

Metro-North Commuter Railroad Company Cash Balance Plan

Financial Statements as of and for the
Years Ended December 31, 2018 and 2017,
Supplemental Schedules, and
Independent Auditors' Report

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

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INDEPENDENT AUDITORS' REPORT

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

Report on the Financial Statements

We have audited the accompanying statements of plan net position of the Metro-North Commuter Railroad Company Cash Balance Plan (the "Plan") as of December 31, 2018 and 2017, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the Plan net position as of December 31, 2018 and 2017, and the respective changes in Plan net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 3 through 7, Schedule of Changes in the Employer's Net Pension Liability and Related Ratios - Schedule I on page 22, Schedule of Employer Contributions - Schedule II on pages 23 through 25, and Schedule of Investment Returns - Schedule III on page 26 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Deloitte & Touche LLP

February 24, 2020

METRO-NORTH COMMUTER RAILROAD COMPANY

CASH BALANCE PLAN

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) DECEMBER 31, 2018 AND 2017

This narrative discussion and analysis of the Metro-North Commuter Railroad Company Cash Balance Plan (the "Plan") financial performance provides an overview of the Plan's financial activities for the years ended December 31, 2018 and 2017. It is meant to assist the reader in understanding the Plan's financial statements by providing an overall review of the financial activities during the past two years and the effects of significant changes, as well as a comparison with the prior year's activity and results. This discussion and analysis is intended to be read in conjunction with the Plan's financial statements which begin on page 8.

Overview of Basic Financial Statements

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

- **The Statements of Fiduciary Net Position** presents the financial position of the Plan at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- **The Statements of Changes in Fiduciary Net Position** present the results of activities during the year. All changes affecting the assets and liabilities of the Plan are reflected on an accrual basis when the activity occurred, regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- **The Notes to Financial Statements** provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.
- **Required Supplementary Information**, as required by the Government Accounting Standards Board ("GASB") includes the Schedule of Changes in the Employer's Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Investment Returns.

Financial Highlights

The Plan is a single employer, defined benefit pension plan. The Plan covers non-collectively bargained employees, formerly employed by Conrail, who joined Metro-North Commuter Railroad Company (“MNCR”) as management employees between January 1 and June 30, 1983, and were still employed as of December 31, 1988. Effective January 1, 1989, these employees were covered under the Metro-North Commuter Railroad Defined Contribution Plan for Management Employees (the “Management Plan”) and the Plan was closed to new participants. The assets of the Management Plan have been merged with the Metropolitan Transportation Authority Defined Benefit Plan for Non-Represented Employees as of the asset transfer date of July 14, 1995.

FINANCIAL ANALYSIS

Fiduciary Net Position

December 31, 2018, 2017, and 2016

(Dollars in thousands)

	2018	2017	2016	Increase/(Decrease)	
				2018-2017	2017-2016
Investments, at fair value	\$ 473	\$ 527	\$ 571	\$ (54)	\$ (44)
Accrued interest	3	3	3	-	-
Receivable from investment securities sold	<u>-</u>	<u>3</u>	<u>30</u>	<u>(3)</u>	<u>(27)</u>
Total assets	<u>476</u>	<u>533</u>	<u>604</u>	<u>(57)</u>	<u>(71)</u>
Payable for investment securities purchased	<u>5</u>	<u>10</u>	<u>30</u>	<u>(5)</u>	<u>(20)</u>
Total liabilities	<u>5</u>	<u>10</u>	<u>30</u>	<u>(5)</u>	<u>(20)</u>
Net position - restricted for pension benefits	<u>\$ 471</u>	<u>\$ 523</u>	<u>\$ 574</u>	<u>\$ (52)</u>	<u>\$ (51)</u>

December 31, 2018 versus December 31, 2017

Investments at December 31, 2018 were \$473 thousand, a decrease of \$54 thousand from 2017. The decrease is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and accrued interest at December 31, 2018 were \$3 thousand, a net decrease of \$3 thousand from 2017. The decrease is the result of a decrease in net securities sold at the end of 2018.

Payables at December 31, 2018 were \$5 thousand, a decrease of \$5 thousand from 2017. The decrease is the result of a decrease in net securities purchased at the end of 2018.

Net position restricted for pension benefits at December 31, 2018 was \$471 thousand, a decrease of \$52 thousand from 2017 as a result of the changes noted above.

December 31, 2017 versus December 31, 2016

Investments at December 31, 2017 were \$527 thousand, a decrease of \$44 thousand from 2016. The decrease is the result of investment activity and plan contributions net of benefit payments and expenses.

