In the opinion of Bond Counsel, under existing law and assuming compliance with the tax covenants described herein, and the accuracy of certain representations and certifications made by the New York City Educational Construction Fund and The City of New York described herein, interest on the 2018A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"). Bond Counsel is also of the opinion that such interest is not treated as a preference item in calculating the alternative minimum tax imposed under the Code. Bond Counsel is further of the opinion that interest on the 2018A Bonds is exempt by virtue of the Act from personal income taxes of the State of New York and its political subdivisions, including The City of New York. See "PART 9 - TAX MATTERS" herein regarding certain other tax considerations.

## $\$ 40,350,000$ <br> NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND REVENUE BONDS, 2018 SERIES A

## Dated: Date of Delivery

Due: As shown on the inside cover
The New York City Educational Construction Fund ("ECF") is issuing its Revenue Bonds, 2018 Series A (the "2018A Bonds") pursuant to the Act and the Resolution for the purposes of (i) providing, together with other money available to ECF, sufficient money to refund and redeem on November 29, 2018 all of ECF's Outstanding Revenue Bonds, 2007 Series A and (ii) paying the costs of issuance of the 2018A Bonds, all as described herein.

Interest on the 2018A Bonds will accrue from their date of delivery, and will be payable on April 1, 2019 and semiannually thereafter on October 1 and April 1 of each year to and including their respective dates of maturity or redemption. The 2018A Bonds will be issued as fully registered bonds initially under a book-entry-only system, registered in the name of Cede \& Co., as nominee for The Depository Trust Company ("DTC"), which will act as securities depository for the 2018A Bonds. (See "PART 5 - Description of the 2018A Bonds - Book-Entry-Only System" herein.) The 2018A Bonds are subject to optional redemption and mandatory redemption prior to maturity as described herein.

The 2018A Bonds are special obligations of ECF, secured by and payable solely from a first lien and pledge of (i) the Revenues (as defined herein) and (ii) the money and investments on deposit in the Debt Service Reserve Fund and in certain other funds and accounts established under the Resolution as more particularly described herein. Under the Resolution and the School Leases described herein, the City is required to make rental payments on the school portions of the ECF Projects sufficient, together with other Revenues available to ECF, to pay the principal and Sinking Fund Installments of, and interest on, the 2018A Bonds as such payments become due. In addition, the Resolution requires the Department of Education of the City (the "Department"), upon a request from ECF, to request annually from the City an appropriation in such amount as may be necessary to restore the Debt Service Reserve Fund to the Debt Service Reserve Requirement if it is below such requirement. In the event of a failure or inability of the Department to pay over the requested amount to ECF on or before August 1 of the calendar year in which the request was made, ECF is required to certify to the Comptroller of the State of New York (the "State Comptroller" and the "State," respectively) the amount of the deficiency, which the State Comptroller is then to pay to ECF out of the next payment of State aid apportioned to the City for the support of common schools. (See "PART 4 - SEcurity and Sources of Payment for the 2018A Bonds" herein.)

ECF has no taxing power. Neither the City nor the State is liable on the 2018A Bonds, and the 2018A Bonds are not a debt of the City or the State.

The issuance of the 2018A Bonds is subject to the approval of legality by Nixon Peabody LLP, New York, New York, Bond Counsel. Certain legal matters will be passed upon for the City by its Corporation Counsel and by Orrick, Herrington \& Sutcliffe LLP, New York, New York, Special Disclosure Counsel to the City. It is expected that the 2018A Bonds in definitive form will be available for delivery to DTC in New York, New York, on or about October 25, 2018.

## \$40,350,000 <br> NEW YORK CITY <br> EDUCATIONAL CONSTRUCTION FUND REVENUE BONDS, 2018 SERIES A

| Due April 1, | Principal Amount | Coupon | Yield | $\begin{aligned} & \text { CUSIP }{ }^{*} \\ & (\mathbf{6 4 9 6 7 0}) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 2019 | \$ 370,000 | 4.00\% | 1.96\% | LH7 |
| 2020 | 205,000 | 4.00 | 2.07 | LJ3 |
| 2021 | 215,000 | 4.00 | 2.15 | LK0 |
| 2022 | 220,000 | 4.00 | 2.22 | LL8 |
| 2023 | 1,925,000 | 4.00 | 2.32 | LM6 |
| 2024 | 2,000,000 | 4.00 | 2.43 | LN4 |
| 2025 | 2,075,000 | 4.00 | 2.54 | LP9 |
| 2026 | 2,160,000 | 4.00 | 2.67 | LQ7 |
| 2027 | 2,245,000 | 4.00 | 2.79 | LR5 |
| 2028 | 2,335,000 | 4.00 | 2.88 | LS3 |
| 2029 | 2,425,000 | 4.00 | 2.98 | LT1 |
| 2030 | 2,530,000 | 5.00 | $3.08^{\dagger}$ | LU8 |
| 2031 | 2,660,000 | 5.00 | $3.16{ }^{\dagger}$ | LV6 |
| 2032 | 2,795,000 | 5.00 | $3.22^{\dagger}$ | LW4 |
| 2033 | 2,930,000 | 5.00 | $3.27{ }^{\dagger}$ | LX2 |
| 2034 | 3,080,000 | 5.00 | $3.32{ }^{\dagger}$ | LY0 |
| 2035 | 3,230,000 | 5.00 | $3.33{ }^{\dagger}$ | LZ7 |
| 2036 | 3,395,000 | 5.00 | $3.38{ }^{\dagger}$ | MA1 |
| 2037 | 3,555,000 | 5.00 | $3.42{ }^{\dagger}$ | MB9 |

[^0]$\dagger$ Priced at stated yield to the April 1, 2029 optional redemption date at a redemption price of $100 \%$.

The information in this Official Statement has been provided by ECF and the City and other sources considered by ECF to be reliable. All estimates and assumptions contained herein are believed to be reliable, but no representation is made that such estimates or assumptions are correct or will be realized. No dealer, broker, salesperson or other person has been authorized by ECF or the underwriters to give any information or make any representation with respect to the 2018A Bonds, other than those contained in this Official Statement, and if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the parties referred to above since the date hereof. This Official Statement does not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of the 2018A Bonds, by any person, in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

This Official Statement contains forecasts, projections and estimates that are based on expectations and assumptions that existed at the time such forecasts, projections and estimates were prepared. In light of the important factors that may materially affect economic conditions in the City and the amount of Revenues (as defined herein), the inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by ECF, its or the City's independent auditors or the underwriters that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results.

If and when included in this Official Statement, the words "expects," "forecasts," "projects," "intends," "anticipates," "estimates" and analogous expressions are intended to identify forward-looking statements and any such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include, among others, general economic and business conditions, changes in political, social and economic conditions, regulatory initiatives and compliance with governmental regulations, litigation and various other events, conditions and circumstances, many of which are beyond the control of ECF. These forward-looking statements speak only as of the date of this Official Statement. ECF disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in ECF's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

Marks Paneth LLP, ECF's independent auditor, has not reviewed, commented on or approved, and is not associated with, this Official Statement. The report of Marks Paneth LLP relating to ECF's financial statements for the fiscal years ended June 30, 2018 and 2017, which is a matter of public record, is included in this Official Statement. However, Marks Paneth LLP has not performed any procedures on any financial statements or other financial information of ECF, including without limitation any of the information contained in this Official Statement, since the date of such report and has not been asked to consent to the inclusion of its report in the Official Statement.

