

# **Metropolitan Transportation Authority**

(A Component Unit of the State of New York)

Independent Auditors' Review Report

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

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## INDEPENDENT AUDITORS' REVIEW REPORT

To the Members of the Board of  
Metropolitan Transportation Authority

### **Report on the Consolidated Interim Financial Information**

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

### ***Management's Responsibility for the Consolidated Interim Financial Information***

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

### ***Auditors' Responsibility***

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

### ***Conclusion***

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

### ***Emphasis of a Matter***

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

### ***Other Matters***

#### ***Required Supplementary Information***

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

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

#### *Supplementary Information*

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

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

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

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

*Deloitte & Touche LLP*

January 22, 2019

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

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
AS OF SEPTEMBER 30, 2018 AND DECEMBER 31, 2017 AND  
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017**

**(\$ In Millions, except as noted)**

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**OVERVIEW OF THE CONSOLIDATED INTERIM FINANCIAL STATEMENTS**

***Introduction***

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

***Management's Discussion and Analysis***

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

***The Consolidated Interim Financial Statements***

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

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

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

***Notes to the Consolidated Interim Financial Statements***

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

***Required Supplementary Information***

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

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

### *Supplementary Information*

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

### **FINANCIAL REPORTING ENTITY**

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

### **MTA Related Groups**

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

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

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

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

### **CONDENSED CONSOLIDATED FINANCIAL INFORMATION AND CONDENSED CONSOLIDATED INTERIM FINANCIAL INFORMATION**

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

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

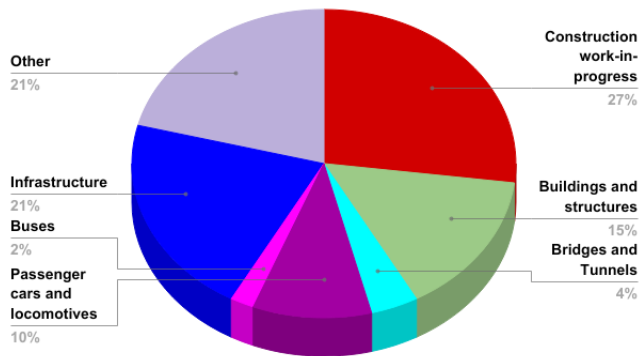
Capital assets include, but are not limited to: bridges, structures, tunnels, construction of buildings and the acquisition of buses, equipment, passenger cars, and locomotives.

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

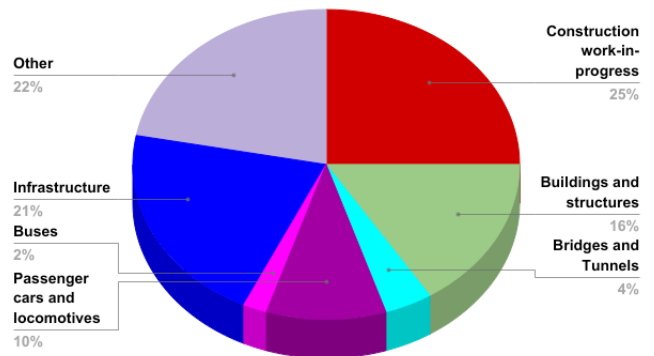
Deferred outflows of resources reflect: changes in fair market values of hedging derivative instruments that are determined to be effective, unamortized loss on refunding, and deferred outflows from pension activities.

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

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



**Capital Assets, Net - December 31, 2017**



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

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



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

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

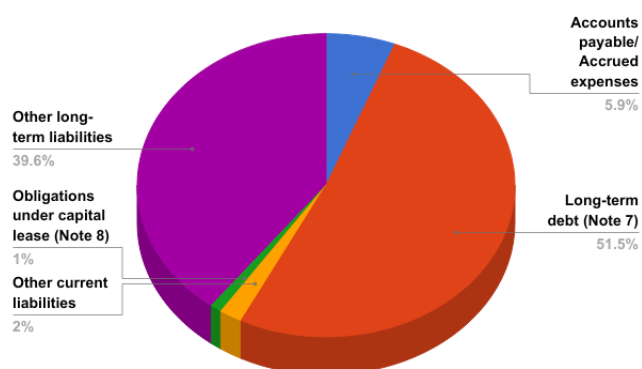
Current liabilities include: accounts payable, accrued expenses, current portions of long-term debt, capital lease obligations, pollution remediation liabilities, unredeemed fares and tolls, and other current liabilities.