Receivables and accrued interest at December 31, 2017 were \$6 thousand, a net decrease of \$27 thousand from 2016. The decrease is the result of a decrease in net securities sold at the end of 2017.

Payables at December 31, 2017 were \$10 thousand, a decrease of \$20 thousand from 2016. The decrease is the result of a decrease in net securities purchased at the end of 2017.

Net position restricted for pension benefits at December 31, 2017 was \$523 thousand, a decrease of \$51 thousand from 2016 as a result of the changes noted above.

Changes in Fiduciary Net Position For the Years Ended December 31, 2018, 2017 and 2016 (Dollars in thousands)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>Increase/(Decrease)</u>	
				<u>2018-2017</u>	<u>2017-2016</u>
Additions:					
Net investment income/(loss)	\$ 1	\$ 20	\$ 16	\$ (19)	\$ 4
Employer contributions	<u>5</u>	<u>-</u>	<u>23</u>	<u>5</u>	<u>(23)</u>
Total additions	<u>6</u>	<u>20</u>	<u>39</u>	<u>(14)</u>	<u>(19)</u>
Deductions:					
Benefits paid to participants	<u>58</u>	<u>71</u>	<u>77</u>	<u>(13)</u>	<u>(6)</u>
Total deductions	<u>58</u>	<u>71</u>	<u>77</u>	<u>(13)</u>	<u>(6)</u>
Net decrease in net position	<u>(52)</u>	<u>(51)</u>	<u>(38)</u>	<u>(1)</u>	<u>(13)</u>
Net position-restricted for pension benefits:					
Beginning of year	<u>523</u>	<u>574</u>	<u>612</u>	<u>(51)</u>	<u>(38)</u>
End of year	<u>\$ 471</u>	<u>\$ 523</u>	<u>\$ 574</u>	<u>\$ (52)</u>	<u>\$ (51)</u>

CHANGES IN FIDUCIARY NET POSITION

The Plan is a closed plan and has two active members as of January 1, 2019. Investments are primarily in bonds and asset backed securities to minimize exposure to market fluctuations. The net position is held in trust for the payment of future benefits to members and beneficiaries.

December 31, 2018 versus December 31, 2017

Net investment income decreased by \$19 thousand in 2018 due to lower net investment gains of \$1 thousand in 2018 versus net investment gains of \$20 thousand in 2017.

Contributions increased by \$5 thousand in 2018 compared to 2017 as a result of the Actuarial Determined Contributions (“ADC”) for 2018.

Benefit payments decreased by \$13 thousand in 2018 compared to 2017. In 2018, there were less retirees taking lump sum distributions when compared to 2017.

December 31, 2017 versus December 31, 2016

Net investment income increased by \$4 thousand in 2017 due to net investment gains of \$20 thousand in 2017 versus net investment gains of \$16 thousand in 2016.

Contributions decreased by \$23 thousand in 2017 compared to 2016 as a result of the Actuarial Determined Contributions (“ADC”) for 2017.

Benefit payments decreased by \$6 thousand in 2017 compared to 2016. In 2017, there were less retirees taking lump sum distributions when compared to 2016.

INVESTMENTS

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

Investment Summary (Dollars in thousands)

<u>Type of Investment</u>	<u>Fair Value</u>	<u>Allocation</u>	<u>Current Year Return</u>
December 31, 2018			
U.S. government & agency securities	\$ 266	56.3 %	3.1 %
Corporate bonds & asset backed securities	184	38.8 %	3.7 %
Short-term investments	12	2.5 %	1.2 %
Other bonds & fixed income securities	<u>11</u>	<u>2.4 %</u>	<u>4.9 %</u>
Total	<u>\$ 473</u>	<u>100.0 %</u>	<u>3.3 %</u>
December 31, 2017			
U.S. government & agency securities	\$ 263	50.0 %	2.6 %
Corporate bonds & asset backed securities	223	42.4 %	3.5 %
U.S. Treasury bills	17	3.2 %	0.0 %
Short-term investments	12	2.2 %	0.8 %
Other bonds & fixed income securities	<u>12</u>	<u>2.2 %</u>	<u>4.7 %</u>
Total	<u>\$ 527</u>	<u>100.0 %</u>	<u>2.9 %</u>
December 31, 2016			
U.S. government & agency securities	\$ 325	56.8 %	2.3 %
Corporate bonds & asset backed securities	221	38.7 %	3.9 %
U.S. Treasury bills	6	1.1 %	0.0 %
Short-term investments	8	1.4 %	0.3 %
Other bonds & fixed income securities	<u>11</u>	<u>2.0 %</u>	<u>4.8 %</u>
Total	<u>\$ 571</u>	<u>100.0 %</u>	<u>2.9 %</u>

Contact Information

This financial report is designed to provide a general overview of the Metro-North Commuter Railroad Company Cash Balance Plan's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Comptroller, Metropolitan Transportation Authority, 2 Broadway, 16th Floor, New York, NY 10004.