Grant Thornton LLP, the City's independent auditor, has not reviewed, commented on or approved, and is not associated with, this Official Statement. The report of Grant Thornton LLP relating to the City's financial statements for the fiscal years ended June 30, 2016 and 2017, which
is a matter of public record, is included in this Official Statement. However, Grant Thornton LLP has not performed any procedures on any financial statements or other financial information of the City, including without limitation any of the information contained in this Official Statement, since the date of such report and has not been asked to consent to the inclusion of its report in the Official Statement.

THE 2018A BONDS HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY BODY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED THE ACCURACY OR DETERMINED THE ADEQUACY OF THIS DOCUMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE. IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2018A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

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# OFFICIAL STATEMENT OF THE <br> NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND RELATING TO THE <br> \$40,350,000 <br> REVENUE BONDS, 2018 SERIES A 

## PART 1 - INTRODUCTION

The purpose of this Official Statement is to set forth certain information concerning the New York City Educational Construction Fund ("ECF") and its proposed \$40,350,000 Revenue Bonds, 2018 Series A (the "2018A Bonds") in connection with the sale of the 2018A Bonds. The coupons and maturity dates of the 2018A Bonds being offered hereby are set forth on the inside cover page of this Official Statement.

The 2018A Bonds will be issued pursuant to the New York City Educational Construction Fund Act, which is Article 10 of the New York State Education Law, as amended (the "Act"), and under and pursuant to ECF's Revenue Bond Resolution, adopted by ECF on December 20, 2004 (the "General Resolution") and a Series Resolution authorizing the 2018A Bonds, adopted by ECF on September 24, 2018 (the "2018 Series Resolution" together with the General Resolution are referred to herein collectively as the "Resolution").

The 2018A Bonds and any other bonds issued pursuant to the General Resolution (collectively, the "Bonds") are special obligations of ECF, secured by and payable solely from a first lien and pledge of (i) the Revenues and (ii) the money and investments on deposit in the Debt Service Reserve Fund and in the other funds and accounts established under the Resolution, with the exception of the Arbitrage Rebate Fund, the Operating Fund and the Acquired Project Expense Fund. "Revenues" are comprised of (i) revenues received by ECF under the School Leases (as hereinafter defined), including any future leases between ECF, as landlord, and The City of New York (the "City"), as tenant, of all of the school portions of all Combined Occupancy Structures (as defined below) financed or refinanced by Bonds, (ii) the Fund Income received by ECF and (iii) payments made to ECF by a counterparty pursuant to a hedge agreement, if any. "Fund Income" consists primarily of payments to ECF pursuant to the leases with respect to the nonschool portions of the Combined Occupancy Structures. See "PART 4 - SECURITY AND Sources of Payment for the 2018A Bonds" and "Appendix A - Summary of Certain Provisions of the Resolution."

The 2018A Bonds are being issued for the purposes of (i) providing, together with other money available to ECF, sufficient money to refund and redeem on November 29, 2018 all of ECF's Outstanding Revenue Bonds, 2007 Series A (the "Refunded Bonds") and (ii) paying the costs of issuance of the 2018A Bonds, all as described herein. See "PART 3 - REFINANCING PLAN" herein. There are currently $\$ 231,200,000$ of ECF Bonds Outstanding under the Resolution, including the $\$ 48,360,000$ aggregate principal amount of Refunded Bonds expected to be defeased upon the issuance of the 2018A Bonds. See "Appendix E—Bonds to be Refunded".

The Resolution permits ECF to issue one or more Series of Bonds, which will be on a parity with all Bonds heretofore issued under the Resolution, the 2018A Bonds and all Bonds hereafter
issued under the Resolution. Bonds may be issued for the purposes of financing the cost of construction of school portions of Combined Occupancy Structures, improvements to the school portions of existing Combined Occupancy Structures, to refund Bonds and for other purposes permitted by the Resolution.

The information in this Official Statement contained in Appendix B hereto concerning the City has been supplied by the City, and ECF has made no independent verification of such information. The audited financial statements of ECF for the fiscal years ended June 30, 2017 and June 30, 2018 and the report of independent accountants of ECF with respect thereto are set forth in Appendix C to this Official Statement. A summary of certain of the provisions of the Resolution is set forth in Appendix A to this Official Statement. The form of legal approving opinion of Nixon Peabody LLP, Bond Counsel, is set forth in Appendix D to this Official Statement.

Certain defined terms that are capitalized but not defined in this Official Statement are defined in the Resolution. See "Appendix A - Summary of Certain Provisions of the Resolution - Certain Definitions." All references in this Official Statement to the Resolution and all other agreements, statutes and instruments are qualified by reference to the complete document.

ECF has no taxing power. The 2018A Bonds do not constitute a debt of either the State of New York (the "State") or the City and neither the State nor the City are liable on them. Neither the faith and credit nor the taxing power of the State or the City is pledged to the payment of principal of or interest on the 2018 A Bonds.

## PART 2 - THE COMBINED OCCUPANCY PROJECTS

## General

ECF is, subject to the approval of the Department of Education of the City (the "Department" (as successor to the Board of Education of the City (the "Board")), empowered under the Act to design, construct, acquire, rehabilitate and improve Combined Occupancy Structures located in the City. References to the Department herein are deemed to include the Board, as appropriate. The Act defines a Combined Occupancy Structure to mean, among other things, improvements on real property containing school accommodations or other facilities of the Department in combination with other compatible and lawful non-school uses. ECF is also empowered to finance the cost of the school portion of Combined Occupancy Structures through the issuance and sale of its bonds, notes or other obligations. Since its establishment, ECF has developed 16 Combined Occupancy Structures. The design, construction, acquisition, rehabilitation, and improvement of Combined Occupancy Structures and the financing of school portions of Combined Occupancy Structures is sometimes referred to herein as "ECF Projects." ECF expects to issue Bonds to develop additional Combined Occupancy Structures in the future.

## Leases of the School Portions of ECF Projects

Pursuant to the Act, ECF, the City and the Department have executed leases covering the school portions of ECF Projects (the "School Leases"). Each School Lease provides, in general, that the City will pay as rental thereunder the sums required by ECF to pay the principal of and interest on the bonds and notes issued to finance the school portion of the particular ECF Projects to which each such School Lease pertains, less the Revenue received by ECF from the non-school
portion of such particular ECF Projects. The School Lease relating to P.S./I.S. 89 and each subsequent School Lease provides, however, that the City is obligated to make rental payments under such School Lease to the extent necessary to pay the principal of and interest on all Outstanding Bonds less the Revenue received by ECF from the non-school portions of all ECF Projects. The Annual Rentals under all School Leases have been pledged to the payment of the Bonds. Under the Act and the School Leases, the City is not liable on such School Leases beyond the money appropriated and lawfully available for the purpose thereof. See "PART 4 - SECURITY and Sources of Payment for the 2018A Bonds." The receipt by ECF of payments under the School Leases may be affected by circumstances related to the financial condition of the City. See "Appendix B - Certain Information Concerning The City of New York."

Each School Lease provides that, upon termination thereof, ECF will convey to the City the school portion of ECF Projects covered by such School Lease together with the land on which it is located and the rights of ECF under its leases or other agreements relating to the non-school portion of such ECF Projects without payment by the City of any consideration for such transfers. The School Leases generally have been for periods of 40 years from their execution, but the City may terminate any School Lease at any time after the expiration of 20 years from the date of such School Lease or the date of the Bonds related to such School Lease, as specified in the relevant School Lease, if the City or State exercises its right under Section 464 of the Act to require ECF to redeem Bonds. The 2018A Bonds are subject to optional redemption and mandatory redemption as described herein under "PART 5 - Description of the 2018A Bonds - Redemption Provisions."