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

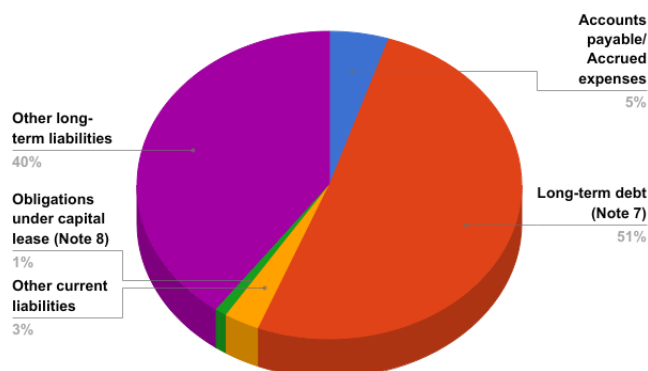
Deferred inflows of resources reflect unamortized gains on refunding and pension related deferred inflows.

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

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



**Total Liabilities - December 31, 2017**





***Significant Changes in Liabilities and Deferred Inflows of Resources Include:***
**September 30, 2018 versus December 31, 2017**

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

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

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

***Significant Changes in Net Position Include:***
**September 30, 2018 versus December 31, 2017**

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

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

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

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

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

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

## OVERALL FINANCIAL POSITION AND RESULTS OF OPERATIONS AND IMPORTANT ECONOMIC CONDITIONS

### *Economic Conditions*

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

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

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

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

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

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

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

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

### **Results of Operations**

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

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

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

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

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

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

### **Capital Programs**

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

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

*2015-2019 Capital Program* — Capital programs covering the years 2015-2019 for: (1) the commuter railroad operations of the MTA conducted by MTA Long Island Rail Road and MTA Metro-North Railroad (the “2015–2019



Commuter Capital Program”), (2) the transit system operated by MTA New York City Transit and its subsidiary, MaBSTOA, the MTA Bus Company, and the rail system operated by MTA Staten Island Railway (the “2015–2019 Transit Capital Program”) were originally approved by the MTA Board in September 2014. The capital programs were subsequently submitted to the Capital Program Review Board (“CPRB”) in October 2014. This plan was disapproved by the CPRB, without prejudice, in October 2014. The capital program for the toll bridges and tunnels operated by MTA Bridges and Tunnels (the “2015–2019 MTA Bridges and Tunnels Capital Program”) was approved by the MTA Board in September 2014 and was not subject to CPRB approval.

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

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

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

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

*2010-2014 Capital Program* — Capital programs covering the years 2010-2014 for: (1) the commuter railroad operations of the MTA conducted by MTA Long Island Rail Road and MTA Metro-North Railroad (the “2010–2014 Commuter Capital Program”), (2) the transit system operated by MTA New York City Transit and its subsidiary, MaBSTOA, the MTA Bus Company, and the rail system operated by MTA Staten Island Railway (the “2010–2014 Transit Capital Program”) were originally approved by the MTA Board in September 2009. The capital programs were subsequently submitted to the CPRB in October 2009. This plan was disapproved by the CPRB, without prejudice, in December 2009 allowing the State Legislature to review funding issues in their 2010 session. The capital program for the toll bridges and tunnels operated by MTA Bridges and Tunnels (the “2010–2014 MTA Bridges and Tunnels Capital Program”) was approved by the MTA Board in September 2009 and was not subject to CPRB approval. The MTA Board approved the revised plan for the Transit and Commuter systems on April 28, 2010 and CPRB approval of the five-year program of projects was obtained on June 1, 2010. The approved CPRB program fully funded only the first two years (2010 and 2011) of the plan, with a commitment to come back to CPRB with a funding proposal for the last three years for the Transit and Commuter Programs. On December 21, 2011, the MTA Board approved an amendment to the 2010-2014 Capital Program for the Transit, Commuter, and Bridges and Tunnels systems that fund the last three years of the program through a combination of self-help (efficiency improvements and real estate initiatives), participation by our funding partners, and innovative and pragmatic financing arrangements. On March 27, 2012, the CPRB deemed approved the amended 2010-2014 Capital Programs for the Transit and Commuter systems as submitted.

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

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

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

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

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



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

## CURRENTLY KNOWN FACTS, DECISIONS, OR CONDITIONS

### *The 2018 MTA July Financial Plan*

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

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

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

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

### *Tropical Storm Sandy Update*

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

### *Labor Update*

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

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

*MTA Metro-North Railroad* – As of September 30, 2018, MTA Metro-North Railroad had reached agreements with nine bargaining units covering approximately 43% of its 5,595 represented employees. Included in this number are two new agreements: in September, Metro-North reached a 29.5 month agreement, running from March 16, 2017 to August 31, 2019, with approximately 775 members of the International Brotherhood of Electrical Workers (“IBEW”).