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

STATEMENTS OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2018 AND 2017

	2018	2017
ASSETS:		
Investments, at fair value:		
U.S. government & agency securities	\$ 266,317	\$ 263,261
Corporate bonds & asset backed securities	183,867	223,205
U.S. Treasury bills	-	16,995
Other bonds & fixed income securities	11,232	11,680
Short-term investments	<u>11,871</u>	<u>11,722</u>
Total investments	<u>473,287</u>	<u>526,863</u>
Accrued interest	2,255	2,604
Receivable from investment securities sold	<u>-</u>	<u>3,238</u>
Total assets	<u>475,542</u>	<u>532,705</u>
LIABILITIES:		
Payable for investment securities purchased	<u>(4,993)</u>	<u>(9,942)</u>
Total liabilities	<u>(4,993)</u>	<u>(9,942)</u>
NET POSITION - restricted for pension benefits	<u>\$ 470,549</u>	<u>\$ 522,763</u>

See notes to financial statements.

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
ADDITIONS:		
Investment income:		
Interest	\$ 15,716	\$ 15,863
Net (depreciation)/appreciation in fair value of investments	<u>(15,436)</u>	<u>3,745</u>
Total investment income	280	19,608
Contributions:		
Employer	5,444	-
Other	<u>-</u>	<u>52</u>
Total additions	<u>5,724</u>	<u>19,660</u>
DEDUCTIONS:		
Benefits paid to participants	<u>(57,938)</u>	<u>(71,061)</u>
Total deductions	<u>(57,938)</u>	<u>(71,061)</u>
NET DECREASE IN NET POSITION	(52,214)	(51,401)
NET POSITION - restricted for pension benefits		
Beginning of year	<u>522,763</u>	<u>574,164</u>
End of year	<u>\$ 470,549</u>	<u>\$ 522,763</u>

See notes to financial statements.

METRO-NORTH COMMUTER RAILROAD COMPANY CASH BALANCE PLAN

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

1. PLAN DESCRIPTION

The following description of the Metro-North Commuter Railroad Company Cash Balance Plan provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan is a single employer, defined benefit pension plan administered by Metro-North Commuter Railroad ("MNCR"). The Plan covers non-collectively bargained employees, formerly employed by Conrail, who joined MNCR as management employees between January 1 and June 30, 1983, and were still employed as of December 31, 1988. Effective January 1, 1989, these employees were covered under the Metro-North Commuter Railroad Defined Contribution Plan for Management Employees (the "Management Plan") and the Plan was closed to new participants. The assets of the Management Plan have been merged with the Metropolitan Transportation Authority Defined Benefit Plan for Non-Represented Employees as of the asset transfer date of July 14, 1995. The Plan is designed to satisfy the applicable requirements for governmental plans under Section 401(a) and 501(a) of the Internal Revenue Code. Accordingly, the Plan is tax-exempt and is not subject to the provisions of the Employee Retirement Income Security Act ("ERISA") of 1974.

Plan Administration

The MTA Board of Trustees shall appoint a Board of Managers of Pensions consisting of five individuals who may, but need not, be officers or employees of the company. The members of the Board of Managers shall hold office at discretion of the MTA Board, each to serve until his successor is appointed. The Board of Managers shall be the agent for the service of legal process with respect to the Plan. No bond or other security is required in any jurisdiction of the Board of Managers or any member thereof except as required by law.

The Board of Managers shall control and manage the operation and administration of the Plan. It shall have all the powers that within its judgment may be necessary or appropriate for that purpose, including, but not by way of limitation, power to adopt any rules consistent with the provisions of the Plan deemed necessary to effectuate the Plan, to conduct the affairs of the Board of Managers, to administer the Plan, to interpret the Plan, to determine the eligibility, status and rights of all persons under the Plan and, in general, to decide any dispute.

Benefits Provided

Pension Benefits - Participants of the Plan obtain a nonforfeitable right to their accrued benefit upon the earlier of (a) the completion of five years of service with the MTA Metro-North Railroad or (b) the attainment of age sixty-two. Vested participants are entitled to receive pension benefits commencing at age sixty-five. Vested participants may elect to receive early retirement benefits upon the attainment of age fifty-five through age sixty-four.