In addition, if the school portion of any ECF Project ceases to be used for school purposes, the land and structures covered by the School Lease for such ECF Project will revert to the City upon payment by the City or the State to ECF of an amount at least equal to the sum required to discharge the obligations of ECF on Bonds or other obligations issued to finance the construction of such school portion. The School Lease of the school portion of any ECF Project may also be terminated on or after the first call date of the bonds issued in connection with such school portion in the event the City, upon agreement of ECF, deposits with the Trustee the requisite money for the redemption of such bonds at the then applicable redemption price.

## PART 3 - REFINANCING PLAN

## Refinancing Plan

The Refunded Bonds are the $\$ 48,360,000$ outstanding principal amount of ECF's Revenue Bonds, 2007 Series A, maturing on and after April 1, 2019. See "Appendix E—Bonds to be Refunded".

Upon issuance of the 2018A Bonds, such proceeds are expected to be used to acquire Defeasance Securities, the principal of and interest on which, when due, together with any initial cash deposit, will provide moneys sufficient to pay the redemption price of the Refunded Bonds and the interest on such Refunded Bonds on November 29, 2018.

The Defeasance Securities will be deposited with the Trustee upon the issuance and delivery of the 2018A Bonds and will be held in trust solely for the payment of the redemption
price of and interest on the Refunded Bonds. At the time of or prior to such deposit the ECF will give the Trustee irrevocable instructions to give notice of the refunding and redemption of the Refunded Bonds and to apply the proceeds from the Defeasance Securities together with any initial cash deposit to the payment of the redemption price of and interest on the Refunded Bonds. In the opinion of Bond Counsel, upon making such deposits with the Trustee and the issuance of certain irrevocable instructions to the Trustee, the Refunded Bonds will, under the terms of the Resolution, be deemed to have been paid and will no longer be outstanding and the pledge of the Revenues or other moneys and securities pledged to the Refunded Bonds and all other rights granted to the Refunded Bonds will be discharged and satisfied.

## Sources and Uses of Funds

The following table sets forth the sources and uses of funds in connection with the issuance of the 2018A Bonds:

## Sources of Funds

Bond Proceeds ....................................................\$40,350,000.00
Net Premium ...........................................................4,974,366.65
Other Available Funds ............................................3,701,525.00
Total Sources of Funds ........................................... $\mathbf{\$ 4 9 , 0 2 5 , 8 9 1 . 6 5}$
Uses of Funds
Refunding Deposit ..............................................\$48,648,348.14
Costs of Issuance* .......................................................326,296.35
Underwriters' Discount................................................51,247.16
Total Uses of Funds................................................. $\mathbf{\$ 4 9 , 0 2 5 , 8 9 1 . 6 5}$

* Costs of issuance include legal and accounting fees, printing costs, and other fees and expenses.


## PART 4 - SECURITY AND SOURCES OF PAYMENT FOR THE 2018A BONDS

## Sources of Payment

The 2018A Bonds are special obligations of ECF, secured by and payable solely from a first lien and pledge of (i) the Revenues, and (ii) the money and investments on deposit in the Debt Service Reserve Fund and in the other funds and accounts established under the Resolution with the exception of the Arbitrage Rebate Fund, the Operating Fund, and the Acquired Project Expense Fund. Under the Resolution and the School Leases, the City is required to make rental payments on the school portions of ECF Projects sufficient to pay the principal and Sinking Fund Installments of and interest on the Outstanding Bonds, including the 2018A Bonds as such payments become due, less the Revenue received by ECF from the non-school portions of ECF Projects.

In addition, the Act requires the Department on or prior to June 30 of each calendar year, upon a certification from ECF of a deficiency in the Debt Service Reserve Fund made on or prior to the preceding February 1, to pay the amount certified by ECF as is necessary to restore the Debt Service Reserve Fund to the Debt Service Reserve Requirement. In the event of a failure or inability of the Department to pay over the certified amount to ECF on or before August 1 of the
calendar year in which the certification was made, ECF is required to certify to the Comptroller of the State (the "State Comptroller") the same requested amount, and such amount is to be paid by the State Comptroller to ECF out of the next payment of State aid apportioned to the City on behalf of the City School District for the support of common schools or such other aid or assistance payable in support of common schools as shall supersede or supplement such State aid for the support of common schools, including federal money apportioned by the State to the City on behalf of the City School District for the support of common schools. Because investments held in the Debt Service Reserve Fund are required to be valued at the lower of cost or par, changes in the market value of securities on deposit in the Debt Service Reserve Fund will not result in an obligation on the part of the Department to make a payment to restore the Debt Service Reserve Fund to its requirement. (See "Appendix A - Summary of Certain Provisions of the Resolution.")

## Annual Rentals from School Portions of ECF Projects

ECF is empowered to finance only the cost of the school portion of Combined Occupancy Structures through the issuance and sale of its bonds, notes or other obligations. Pursuant to the Resolution and the School Leases, collectively, the City is required to make rental payments on the school portions of ECF Projects sufficient to pay the principal and Sinking Fund Installments of and interest on the Outstanding Bonds, including the 2018A Bonds as such payments become due, less the Revenue received by ECF from the non-school portions of ECF Projects. See "PART 2 - The Combined Occupancy Projects - Leases of the School Portions of ECF Projects."

Since 2005, the non-school portions of ECF Projects have generated revenues that have been sufficient to offset payment obligations of the City under all the School Leases in respect of debt service on the Outstanding Bonds. However, no assurance can be given that such Revenues will continue to be sufficient to offset such School Lease payment obligations. In the event that sufficient revenues are not available from the non-school portion of the ECF Projects, the City is required under the School Leases to make payments in amounts sufficient to pay the principal and Sinking Find Installments of and interest on the Outstanding Bonds (including the 2018A Bonds). The Act and the Leases provide that the City will be liable for the annual rentals only to the extent of money appropriated and lawfully available therefor. The receipt by ECF of payments under the School Leases may also be affected by circumstances related to the financial condition of the City. See "Appendix B - Certain Information Concerning The City of New York." ECF has pledged to the security for the Holders of the Bonds its right to receive Revenues derived from the School Leases.

## Other Revenues

ECF has pledged as security for the Holders of the Bonds its right to receive Revenues derived from the non-school portions of the leases of ECF Projects. During its last five fiscal years, ECF has received Revenues from the non-school portions of its Projects, including participation payments from the developer of ECF's 250 East $57^{\text {th }}$ Street Project, in the amounts set forth in the following table:

| Fiscal Year <br> Ended June 30 |
| :---: |
| 2014 |
| 2015 |
| 2016 |
| 2017 |
| 2018 |

## Non-School Revenues (in millions) <br> \$20.087 <br> 17.609 <br> 21.108 <br> 33.319 <br> 45.728

## Debt Service Reserve Fund and Intercept of State Education Aid

The Debt Service Reserve Fund established under the Resolution in accordance with the Act is maintained with the Trustee in an amount equal to the Debt Service Reserve Requirement. The Debt Service Reserve Requirement is an amount equal to the maximum amount of principal and Sinking Fund Installments of, and interest on Outstanding Bonds becoming due in the then current or any succeeding calendar year. See "Appendix A - Summary of Certain Provisions of the Resolution - Certain Definitions," for a description of how the Debt Service Reserve Requirement is calculated.

The Debt Service Reserve Fund may not be reduced below the Debt Service Reserve Requirement except for the purpose of paying principal and Sinking Fund Installments of and interest on Outstanding Bonds when due if other money of ECF is not available.