Also in September, the railroad reached agreement with approximately 20 members of the Association of Commuter Rail Employees Division 37 (“ACRE 37”), a 28.5 month agreement that will cover the period from January 16, 2017 to May 31, 2019. These agreements, like all the others with MTA Metro-North Railroad’s unions, are consistent with the railroad wage pattern established at MTA Long Island Rail Road. MTA Metro-North Railroad’s remaining represented population is covered by agreements that, while now considered “amendable” under the Railway Labor Act, remain in effect. The railroad is engaged in collective bargaining with these remaining units and it is expected that settlements will be reached that will also conform to the established railroad wage pattern.

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

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

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

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

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

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

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

Subsequent to the May impasse arbitration with ATU Local 1179, MTA Bus Company reached agreement with a second ATU unit—Local 1181— which represents approximately 254 hourly employees. As with ATU Local 1179, the 88-month ATU Local 1181 agreement, which expires October 31, 2019, covers an equal length of time as the

two most recent labor agreements between MTA New York City Transit and TWU Local 100; and it is consistent with the cost pattern established by those agreements. The agreement also contains essentially the same pension modifications and means of funding these changes that were laid out in the impasse arbitration with ATU Local 1179.

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

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

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

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

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

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

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(A Component Unit of the State of New York)

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

(\$ In millions)

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

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

(Continued)



(A Component Unit of the State of New York)

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

(\$ In millions)

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

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

(Concluded)

(A Component Unit of the State of New York)

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

**NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017**

(\$ In millions)

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

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

(Continued)

(A Component Unit of the State of New York)

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

**NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017**

(\$ In millions)

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

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

(Concluded)



(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS**

**NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017**

(\$ In millions)

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

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

(Continued)

(A Component Unit of the State of New York)

**CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS**

**NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017**

(\$ In millions)

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

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

(Concluded)

**METROPOLITAN TRANSPORTATION AUTHORITY****(A Component Unit of the State of New York)****NOTES TO CONSOLIDATED INTERIM FINANCIAL STATEMENTS  
AS OF SEPTEMBER 30, 2018 AND DECEMBER 31, 2017 AND  
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2018 AND 2017****(\$ In millions, except as noted)**

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**1. BASIS OF PRESENTATION**

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

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

**Metropolitan Transportation Authority and Related Groups (Component Units)**

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

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

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

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

## 2. SIGNIFICANT ACCOUNTING POLICIES

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

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

### New Accounting Standards Adopted

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

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

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

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

### Accounting Standards Issued but Not Yet Adopted

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

## Non-operating Revenues

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

### 3. CASH AND INVESTMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

<sup>(1)</sup>These securities are only included in the FMTAC portfolio.

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

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

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

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

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



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

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

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

- certain equities; and
- certain mutual funds.

FMTAC is prohibited from making the following investments:

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

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

#### **4. EMPLOYEE BENEFITS**

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

##### ***Plan Descriptions***

###### ***1. Additional Plan —***

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

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

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

## **2. *MaBSTOA Plan* —**

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

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

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

## **3. *MNR Cash Balance Plan* —**

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

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

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

## **4. *MTA Defined Benefit Plan* —**

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

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

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

### **5. NYCERS —**

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

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

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

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

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

### **6. NYSLERS —**

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

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

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

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

### **Benefits Provided**

#### **1. Additional Plan —**

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

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

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

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

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

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



## 2. MaBSTOA Plan —

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

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

### Tier 1 —

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

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

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

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

### Tier 2 —

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

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

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

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

### Tiers 3, 4 —

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

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

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

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

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

#### **Tier 6 —**

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

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

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

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

### **3. MNR Cash Balance Plan —**

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



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

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

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

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

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

#### **4. MTA Defined Benefit Plan —**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### 5. *NYCERS* —

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

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

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

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

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

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

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

#### 6. *NYSLERS* —

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

##### *Tiers 1 and 2* —

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

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



### *Tiers 3, 4, and 5 —*

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

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

### *Tier 6 —*

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

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

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

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

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

## Membership

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

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

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

## Contributions and Funding Policy

### 1. Additional Plan —

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

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

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

### 2. MaBSTOA Plan —

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



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

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

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

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

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

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

### **3. MNR Cash Balance Plan —**

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

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

#### 4. MTA Defined Benefit Plan —

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

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

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

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

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

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

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

## 5. NYCERS —

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

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

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

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

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

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

## 6. NYSLERS —

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

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

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

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

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

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

### *Net Pension Liability*

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

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

### *Pension Plan Fiduciary Net Position*

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

### Actuarial Assumptions

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

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



## *Mortality*

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

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

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

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

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

### **NYCERS:**

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

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

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

### **NYSLERS:**

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

## *Expected Rate of Return on Investments*

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

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

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

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

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

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

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

### Discount rate

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

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

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

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

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

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

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

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

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





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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### Deferred Compensation Program