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

Prior to a participant’s annuity commencement date, each Participant’s account balance shall be increased each month by a factor, which when compounded monthly for 12 months, would produce the benefit escalator for the applicable plan year.

The benefit escalator is defined as the Pension Benefit Guaranty Corporation immediate annuity rate in effect for December of the year preceding the year for which the determination is being made.

Death Benefits — Benefits are paid to vested participants’ beneficiaries in the event of a participants’ death. The amount of benefits payable is the participant’s account balance at the date of his or her death.

Membership

Membership of the Plan consisted of the following as of January 1, 2019, the date of the latest actuarial valuation:

Active Plan Members	2
Retirees and beneficiaries receiving benefits	25
Vested formerly active members not yet receiving benefits	<u>15</u>
Total	<u><u>42</u></u>

Contributions

Funding for the Plan is provided by MNCR which is a public benefit corporation that receives funding for its operations and capital needs from the Metropolitan Transportation Authority (“MTA”) and the Connecticut Department of Transportation (“CDOT”). Certain funding by MTA is made to MNCR on a discretionary basis. The continuance of funding for the Plan has been, and will continue to be, dependent upon the receipt of adequate funds.

MNCR’s funding policy with respect to the Plan was to contribute the full amount of the pension benefit obligation (“PBO”) of approximately \$2.977 million to the trust fund in 1989. As participants retire, distributions from the Plan have been made by the Trustee. MNCR anticipated that no further contributions would be made to the Plan. However, due to changes in actuarial assumptions and market performance, additional unfunded pension liabilities were paid to the Plan in several subsequent years. Per the January 1, 2017 valuation, the actuarial value of assets exceeded the actuarial accrued liability and as a result no payment is required for 2017. Per the January 1, 2018 valuation, the unfunded total pension liability was \$5 thousand and paid to the Plan in 2018. Per the January 1, 2019 valuation, the unfunded total pension liability was \$9 thousand and paid to the Plan in 2019.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Plan's financial statements are prepared on the accrual basis of accounting.

Use of Estimates

The preparation of the Plan's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates include the determination of the fair market value of investments, the actuarial determined contribution and the total pension liability.

Investment Valuation and Income Recognition

Fair value for the publicly traded government bonds and notes, corporate bonds and mortgage/asset backed securities represents the quoted market prices of a national securities exchange. Gains and losses on investments that were sold during the year are included in net appreciation or depreciation in fair value of investments. Interest income on the government and corporate bonds is recorded when earned. The Plan's investments are held in trust by Wells Fargo Bank (the "Trustee"), in the name of the Plan.

Benefits

Benefits are recognized when paid.

Administrative Expenses

The administrative expenses of the Plan are paid by MNCR. Administrative expenses were \$15 thousand and \$18 thousand for the years ended December 31, 2018 and 2017, respectively.

Federal Income Tax Status

The Internal Revenue Service ("IRS") has determined and informed the MNCR by a letter dated January 10, 1997, that the Plan and related trust were designed in accordance with the applicable regulations of the IRC. The Plan has been amended since receiving the determination letter. The MNCR believes that the Plan is currently designed and operated in compliance with the applicable requirements of the IRC and the Plan and related trust continue to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

New Accounting Standards Adopted

The Plan adopted the following GASB Statement for the year-ended December 31, 2018:

GASB Statement No. 85, *Omnibus 2017*, addresses practice issues identified during the implementation and application of certain GASB statements. The provisions of this Statement amend and clarify guidance under a variety of topics with the intent to enhance consistency in the application of accounting and reporting requirements. This Statement specifically addresses issues related to blending component units, goodwill, fair value measurement and application, and pensions and other postemployment benefits. The requirements of this Statement are effective for reporting periods

beginning after June 15, 2017. The adoption of this Statement had no impact on the Plan's financial statements.

Accounting Standards Issued but Not Yet Adopted

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

GASB		MNCR Pension
Statement No.	GASB Accounting Standard	Plan Required
		Year of Adoption
84	<i>Fiduciary Activities</i>	2019

Subsequent Events

As of February 24, 2020, there were no materially significant subsequent events.

3. INVESTMENTS

A professional investment management firm manages the Plan. The Plan utilizes various investment securities including U.S. government securities and corporate debt instruments. The investment guideline is included within the investment management agreement agreed to by the MTA Board of Trustees. The guideline grants the investment manager full discretion to buy, sell, invest and reinvest the Plan's assets in domestic fixed income investments. The investment objective is to achieve consistent, positive real returns and to maximize long-term total return within prudent levels of risk through a combination of income and capital appreciation. Investment securities, in general, are exposed to various risks, such as interest rate risk, credit risk, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the financial statements.