To further assure maintenance of the Debt Service Reserve Fund, the Act and, as applicable, the Resolution require the Department to pay to ECF for deposit in the Debt Service Reserve Fund, such sum, if any, as has been certified by the Chairman of ECF to the Department, the Mayor and the Director of Management and Budget of the City as necessary to restore the Debt Service Reserve Fund to the Debt Service Reserve Requirement. Such sum is to be paid from money appropriated and paid by the City to the Department or from money otherwise lawfully available to the Department for such purpose. The Act provides that the Chairman of ECF annually, not later than February 15 in each calendar year, is to make and deliver to the Department, the Mayor and the Director of Management and Budget of the City a certificate stating the amount, if any, required to restore the Debt Service Reserve Fund to the required amount and the amount so stated is to be paid to ECF by the Department during the then current fiscal year of ECF. In the event of the failure or inability of the Department to pay over the stated amount to ECF on or before August 1 of the same calendar year, the Chairman of ECF is to make and deliver to the State Comptroller a further certificate restating the amount so required and, after the State Comptroller has given written notice to the Commissioner of Education of the State, the Mayor and the Director of Management and Budget of the City, the Act provides that such amount is to be paid over to ECF by the State Comptroller out of the next payment of State aid apportioned to the City on behalf of the City School District for the support of common schools or such other aid or assistance payable in support of common schools as may have superseded or supplemented such State aid for the support of common schools, including federal money apportioned by the State to the City on behalf of the City School District for the support of common schools. Because investments held in the Debt Service Reserve Fund are required to be valued at the lower of cost or par, changes in the market value of securities on deposit in the Debt Service Reserve Fund will not result in an obligation on the part of the Department to make a payment to restore the Debt Service Reserve Fund to its requirement.

Under the State Constitution, all State Education aid apportioned and paid pursuant to the Act is subject to appropriation by the State Legislature prior to the payment thereof. Accordingly, the provisions of the Act described in the preceding paragraph do not create a legally enforceable obligation of the State to pay such money absent an appropriation or to appropriate such money, nor do they create a debt of the State. If, however, appropriations are made in sufficient amounts (and such appropriations have not lapsed or been repealed) and money is available to make the required payment, the State Comptroller is legally obligated to make the payments to ECF required by the Act.

The total amount of State education aid received by the City for fiscal years 2014 through 2017 and the amount of State education aid projected to be paid to the City for fiscal year 2018 is set forth in the following table.

| Fiscal Year <br> Ended June 30 |
| :---: |
| 2014 |
| 2015 |
| 2016 |
| 2017 |
| $2018^{*}$ |
| *Projected |

State Education Aid (in millions)
\$ 8,645.52
9,043.34
9,834.12
10,332.81
10,714.44

## Competing Claims to State Education Aid

As described below, under State law certain other bonds have a direct or contingent claim on State education aid for their payment if the expected sources of funds for their payment are unavailable or insufficient. The provisions of State law creating such claims do not establish any order of priority among such potentially competing claims. Additionally, the failure of the City to provide certain mandated educational services may result in a withholding of a portion of, or a reduction of, State education aid to which it would otherwise be entitled.

## Direct Claims.

MBBA Bonds. Special School Purpose Revenue Bonds (Prior Year Claims) (the "MBBA Bonds") have been issued by the State of New York Municipal Bond Bank Agency ("MBBA") pursuant to the State of New York Municipal Bond Bank Agency Act, Title 18 of Article VIII of the Public Authorities Law of the State of New York, as amended (the "MBBA Act"), to fund the cost of making a payment to the City in satisfaction of prior year claims owed to the City under Section 3604 of the Education Law. Pursuant to the MBBA Act, the Chairman of the MBBA is required to deliver annually a certificate to the State Comptroller and the Director of the Budget of the State, certifying the amount of public funds apportioned or otherwise made payable by the State to the City as provided in Article 73 of the Education Law necessary for payment of (i) interest, principal and redemption premium, if any, maturing or otherwise becoming due during the subsequent State fiscal year on the MBBA Bonds; (ii) the amounts required to be deposited to the Debt Service Reserve Fund with respect to the MBBA Bonds; and (iii) any and all amounts required for the purpose of satisfying any rebate obligation to the federal government. Upon receipt of such certification, the State Comptroller is required to transfer to the MBBA such State
education aid to the extent so stated in such certificate. The payments of State education aid to the MBBA are not dependent upon annual appropriation by the City. Principal of the MBBA Bonds is amortized through the period ending December 1, 2022. The maximum annual debt service on the MBBA Bonds is approximately $\$ 40.4$ million.

## Contingent Claims.

City General Obligation Bonds. The State Finance Law Section 99-b provides protection against any default on debt issued for school purposes by any city, city school district or school district of the State up to the limits of that entity's State education aid. If a city, city school district or school district of the State defaults in the payment of the principal of its bonds and notes issued for school purposes, the State is to withhold from the next payment of State education aid made to such entity, an amount required to cure such default in the payment of such bonds. The City issues bonds for school purposes as part of bond issues that also finance many other purposes of the City. If the City should default on any bond issue that includes financing for school purposes, there would be withheld from the State education aid payable to the City an amount sufficient to cure such default on the bonds issued for school purposes, and any such amount so withheld could reduce the amount of available State education aid to cure deficiencies in the Debt Service Reserve Fund. Projected debt service for fiscal year 2019 on City bonds issued for school purposes outstanding as of September 30, 2018, is approximately $\$ 1.11$ billion, without reflecting prepayments by the City.

TFA Bonds. Bonds issued by the New York City Transitional Finance Authority ("TFA") for school purposes have the protection of the State Finance Law Section 99-b. Projected debt service for fiscal year 2019 on such bonds outstanding as of September 30, 2018, is approximately $\$ 1.42$ billion, without reflecting prepayments by the City.

Other Competing Claims. Certain State programs provide for statutory application or withholding of State aid and local assistance as security for the repayment of obligations of, or the repayment of financial assistance provided to the City, including but not limited to the following relating to: loan agreements with the Environmental Facilities Corporation ("EFC") for water pollution control projects under Section 1285-j(11) of the Public Authorities Law; financing agreements with the EFC with respect to the Drinking Water Revolving Fund program under Section 1285-m of the Public Authorities Law; the MBBA under Section 2436 of the Public Authorities Law; the New York State Sports Authority under Section 2473 of the Public Authorities Law; acquisition, construction or maintenance costs of alternative correctional facilities under Section 89-h of the Corrections Law; and failure of the City to make a payment due to the Design and Construction Account of the Hazardous Waste Remedial Fund under Section 97-b of the State Finance Law. The City does not currently participate in the foregoing programs and does not currently expect to participate in such programs in the future. Also, Section 54-a of the State Finance Law provides that, if the City levies or causes to be levied taxes upon real property in excess of constitutional limitations, the State Comptroller may withhold local assistance by the State to the City to the extent of such excess.

In addition, the State may withhold or reduce State education aid, and in certain cases must withhold or reduce such aid, upon the City's failure to provide statutorily mandated courses of instruction in a number of special areas, upon the City's failure to provide the statutorily required
number of instructional days, upon the City's failure to provide certain health services, upon the City's failure to provide statutorily mandated services for handicapped students, upon the City's failure to make any required payment for the maintenance or operation of charter schools in the City, upon the City's noncompliance with certain other statutorily mandated administrative practices or upon the City's willful disobedience of certain laws or directives. During the last ten years, no State education aid has been withheld from the City for failure to meet the abovementioned requirements.