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 5. OTHER POSTEMPLOYMENT BENEFITS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Inflation Rate** - 2.5% per annum compounded annually.

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

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

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

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

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

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

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

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

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



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

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

### Health Care Cost Trend Rates

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

<sup>1</sup> Ultimate rate used for years prior to 2016 for Entry Age purposes.

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

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

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

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

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

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

**Demographic Assumptions:**

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

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

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

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

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

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

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

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

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

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

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

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

\* Based on Entry Age Normal

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

## 6. CAPITAL ASSETS

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

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

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

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



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

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

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

## 7. LONG-TERM DEBT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

Refer to Note 8 for further information on Leases.



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

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

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

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

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

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

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

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

Unamortized losses related to bond refundings were as follows:

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

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

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

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

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

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

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

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

### Loans Payable (in millions)

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

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

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

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

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

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

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

**Derivative Instruments - Summary Information**

(in \$ millions)

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

**Derivative Instruments - Summary Information**

(in \$ millions)

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



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

### Swap Agreements Relating to Synthetic Fixed Rate Debt

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

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

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

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

<sup>1</sup> Guarantor: American International Group, Inc., parent of AIG Financial Products.

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

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

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

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

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

### Risks Associated with the Swap Agreements

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

## 8. LEASE TRANSACTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



## Capital Leases Schedule

For the Period Ended September 30, 2018

(in millions)

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

## Capital Leases Schedule

For the Year Ended December 31, 2017

(in millions)

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

## 9. FUTURE OPTION

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

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

## 10. ESTIMATED LIABILITY ARISING FROM INJURIES TO PERSONS

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

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

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

## 11. COMMITMENTS AND CONTINGENCIES

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

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

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

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

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

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

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

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

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

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

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

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

## **12. POLLUTION REMEDIATION COST**

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

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

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

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

### 13. CURRENT AND NON-CURRENT LIABILITIES

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

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

## 14. FUEL HEDGE

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

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

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

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

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



**15. CONDENSED COMPONENT UNIT INFORMATION**

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

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

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

## 16. SUBSEQUENT EVENTS

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

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

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

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

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

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

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

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

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

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

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**METROPOLITAN TRANSPORTATION AUTHORITY**  
 (A Component Unit of the State of New York)  
**REQUIRED SUPPLEMENTARY INFORMATION**

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

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

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

**METROPOLITAN TRANSPORTATION AUTHORITY**  
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**REQUIRED SUPPLEMENTARY INFORMATION**

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

(continued)

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

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



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**REQUIRED SUPPLEMENTARY INFORMATION**

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

(\$ in thousands)

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

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

**METROPOLITAN TRANSPORTATION AUTHORITY**

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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**REQUIRED SUPPLEMENTARY INFORMATION**

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

**(concluded)**

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

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

***Changes of Benefit Terms:***

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

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

***Changes of Assumptions:***

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

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



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**REQUIRED SUPPLEMENTARY INFORMATION**
**SCHEDULE OF FUNDING PROGRESS FOR THE MTA POSTEMPLOYMENT BENEFIT PLAN**

(\$ in millions)

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

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**SUPPLEMENTARY INFORMATION**  
**SCHEDULE OF CONSOLIDATED RECONCILIATION BETWEEN FINANCIAL PLAN**  
**AND FINANCIAL STATEMENTS FOR THE PERIOD ENDED SEPTEMBER 30, 2018**  
**(\$ in millions)**
**(Unaudited)**

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

**METROPOLITAN TRANSPORTATION AUTHORITY**  
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**SUPPLEMENTARY INFORMATION**
**SCHEDULE OF CONSOLIDATED SUBSIDY ACCRUAL RECONCILIATION BETWEEN  
 FINANCIAL PLAN AND FINANCIAL STATEMENTS FOR THE PERIOD ENDED SEPTEMBER 30, 2018**
**(\$ in millions)**
**(Unaudited)**

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

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

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

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

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

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