The investment management firm is required to maintain a diversified portfolio. All investment managers are expected to perform their fiduciary duties as prudent people would and to conform to all state and federal statutes governing the investment of retirement funds. Securities managers must be registered advisors under the Investment Advisors Act of 1940. The investment managers must comply with the risk management guidelines per the Investment Management Agreement.

Investment managers may not purchase inverse floating rate bonds, structured notes, commodities, securities on margin, sell short, lend securities, invest in private placements, commingled funds (except Short-Term Investment Funds), real estate investments, and oil, gas & mineral exploration investments without the written consent of the Plan. The Plan's fixed-income assets shall be invested in domestic marketable, fixed-income securities.

Fixed-income managers are expected to adhere to the following guidelines as a means of limiting credit risk:

- Commercial Paper, Eurodollar Commercial Paper and Variable Rate Notes rated P-1 by Moody's, A1 by Standard and Poor's, or F1 by Fitch.
- Certificates of Deposit and Bankers Acceptances of institutions whose long-term debt is rated Baa or better by Moody's Investor's Service or equivalent by Standard & Poor's.
- United States Treasury Bonds, Notes and Bills.
- Debt instruments of the U.S. Government or its Agencies and Instrumentalities.
- Marketable corporate debt, Yankee bonds, Eurodollar bonds, non-agency mortgage-backed securities, asset backed securities and taxable municipal securities rated the equivalent of Baa or better by Moody's Investors Services, Standard & Poor's, or Fitch Investor's Services, for an overall portfolio average of A or better. In the case of split ratings, the higher rating applies.
- Collateralized Mortgage Obligations ("CMO's") backed by pools of agency or non-agency mortgages including those that are re-constructed in their original proportions from the same pool (such as IO's/PO's, and floaters/inverse floaters). Companion tranches and support tranches are limited to 3% of the book value of the portfolio.
- 144A Privates (non-registered debt issued by corporations), non-convertible preferred stock and fully hedged non-dollar bonds rated A or better by Moody's Investors Services, Standard & Poor's, or Fitch Investor's Services are limited to 20% of the book value of the portfolio.
- Securities downgraded subsequent to purchase resulting in violation of quality guidelines may be held at the manager's discretion.
- Managers may not hold more than 5% at book value and 10% at market value of the portfolios in any one issuer's securities other than direct or moral obligations of the U.S. Government.
- Unrated securities other than those issued by the U.S. Government or its Agencies and Instrumentalities may not be purchased without the prior consent of the Plan.

GASB 72 Disclosure

In fiscal year 2015, the Plan adopted GASB Statement No. 72 ("GASB 72"), *Fair Value Measurement and Application*. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements. The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Plan has the following recurring fair value measurements as of December 31, 2018 and December 31, 2017:

GASB 72 Disclosure
(in thousands)

INVESTMENTS - fair value level	2018			
	Level 1	Level 2	Level 3	Total
Debt securities:				
U.S government agency	\$ 142	\$ 124	\$ -	\$ 266
Corporate bonds	-	164	-	164
Commerical mortgage-backed securities	-	20	-	20
Other bonds	-	11	-	11
Total debt securities	142	319	-	461
Total investments by fair value level	142	319	-	461
INVESTMENTS- measured at the net asset value (NAV)				
Short-term other				12
Total investments measured at the NAV				12
Total investments by fair value level	\$ 142	\$ 319	\$ -	\$ 473

INVESTMENTS - fair value level	2017			
	Level 1	Level 2	Level 3	Total
Debt securities:				
U.S government agency	\$ 145	\$ 118	\$ -	\$ 263
Corporate bonds	-	203	-	203
U.S treasury securities	17	-	-	17
Commerical mortgage-backed securities	-	20	-	20
Other bonds	-	12	-	12
Total debt securities	162	353	-	515
Total investments by fair value level	162	353	-	515
INVESTMENTS- measured at the net asset value (NAV)				
Short-term other				12
Total investments measured at the NAV				12
Total investments by fair value level	\$ 162	\$ 353	\$ -	\$ 527

Equity and Fixed Income Securities

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using prices determined by the use of matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 are securities whose stated market price is unobservable by the market place; many of these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.

Money-Weighted Rate of Return

For the years ended December 31, 2018 and December 31, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, for the Plan was 0.06% and 3.76%, respectively.