ECF's receipt of the State education aid could also be affected by withholding of State education aid in satisfaction of any disallowance regarding prior aid funds distributed to the City.

## Effect of Claims on State Education Aid.

Statutory application and intercept of State education aid for any of the above purposes or any other purpose could have the result of diminishing the amount of State education aid subject to be intercepted by the State Comptroller. Furthermore, the City may in the future participate in financing programs incorporating procedures for the application or withholding of State education aid for the repayment of obligations of, or the repayment of financial assistance provided to, the City. In addition, the State may institute, with or without the consent of the City, programs for the diversion or withholding of State education aid otherwise payable to the City.

## PART 5 - DESCRIPTION OF THE 2018A BONDS

## General

The 2018A Bonds will be dated the date of delivery, will bear interest at the respective rates per annum and will mature on the dates and in the amounts set forth on the inside cover page of this Official Statement. Interest on the 2018A Bonds will accrue from the date of delivery, will be payable on April 1, 2019 and semiannually thereafter on October 1 and April 1 of each year to and including their respective dates of maturity or earlier redemption, and will be payable in lawful money of the United States of America. The 2018A Bonds will be issued as fully registered bonds, and, when issued, will be registered in the name of and held by Cede \& Co., as nominee for DTC (as hereinafter defined). Purchases of beneficial interests in the 2018A Bonds will be made in book-entry-only form (without certificates) in the denomination of $\$ 5,000$ or any whole multiple thereof and, under certain circumstances, such beneficial interests are exchangeable for one or more fully registered bonds of like principal amount, series and maturity in the denomination of $\$ 5,000$ or any whole multiple thereof.

So long as DTC (as hereinafter defined) or its nominee, Cede \& Co., is the registered owner of the 2018A Bonds, payments of the principal of and interest on the 2018A Bonds will be made directly to Cede \& Co. Disbursement of such payments to the DTC participants is the responsibility of DTC and disbursement of such payments to the owners of beneficial interests in the 2018A Bonds is the responsibility of the DTC participants. In the event the 2018A Bonds are registered in the names of the beneficial owners thereof, the principal thereof will be payable upon presentation and surrender thereof at the corporate trust office of The Bank of New York Mellon (as "Trustee"), and the interest thereon will be payable by check or draft mailed (or, upon request of a Holder of not less than $\$ 1,000,000$ in aggregate principal amount of 2018A Bonds made to
the Trustee not less than five days prior to the Record Date, by wire transfer), to the registered owners thereof as of the Record Date at their addresses as they appear in the records of the Trustee. (See "Book-Entry-Only System" under this caption.)

## Redemption Provisions

The 2018A Bonds maturing on or prior to April 1, 2029 are not subject to redemption prior to maturity.

Optional Redemption of 2018 A Bonds. The 2018A Bonds maturing after April 1, 2029 are subject to redemption prior to maturity at the option of ECF on and after April 1, 2029, in any order (selected by lot within a maturity), as a whole or in part at any time, at a Redemption Price of $100 \%$ of the principal amount of the 2018A Bonds to be redeemed, plus accrued interest to the date of redemption.

Selection of Bonds to be Redeemed. So long as DTC acts as securities depository for the 2018A Bonds, if less than all of the 2018A Bonds of a Series and maturity are called for redemption, the particular 2018A Bonds or portions thereof to be redeemed will be selected in accordance with DTC procedures. See "Book-Entry Only System" below.

Notice of Redemption. The Trustee is to give notice of the redemption of the 2018A Bonds in the name of ECF by mailing a notice of redemption, postage prepaid, not less than 30 days nor more than 60 days prior to the redemption date, to the registered owners of any 2018A Bonds that are to be redeemed, at their last known addresses appearing on the registration books, but such mailing is not a condition precedent to such redemption and failure of any such registered owner to receive such notice will not affect the validity of the proceedings for the redemption of 2018A Bonds. If directed in writing by an Authorized Officer of ECF, the Trustee will also give such notice by publication thereof once in an Authorized Newspaper, such publication to be not less than 30 days nor more than 60 days prior to the redemption date, but such publication is not a condition precedent to such redemption, and failure to so publish any such notice or a defect in such notice or in the publication thereof will not affect the validity of the proceedings for the redemption. Any such notice may contain conditions to ECF's obligation to redeem the 2018A Bonds.

If, on the redemption date, money for the redemption of the 2018A Bonds of like maturity to be redeemed, together with interest thereon to the redemption date, is held by the Trustee so as to be available for payment of the redemption price, then interest on the 2018A Bonds of such maturity will cease to accrue from and after the redemption date and such 2018A Bonds will no longer be considered to be outstanding under the Resolution.

Conditional Redemption. ECF's obligation to optionally redeem a 2018A Bond may be conditioned upon the availability of sufficient money to pay the Redemption Price for all of the 2018A Bonds to be redeemed on the redemption date. If sufficient money is available on the redemption date to pay the Redemption Price and if notice has been mailed and the conditions, if any, to such redemption have been satisfied or waived by ECF, then interest on the 2018A Bonds
of such maturity will cease to accrue from and after the redemption date and such 2018A Bonds will no longer be considered to be Outstanding under the Resolution.

## Book-Entry-Only System

The Depository Trust Company ("DTC"), New York, NY. will act as securities depository for the 2018A Bonds. The 2018A Bonds will be issued as fully-registered securities registered in the name of Cede \& Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered bond certificate will be issued for each maturity of the 2018A Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC, in the aggregate principal amount of the 2018A Bonds.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants (the "Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust \& Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (the "Indirect Participants"). DTC has a Standard \& Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com or www.dtc.org.

Purchases of 2018A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2018A Bonds on DTC's records. The ownership interest of each actual purchaser of each 2018A Bonds ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction.

Transfers of ownership interests in the 2018A Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in 2018A

Bonds, except in the event that use of the book-entry system for the 2018A Bonds is discontinued. To facilitate subsequent transfers, all 2018A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede \& Co., or such other name as may be requested by an authorized representative of DTC. The deposit of 2018A Bonds with DTC and their registration in the name of Cede \& Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of any 2018A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts the 2018A Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the 2018A Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede \& Co. (nor any other DTC nominee) will consent or vote with respect to the 2018A Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to ECF as soon as possible after the record date. The Omnibus Proxy assigns Cede \& Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2018A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payment of redemption proceeds and principal and interest payments on the 2018A Bonds will be made to Cede \& Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from ECF or Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or ECF, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, if any, and interest on the 2018A Bonds to Cede \& Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee. Disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the 2018A Bonds at any time by giving reasonable notice to ECF or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, bond certificates are required to be printed and delivered.

ECF may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, bond certificates will be printed and delivered to DTC.

Unless otherwise noted, the information contained in the preceding paragraphs of this subsection "Book-Entry-Only System" has been extracted from information given by DTC. Neither ECF, the Trustee nor the underwriters make any representation as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereto.

NEITHER ECF NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO SUCH DTC PARTICIPANTS, INDIRECT PARTICIPANTS, OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE PAYMENTS TO OR THE PROVIDING OF NOTICE FOR SUCH DTC PARTICIPANTS, INDIRECT PARTICIPANTS, OR THE BENEFICIAL OWNERS.

## PART 6 - DEBT SERVICE ON THE 2018A BONDS

The following table sets forth the amounts required to be paid by ECF during each 12month period ending June 30 of the years shown below for the payment of debt service on ECF's Outstanding Bonds, debt service on the 2018A Bonds and aggregate debt service on all Outstanding Bonds under the Resolution after the issuance of the 2018A Bonds.

