollar payments.	Period specified in current valuation report (closed 17-year period from January 1, 2016) with level dollar payments.	Period specified in current valuation report (closed 18-year period from January 1, 2015) with level dollar payments.	Period specified in current valuation report (closed 19-year period from January 1, 2014) with level dollar payments.
Actuarial asset valuation method	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.	Actuarial value equals market value less unrecognized gains/losses over a 5-year period. Gains/losses are based on market value of assets.
Interest rate	Net rate of 7.0% for 2018, per annum, net of investment expenses	Net rate of 7.0% for 2017, per annum, net of investment expenses	Net rate of 7.0% for 2016, per annum, net of investment expenses	Net rate of 7.0% for 2015, per annum, net of investment expenses	Net rate of 7.0% for 2014, per annum, net of investment expenses
Inflation	2.5% per annum	2.5% per annum	2.5% per annum	2.5% per annum	2.5% per annum
Railroad retirement wage base	3.5% per year	3.5% per year	3.5% per year	3.5% per year	3.5% per year
Mortality	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA	Based on experience of all LIRR members reflecting mortality improvement on generational basis using Scale AA
Separations other than for normal retirement	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience	Tables based on recent experience
Rates of normal retirement	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.	Tables based on recent experience. Rates vary by age, years of service at retirement.
Salary increases	3.0% per year	3.0% per year	3.0% per year	3.0% per year	3.0% per year
Overtime	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.	Earnings in each year increased by 65% for represented employees to account for overtime and by 20% in the year prior to assumed retirement and by 10% in the year prior to termination (other than retirement) for non-represented employees to account for unused vacation pay.
Provision for expenses	The provision for administrative expenses was modified to equal an average of the prior three years.	The provision for administrative expenses was modified to equal an average of the prior three years.	The provision for administrative expenses was modified to equal an average of the prior three years.	$650,000 is added to the normal cost to account for administrative expenses paid by plan assets throughout the year.	$500,000 is added to the normal cost to account for administrative expenses paid by plan assets throughout the year.

THE LONG ISLAND RAIL ROAD COMPANY PLAN FOR ADDITIONAL PENSIONS

SCHEDULE III

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF INVESTMENT RETURNS
FOR THE YEARS ENDED DECEMBER 31

The following table displays annual money-weighted rate of return, net of investment expense.

Year Ended December 31	Net Money-Weighted Rate of Return
2013	N/A
2014	3.73 %
2015	0.07 %
2016	8.11 %
2017	13.38 %
2018	(3.49)%
2019	15.23 %
2020	0.39 %
2021	13.37 %
2022	(7.00)%

In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.