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

Net (depreciation)/appreciation in Fair Value of Investments as Determined by Quoted Market Prices

The Plan's investments (including gains and losses on investments sold during the year) (depreciated)/appreciated in value as follows:

	Year Ended December 31,	
	2018	2017
U.S. government & agency securities	\$ (5,051)	\$ 600
Corporate bonds & asset backed securities	(9,937)	2,939
Other bonds & fixed income securities	(448)	206
	<u>\$ (15,436)</u>	<u>\$ 3,745</u>

Credit Risk

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2018 and December 31, 2017, respectively, are as follows:

December 31, 2018 Quality Rating	Fair Value	Percentage of Portfolio
AAA	\$ 46,775	9.88%
AA	4,846	1.02
A	13,315	2.81
AA-	4,913	1.04
A-	19,884	4.20
BBB+	53,515	11.31
BBB	28,716	6.07
BBB-	9,712	2.05
NR	<u>25,294</u>	<u>5.35</u>
Total credit risk debt securities	206,970	
U.S. government & agency securities*	<u>266,317</u>	<u>56.27</u>
Total investment portfolio	<u>\$ 473,287</u>	<u>100.00%</u>

December 31, 2017	Fair	Percentage of
Quality Rating	Value	Portfolio
AAA	\$ 37,761	7.17%
AA	4,937	0.94
A+	5,111	0.97
A	17,477	3.32
AA-	6,557	1.24
A-	21,178	4.02
BBB+	88,066	16.27
BBB	35,601	6.76
BBB-	10,177	1.93
NR	<u>19,741</u>	<u>3.75</u>
Total credit risk debt securities	246,607	
U.S. government & agency securities*	<u>280,256</u>	<u>53.19</u>
Total investment portfolio	<u>\$ 526,863</u>	<u>100.00%</u>

*Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk and do not have purchase limitations.

Custodial Credit Risk

The Plan does not have a general policy addressing custodial risk, but it is the practice of the Plan that all investments are registered or held by the Plan or its agent in the Plan's name. Deposits are to be registered or collateralized with securities held at fiscal agents in the Plan's name.

Interest Rate Risk

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

December 31, 2018	Fair	Percentage of	Duration
Investment Type	Value	Portfolio	(Years)
U.S. government & agency securities	\$ 266,317	56.27%	5.72
Corporate bonds & asset backed securities	183,867	38.85	5.86
Other bonds & fixed income securities	11,232	2.37	5.05
Short-term investments	<u>11,871</u>	<u>2.51</u>	0.00
Total investment	<u>\$ 473,287</u>	<u>100.00%</u>	
Portfolio average duration			<u>5.67</u>

December 31, 2017	Fair	Percentage of	Duration
Investment Type	Value	Portfolio	(Years)
U.S. government & agency securities	\$ 263,261	49.97%	5.44
Corporate bonds & asset backed securities	223,205	42.36	6.64
U.S. treasury bills	16,995	3.23	0.03
Other bonds & fixed income securities	11,680	2.22	5.98
Short-term investments	11,722	2.22	0.00
Total investment	<u>\$ 526,863</u>	<u>100.00%</u>	
Portfolio average duration			<u>5.66</u>

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Plan assets are invested in domestic fixed-income securities denominated in U.S. dollars and accounted for at fair market value. The Plan has no exposure to foreign currency fluctuation.

4. NET PENSION LIABILITY

The components of the net pension liability of the employer at December 31, 2018 and 2017, for the Plan, were as follows:

	2018	2017
Total pension liability	\$ 478,801	\$ 527,998
Plan's fiduciary net position	<u>470,549</u>	<u>522,763</u>
Employer's net pension liability	<u>\$ 8,252</u>	<u>\$ 5,235</u>
Plan's fiduciary net position as a percentage of the total pension liability	98.28%	99.01%

The total pension liability was determined by an actuarial valuation as of the measurement date, calculated based on the discount rate and actuarial assumptions below.

Discount Rate

The plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return.

	2018	2017
Discount rate	4.00%	4.00%
Long-term expected rate of return net of investment expense	4.00%	4.00%
Municipal bond rate	N/A	N/A

Other Key Actuarial Methods and Assumptions for the years ended December 31, 2018 and December 31, 2017 were as follows:

The actuarial assumptions that determined the total pension liability as of December 31, 2018 and December 31, 2017 was based on an experience study for the period January 1, 2011 - January 1, 2016.