## Debt Service Requirements*

| Period Ending June 30 | Debt Service on Outstanding Bonds ${ }^{\dagger}$ | 2018A Bonds |  | Aggregate Debt Service |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Principal | Interest |  |
| 2019 | \$16,225,648 | \$370,000 | \$804,158 | \$17,399,806 |
| 2020 | 14,994,323 | 205,000 | 1,840,950 | 17,040,273 |
| 2021 | 14,969,347 | 215,000 | 1,832,750 | 17,017,097 |
| 2022 | 14,941,873 | 220,000 | 1,824,150 | 16,986,023 |
| 2023 | 14,915,655 | 1,925,000 | 1,815,350 | 18,656,005 |
| 2024 | 14,886,560 | 2,000,000 | 1,738,350 | 18,624,910 |
| 2025 | 14,863,298 | 2,075,000 | 1,658,350 | 18,596,648 |
| 2026 | 14,832,774 | 2,160,000 | 1,575,350 | 18,568,124 |
| 2027 | 14,794,553 | 2,245,000 | 1,488,950 | 18,528,503 |
| 2028 | 14,770,593 | 2,335,000 | 1,399,150 | 18,504,743 |
| 2029 | 14,735,635 | 2,425,000 | 1,305,750 | 18,466,385 |
| 2030 | 14,698,463 | 2,530,000 | 1,208,750 | 18,437,213 |
| 2031 | 14,647,878 | 2,660,000 | 1,082,250 | 18,390,128 |
| 2032 | 14,603,215 | 2,795,000 | 949,250 | 18,347,465 |
| 2033 | 14,553,878 | 2,930,000 | 809,500 | 18,293,378 |
| 2034 | 14,508,703 | 3,080,000 | 663,000 | 18,251,703 |
| 2035 | 14,450,953 | 3,230,000 | 509,000 | 18,189,953 |
| 2036 | 14,399,765 | 3,395,000 | 347,500 | 18,142,265 |
| 2037 | 14,337,323 | 3,555,000 | 177,750 | 18,070,073 |
| 2038 | 14,272,738 | - | - | 14,272,738 |
| 2039 | 14,204,240 | - | - | 14,204,240 |
| 2040 | 14,140,105 | - | - | 14,140,105 |
| 2041 | 10,537,988 | - | - | 10,537,988 |
| Total | \$334,285,508 | \$40,350,000 | \$23,030,258 | \$397,665,766 |

[^1]
## PART 7 - THE NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND

## General

ECF is a corporate governmental agency constituting a public benefit corporation. It was created in 1966 by the Act in order to facilitate the construction and improvement of City
elementary and secondary public school buildings in combination with other compatible lawful uses such as housing, office or other commercial buildings. To carry out this purpose, ECF is empowered, among other things, to issue its bonds and notes to obtain the sums necessary to finance the construction or improvement of the school portions of Combined Occupancy Structures and to apply the revenues received from both the school and non-school portions thereof to the payment of such bonds and notes.

ECF's office is located at 30-30 Thomson Avenue, 6th Floor, Long Island City, New York 11101. Its telephone number is (718) 472-8285.

## Governance and Management

Pursuant to the Act, the board of trustees of ECF consists of the Chancellor of the New York City Public Schools, who is the Chairman of ECF, and two trustees appointed by the Mayor of the City, who each serve at the pleasure of the Mayor. ECF's present board of trustees and its professional staff are:

## Trustees

Richard A. Carranza is Chancellor of the New York City Public Schools, also known as the New York City Department of Education. By virtue of his appointment as Chancellor by Mayor de Blasio in March 2018, Mr. Carranza became Chairman of the ECF Board of Trustees. Mr. Carranza serves at the pleasure of the Mayor, and his term as Chair of ECF is co-terminous with his position as Chancellor.

Karin Goldmark (Chancellor's designee) is Deputy Chancellor of School Planning and Design for the New York City Department of Education. Ms. Goldmark is a New York City native and public school graduate, who most recently served as Senior Education Advisor to First Deputy Mayors Dean Fuleihan and Anthony Shorris since 2014. She previously worked at the Department of Education as Executive Director for New Initiatives. She has also served as Executive Director of College Summit New York and as Vice President of the NYC Leadership Academy. Ms. Goldmark is a graduate of University of Pennsylvania's Wharton School and earned a J.D. from Yale Law School.

Lorraine Grillo is President and CEO of the New York City School Construction Authority. In July 2018, she was also appointed Commissioner of the Department of Design and Construction by Mayor de Blasio. Ms. Grillo began her career at the New York City School Construction Authority (the "SCA") over 24 years ago as a Community Relations specialist and has held a variety of positions within the agency. Over the past eight years, the SCA, under her leadership, has successfully produced over 75,000 new school seats and completed thousands of capital improvement projects in existing school buildings.

## Professional Staff

Jennifer Maldonado has served as the Executive Director of ECF since 2013. Prior to joining ECF Ms. Maldonado served as Director of Government Relations for Covanta Energy's Northeast and Puerto Rico regions on issues including renewable energy, electricity restructuring, solid waste management and environmental policy. Ms. Maldonado also served as Director of

Intergovernmental Relations for the Empire State Development Corporation; her portfolio included development projects throughout New York, including Moynihan Station, Columbia University and Atlantic Yards. Ms. Maldonado served as Vice President Public Affairs/ Government Relations for PaineWebber/UBS Americas from 1996-2003.

Cynthia Wong was appointed ECF Director of Finance in 2015 and has been working at ECF since September 2014. Ms. Wong previously served as the Deputy Director, Capital Budget and Financial Planning, and as Senior Grant Manager at the NYC Department of Education. She has also worked at the NYC School Construction Authority as a Manager in Capital Planning and at Goldman Sachs in their Investment Management Division. Ms. Wong is a graduate of Stanford University and earned an MBA from Yale School of Management.

## PART 8 - LITIGATION

ECF experiences routine litigation and claims incidental to the construction of its projects, the conduct of its affairs and the ownership of its properties. Such litigation is being defended either by insurance companies on behalf of ECF or by experienced defense counsel retained by ECF. The probable recoveries and the estimated costs and expenses of the defense of such litigation will, in the opinion of ECF, be entirely within ECF's applicable insurance policy limits (subject to applicable deductibles) or will be entirely covered by available reserves set aside in the Project Construction Fund under the Resolution and, accordingly, will not materially adversely affect ECF's operations or financial condition.

Upon delivery of the Bonds, the Executive Director of ECF will certify that there is no controversy or litigation of any nature pending or to his knowledge threatened to restrain or enjoin the issuance, sale, execution or delivery of the 2018A Bonds, or in any way contesting or affecting the validity of the 2018A Bonds or any of the proceedings taken with respect to the issuance and sale thereof or the application of money pledged to the payment of the 2018A Bonds. The City's Corporation Counsel will certify that there is no controversy or litigation of any nature pending or to his knowledge threatened to restrain or enjoin the performance by the City of its obligations under the Leases, or in any way contesting or affecting the validity of the Leases; or in lieu of such certificate, a statement by the City's Corporation Counsel that in his opinion the issues raised in any such pending or threatened controversy or litigation, insofar as they affect the validity of any of the Leases are without substance or that the contention of any plaintiffs therein that affects the validity of the Leases is without merit.

## PART 9 - TAX MATTERS

## Federal Income Taxes

The Internal Revenue Code of 1986, as amended (the "Code"), imposes certain requirements that must be met subsequent to the issuance and delivery of the 2018A Bonds for interest thereon to be and remain excluded from gross income for federal income tax purposes. Noncompliance with such requirements could cause the interest on the 2018A Bonds to be included in gross income for federal income tax purposes retroactive to the date of issue of the 2018A Bonds. Pursuant to the Resolution and the Tax Certificate, ECF and the City have covenanted to comply with the applicable requirements of the Code in order to maintain the
exclusion of the interest on the 2018A Bonds from gross income for federal income tax purposes pursuant to Section 103 of the Code. In addition, ECF and the City have made certain representations and certifications in the Resolution and the Tax Certificate. Bond Counsel will not independently verify the accuracy of those representations and certifications.

In the opinion of Nixon Peabody LLP, Bond Counsel, under existing law and assuming compliance with the aforementioned covenant, and the accuracy of certain representations and certifications made by ECF and the City described above, interest on the 2018A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Code. Bond Counsel is also of the opinion that such interest is not treated as a preference item in calculating the alternative minimum tax imposed under the Code.

## State Taxes

Bond Counsel is also of the opinion that interest on the 2018A Bonds is exempt, by virtue of the Act, from personal income taxes of the State of New York and its political subdivisions, including The City of New York. Bond Counsel expresses no opinion as to other State of New York or local tax consequences arising with respect to the 2018A Bonds nor as to the taxability of the 2018A Bonds or the income therefrom under the laws of any state other than the State of New York.

## Original Issue Premium

The 2018A Bonds sold at prices in excess of their principal amounts are "Premium Bonds". An initial purchaser with an initial adjusted basis in a Premium Bond in excess of its principal amount will have amortizable bond premium which is not deductible from gross income for federal income tax purposes. The amount of amortizable bond premium for a taxable year is determined actuarially on a constant interest rate basis over the term of each Premium Bond based on the purchaser's yield to maturity (or, in the case of Premium Bonds callable prior to their maturity, over the period to the call date, based on the purchaser's yield to the call date and giving effect to any call premium). For purposes of determining gain or loss on the sale or other disposition of a Premium Bond, an initial purchaser who acquires such obligation with an amortizable bond premium is required to decrease such purchaser's adjusted basis in such Premium Bond annually by the amount of amortizable bond premium for the taxable year. The amortization of bond premium may be taken into account as a reduction in the amount of taxexempt income for purposes of determining various other tax consequences of owning such 2018A Bonds. Owners of the Premium Bonds are advised that they should consult with their own advisors with respect to the state and local tax consequences of owning such Premium Bonds.

## Ancillary Tax Matters

Ownership of the 2018A Bonds may result in other federal tax consequences to certain taxpayers, including, without limitation, certain $S$ corporations, foreign corporations with branches in the United States, property and casualty insurance companies, individuals receiving Social Security or Railroad Retirement benefits, individuals seeking to claim the earned income credit, and taxpayers (including banks, thrift institutions and other financial institutions) who may be
deemed to have incurred or continued indebtedness to purchase or to carry the 2018A Bonds. Prospective investors are advised to consult their own tax advisors regarding these rules.

In 2006, interest paid on tax-exempt obligations such as the 2018A Bonds is subject to information reporting to the Internal Revenue Service (the "IRS") in a manner similar to interest paid on taxable obligations. In addition, interest on the 2018A Bonds may be subject to backup withholding if such interest is paid to a registered owner that (a) fails to provide certain identifying information (such as the registered owner's taxpayer identification number) in the manner required by the IRS, or (b) has been identified by the IRS as being subject to backup withholding.

Bond Counsel is not rendering any opinion as to any federal tax matters other than those described in the opinions attached as Appendix D. Prospective investors, particularly those who may be subject to special rules described above, are advised to consult their own tax advisors regarding the federal tax consequences of owning and disposing of the 2018A Bonds, as well as any tax consequences arising under the laws of any state or other taxing jurisdiction.

## Changes in Law and Post Issuance Events

Legislative or administrative actions and court decisions, at either the federal or state level, could have an adverse impact on the potential benefits of the exclusion from gross income of the interest on the 2018A Bonds for federal or state income tax purposes, and thus on the value or marketability of the 2018A Bonds. This could result from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax), repeal of the exclusion of the interest on the 2018A Bonds from gross income for federal or state income tax purposes, or otherwise. It is not possible to predict whether any legislative or administrative actions or court decisions having an adverse impact on the federal or state income tax treatment of holders of the 2018A Bonds may occur. Prospective purchasers of the 2018A Bonds should consult their own tax advisers regarding the impact of any change in law on the 2018A Bonds.

Bond Counsel has not undertaken to advise in the future whether any events after the date of issuance and delivery of the 2018A Bonds may affect the tax status of interest on the 2018A Bonds. Bond Counsel expresses no opinion as to any federal, state or local tax law consequences with respect to the 2018A Bonds, or the interest thereon, if any action is taken with respect to the 2018A Bonds or the proceeds thereof upon the advice or approval of other counsel.

## PART 10 - VERIFICATION OF MATHEMATICAL COMPUTATIONS

Samuel Klein and Company, Certified Public Accountants, a firm of Certified Public Accountants, will deliver to the ECF a report indicating that such firm has, based on information and assertions provided by the Underwriters and the ECF and its representatives, verified the mathematical accuracy of (a) the mathematical computations of the adequacy of the initial cash deposit together with the maturing principal of and interest on the Defeasance Securities held in trust for the payment of the Refunded Bonds to pay, when due, the maturing principal and redemption price of and interest on the Refunded Bonds on the respective maturity or redemption date of the Refunded Bonds (as described herein under the caption "Refinancing Plan" and in
"Appendix E-Bonds to be Refunded"), and (b) the mathematical computations supporting the conclusion of Bond Counsel that the Bonds are not "arbitrage bonds" under the Code.

## PART 11 - RATINGS

S\&P Global Ratings ("S\&P") and Moody's Investors Service ("Moody's") have assigned unenhanced long-term debt ratings of AA- and Aa3, respectively, to the 2018A Bonds. These ratings reflect only the view of S\&P and Moody's, respectively, and an explanation thereof may be obtained from S\&P and Moody's, respectively. Such ratings are not a recommendation to buy, sell or hold securities. There is no assurance that the ratings will remain in effect for any given period of time or that they will not be revised downward or withdrawn entirely by S\&P and Moody's, if, in their judgment, circumstances so warrant. Any such downward revision or withdrawal of a rating may have an adverse effect on the market price of the 2018A Bonds.

## PART 12 - FINANCIAL ADVISOR

PFM Financial Advisors LLC, New York, New York is acting as financial advisor to ECF in connection with the issuance of the 2018A Bonds.

## PART 13 - UNDERWRITING

The 2018A Bonds will be purchased for reoffering by Merrill Lynch, Pierce, Fenner \& Smith Incorporated, as the underwriters thereof. The compensation for services rendered in connection with the reoffering of the 2018A Bonds will be $\$ 51,247.16$.

In addition, the underwriters may have entered into distribution agreements with other broker-dealers (that have not been designated by ECF as the underwriters) for the distribution of the 2018A Bonds at the original issue prices. Such agreements generally provide that the underwriters will share a portion of their underwriting compensation or selling concession with such broker-dealers.

## PART 14 - CONTINUING DISCLOSURE

In order to assist the underwriters in complying with Rule $15 \mathrm{c} 2-12$ promulgated by the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended, ECF, the City and the Trustee will enter into a written agreement (the "Continuing Disclosure Agreement") for the benefit of the owners of the 2018A Bonds pursuant to which ECF and the City will undertake to provide continuing disclosure of certain financial information and operating data and certain events, if material.