	<u>2018</u>	<u>2017</u>
Valuation date:	January 1, 2019	January 1, 2018
Measurement date:	December 31, 2018	December 31, 2017
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Actuarial assumptions:		
Asset valuation method:	Market Value of Plan Asset	Market Value of Plan Asset
Projected salary increases:	N/A	N/A
COLAs:	N/A	N/A
Inflation:	2.50%	2.50%
Interest:	4.0% per annum, compounded annually	4.0% per annum, compounded annually
Benefit escalator:	3.0% per annum, compounded annually	3.0% per annum, compounded annually
Provision for Expenses:	None assumed from Plan assets	None assumed from Plan assets

Additional Actuarial Assumptions:

Termination: Withdrawal rates vary by age. The termination assumption has no impact on liabilities since all active members are retirement eligible. Illustrative rates shown below are for years 2018 and 2017:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	11.46 %	45	0.67 %
25	6.29	50	0.63
30	3.43	55	0.59
35	1.73	60	0.55
40	0.90	64	0.00

Retirement Assumption: Retirement rates vary by age. The retirement assumption is based on the eligibility provisions of this plan and on professional judgement. Illustrative rates shown below are for years 2018 and 2017:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55	12.0 %	61	15.0 %
56	8.0	62	35.0
57-58	6.0	63-64	20.0
59-60	7.0	65+	100.0

Mortality: The mortality assumption is based on a 2017 experience study for all MTA plans combined.

Pre-termination: RP-2000 Employee Mortality Table for Males and Females with blue collar adjustments, projected on a generational basis using Scale AA.

Post-termination: 95% of the rates from the RP-2000 Healthy Annuitant Mortality Table for Males with blue collar adjustments and 116% of the rates from the RP-2000 Healthy Annuitant Mortality Table for Females, both projected on a generational basis using Scale AA. As generational tables, they reflect mortality improvements both before and after the measurement date.

Form of Payment for Cash Balance Account: For active participants, lump sum at decrement. For terminated vested participants, lump sum on the valuation date. This is based on the majority of participants electing a lump sum upon retirement.

Benefits not valued: The Additional Benefit was not valued as the potential liability for this benefit is de minimus.

Changes in Actuarial Assumptions Since Prior Valuation: None.

Long-Term Expected Rate of Return

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2018 and 2017.

Asset Class	Index	Target Allocation	2018	2017
Core Fixed Income	Barclays Aggregate	100.00%	1.58%	1.41%
Assumed Inflation - Mean			2.50%	2.50%
Assumed Inflation - Standard Deviation			1.65%	1.85%
Portfolio Nominal Mean Return			4.09%	3.92%
Portfolio Standard Deviation			3.90%	4.55%
Long-Term Expected Rate of Return selected by MTA			4.00%	4.00%

Sensitivity Analysis

The following presents the net pension liability of the Metro-North Commuter Railroad Company Cash Balance Plan as of December 31, 2018 and 2017, respectively, calculated using the discount rate of 4.00%, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (3.00%) or 1 percentage point higher (5.00%) than the current rate.

	December 31, 2018			December 31, 2017		
	1% Decrease 3.00%	Discount Rate 4.00%	1% Increase 5.00%	1% Decrease 3.00%	Discount Rate 4.00%	1% Increase 5.00%
Net Pension Liability	\$35,157	\$8,252	(\$15,544)	\$35,109	\$5,235	(\$21,154)

* * * * *

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

Schedule I

Required Supplementary Information (Unaudited)

Schedule of Changes in the Employer's Net Pension Liability and Related Ratios (\$ in Thousands)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability:					
Service Cost	\$ -	\$ -	\$ -	\$ -	\$ -
Interest	20	21	24	29	32
Changes of economic/demographic (gains) or losses	(11)	12	(15)	(10)	-
Changes of assumptions	-	-	-	18	-
Benefit payments	<u>(58)</u>	<u>(71)</u>	<u>(77)</u>	<u>(113)</u>	<u>(88)</u>
Net change in total pension liability	(49)	(38)	(68)	(76)	(56)
Total pension liability - beginning	<u>528</u>	<u>566</u>	<u>634</u>	<u>710</u>	<u>766</u>
Total pension liability - ending (a)	<u>\$ 479</u>	<u>\$ 528</u>	<u>\$ 566</u>	<u>\$ 634</u>	<u>\$ 710</u>
Fiduciary Net Position:					
Employer contributions	\$ 5	\$ -	\$ 23	\$ 18	\$ -
Net investment income	1	20	16	6	41
Benefit payments	(58)	(71)	(77)	(113)	(88)
Administrative expenses	<u>-</u>	<u>-</u>	<u>-</u>	<u>3</u>	<u>(3)</u>
Net change in plan fiduciary net position	(52)	(51)	(38)	(86)	(50)
Fiduciary net position - beginning	<u>523</u>	<u>574</u>	<u>612</u>	<u>698</u>	<u>748</u>
Fiduciary net position - ending (b)	<u>471</u>	<u>523</u>	<u>574</u>	<u>612</u>	<u>698</u>
Net pension liability - ending (a) - (b)	<u>\$ 8</u>	<u>\$ 5</u>	<u>\$ (8)</u>	<u>\$ 22</u>	<u>\$ 12</u>
Fiduciary net position as a percentage of the total pension liability	98.28%	99.01%	101.39%	96.56%	98.36%
Covered payroll	\$ 275	\$ 268	\$ 649	\$ 995	\$ 2,080
Net pension liability as a percentage of covered payroll	<u>3.00%</u>	<u>1.95%</u>	<u>-1.22%</u>	<u>2.20%</u>	<u>0.56%</u>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

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

Schedule II

**Required Supplementary Information (Unaudited)
Schedule of Employer Contributions**

Fiscal Year Ending December 31	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of covered Payroll
2009	330	330	-	5,936,288	0.01%
2010	1,837	11,875	(10,038)	4,496,148	0.26%
2011	-	-	-	-	N/A
2012	-	-	-	-	N/A
2013	-	-	-	-	N/A
2014	4,977	14,124	(9,147)	2,080,077	0.68%
2015	-	-	-	-	N/A
2016	22,721	22,721	-	648,524	3.50%
2017	-	-	-	268,488	0.00%
2018	5,444	5,444	-	274,921	1.98%

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

Schedule II (continued)

**Notes to Required Supplementary Information (Unaudited)
Schedule of Employer Contributions**

Actuarial Methods and Assumptions

The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Date	January 1, 2019	January 1, 2018	January 1, 2017
Valuation Timing	Actuarially determined contributions calculated as of December 31 for the fiscal year.	Actuarially determined contributions calculated as of December 31 for the fiscal year.	Actuarially determined contributions calculated as of December 31 for the fiscal year.
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization Method	One-year amortization of the unfunded liability, if any.	One-year amortization of the unfunded liability, if any.	One-year amortization of the unfunded liability, if any.
Asset Valuation Method	Actuarial value equals market value.	Actuarial value equals market value.	Actuarial value equals market value.
Inflation	2.50%	2.50%	2.30%
Salary Increases	N/A	N/A	N/A
Investment Rate of Return	4.00%, net of investment expenses	4.00%, net of investment expenses	4.00%, net of investment expenses
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA

**Notes to Required Supplementary Information (Unaudited)
Schedule of Employer Contributions**

Actuarial Methods and Assumptions

The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Date	January 1, 2016	January 1, 2014
Valuation Timing	Actuarially determined contributions calculated as of December 31 for the fiscal year.	Actuarially determined contributions calculated as of December 31 for the fiscal year.
Actuarial Cost Method	Entry Age Normal	Unit Credit
Amortization Method	One-year amortization of the unfunded liability, if any.	Period specified in current valuation (closed 10 year period beginning January 1, 2008 - 4 year period for the January 1, 2014 valuation).
Asset Valuation Method	Actuarial value equals market value.	Effective January 1, 2015, the Actuarially Determined Contribution (ADC) will reflect one-year amortization of the unfunded accrued liability in accordance with the funding policy adopted by the MTA.
Inflation	2.30%	2.50%
Salary Increases	N/A	N/A - There were no projected salary increase assumptions used in the January 1, 2014 valuation as participants of the Plan were covered under the Management Plan effective January 1, 1989. For participants of the Plan eligible for additional benefits, these benefits were not valued as the potential liability is de minimus.
Investment Rate of Return	4.00%, net of investment expenses	4.50%, net of investment expenses
Mortality	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA	Based on experience of all MTA members reflecting mortality improvement on a generational basis using scale AA

METRO-NORTH COMMUTER RAILROAD COMPANY
CASH BALANCE PLAN

Schedule III

Required Supplementary Information (Unaudited)
Schedule of Investment Returns

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

<u>Fiscal Year</u> <u>Ending</u> <u>December 31</u>	<u>Net</u> <u>Money-Weighted</u> <u>Rate of Return</u>
2009	N/A
2010	N/A
2011	N/A
2012	N/A
2013	N/A
2014	5.96%
2015	0.93%
2016	2.75%
2017	3.67%
2018	0.06%

Schedule is intended to show information for 10 years. Information was not readily available for periods prior to 2014. Additional years will be displayed as they become available.