The Continuing Disclosure Agreement will require that ECF deliver within 185 days of the end of each fiscal year its year-end audited financial statements together with certain updated information (the "Fund Information") with respect to the information under the headings "The Combined Occupancy Projects," "Security and Sources of Payment for the 2018A Bonds-Other Revenues" and "Security and Sources of Payments for the 2018A Bonds-Debt Service Reserve Fund and Intercept of State Education Aid" (in each case only to the extent of the table contained therein). The notices that ECF will undertake to provide as described above, include notices of any of the following events with respect to the Bonds and such notices will be provided to EMMA
(as defined below) in a timely manner not in excess of ten business days after the occurrence of the event: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, notices of proposed issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds; (7) modifications to the rights of security holders, if material; (8) bond calls, if material and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the securities, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership or similar event of ECF; which event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for ECF in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of ECF, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of ECF; (13) the consummation of a merger, consolidation, or acquisition involving ECF or the sale of all or substantially all of the assets of ECF, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and (14) appointment of a successor or additional trustee or the change of name of a trustee, if material. In addition, ECF will undertake, for the benefit of the holders of the Bonds, to provide to the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access System ("EMMA") in a timely manner, notice of any failure by ECF to provide the Fund Information and annual financial statements by the date required in ECF's undertaking described above.

The Continuing Disclosure Agreement will also require that the City (a) deliver within 185 days after the end of each fiscal year, to EMMA, core financial information and operating data for the prior fiscal year, including (i) the City's audited general purpose financial statements, prepared in accordance with generally accepted accounting principles in effect from time to time, and (ii) material historical quantitative data on the City's revenues, expenditures, financial operations and indebtedness generally of the type found in Sections IV, V, VIII and IX, and under the caption "2013-2017 Summary of Operations" in Section VI of "Appendix B-Certain Information Concerning The City of New York," provided that if the inclusion or format of such information is changed or new information is added in such sections in any future City official statement, thereafter the information provided to EMMA will contain or include by reference information of the type included in such future City official statement as so changed or added; and (b) in a timely manner not in excess of ten business days after the occurrence of any event described below, provide notice to EMMA, of any of the following events: (i) bankruptcy, insolvency, receivership or similar event of the City; which event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets of business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and
officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City, and (ii) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material.

## PART 15 - ELIGIBILITY FOR INVESTMENT

Under the Act, the Bonds are securities in which all public officers and bodies of the State and all its municipalities and municipal subdivisions, all insurance companies and associations, and other persons carrying on an insurance business in the State, all banks, bankers, trust companies, savings banks and savings associations, including savings and loan associations, building and loan associations, investment companies and other persons carrying on a banking business in the State, all administrators, guardians, executors, trustees and other fiduciaries, and all other persons whatsoever in the State, who are now or may hereafter be authorized to invest in Bonds or other obligations of the State, may properly and legally invest funds, including capital, in their control or belonging to them.

## PART 16 - CERTAIN LEGAL MATTERS

Legal matters related to the authorization, issuance, sale and delivery of the Bonds are subject to the approval of Nixon Peabody LLP, New York, New York, Bond Counsel. The approving opinion of Bond Counsel will be in substantially the form attached to this Official Statement as Appendix D. Certain legal matters will be passed upon for the City by its Corporation Counsel, and by Orrick, Herrington \& Sutcliffe LLP, New York, New York, its Special Disclosure Counsel.

## PART 17 - MISCELLANEOUS

The references herein to the Act, the Resolution and the School Leases are brief summaries of certain provisions thereof. Such summaries do not purport to be complete and reference is made to the Act, the Resolution and the School Leases for full and complete statements of such provisions. Copies of the Act, the Resolution and the School Leases are available at the offices of the Trustee.

The agreements of ECF with holders of the 2018A Bonds are fully set forth in the Resolution. Neither any advertisement of the 2018A Bonds nor this Official Statement is to be construed as a contract with purchasers of the 2018A Bonds.

The delivery of this Official Statement has been duly authorized by ECF.

Any statements in this Official Statement involving matters of opinion, projections or estimates, whether or not expressly so stated, are intended as such and not as representations of fact. No representation is made that any of such statements will be realized. The agreements of ECF are fully set forth in the Resolution in accordance with the Act, and this Official Statement is not to be construed as a contract or agreement between ECF and the underwriters or owner of any of the 2018A Bonds.

NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND

Dated: October 11, 2018

## APPENDIX A

SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION
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# APPENDIX A - SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION 

## CERTAIN DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION

## Definitions of Certain Terms

Accreted Value means with respect to any Capital Appreciation Bond (i) as of any Valuation Date, the amount set forth for such date in the Series Resolution authorizing such Capital Appreciation Bond or the Series Certificate relating to such Bond and (ii) as of any date other than a Valuation Date, the sum of (a) the Accreted Value on the preceding Valuation Date and (b) the product of (1) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and the denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date, calculated based on the assumption that Accreted Value accrues during any semiannual period in equal daily amounts on the basis of a year of twelve 30-day months, and (2) the difference between the Accreted Values for such Valuation Dates.

Acquired Project means a Project which the Fund has acquired title to, or taken possession of, through protection and enforcement of its rights conferred by law or the Agreement of Lease upon such Project.

Acquired Project Expense means the amount set forth in the Fund Budget for such Fiscal Year prepared in accordance with the Resolution for the costs and expenses incurred by the Fund in connection with the acquisition, ownership or operation of an Acquired Project.

Acquired Project Expense Fund means the fund so designated, created and established pursuant to the Resolution.

Acquired Project Operating Income means the net income derived by the Fund from its acquisition, ownership or operation of an Acquired Project remaining after payment of all costs and expenses arising from the ownership and operation of such Acquired Project.

Act means the New York City Educational Construction Fund Act, being and constituting Article 10 of the Education Law (Chapter 16 of the Consolidated Laws of the State), as amended.

Administrative Expenses means for any Fiscal Year (a) the amount set forth in the Fund Budget for such Fiscal Year prepared in accordance with the Resolution for all costs, fees and expenses of every kind arising out of or incurred in connection with carrying out and administering its powers, duties and functions as authorized by the Act, and shall include, without limiting the generality of the foregoing: salaries, legal, accounting and consultants' services and expenses, payments to pension, retirement, health and hospitalization funds, fees and expenses of the Trustee, Paying Agents and any Providers (other than Provider Payments), payments required to be made under any Interest Rate Exchange Agreements to Counterparties and any other expenses required or permitted to be paid by the Fund under the provisions of the Act or the Resolution or otherwise, and (b) any amounts payable by the Fund during such Fiscal Year solely as a consequence of the termination of a Hedge Agreement; provided, however, that Administrative Expenses shall not
include any costs or expenses of the Fund arising from or related to the acquisition, ownership or operation of an Acquired Project.

Advance Rental Payment means a payment of Annual Rentals to become due and payable in accordance with the Agreement of Lease for the full term thereof, together with such other amounts as shall be determined by the Fund.

Agreement of Lease means each lease made and entered into by the City and the Fund for the school portion of a Combined Occupancy Structure.

Annual Rentals means the Annual Rentals due and payable by the City for the school portion of a Combined Occupancy Structure in accordance with the Agreement of Lease with respect to such Combined Occupancy Structure, including any and all penalties imposed upon the City for failure to make any such payment on or before the due date thereof, and all proceeds of use and occupancy insurance policies or like arrangements carried with respect to the Project, payable to the Fund in lieu of certain of the Annual Rentals.

Appreciated Value means with respect to any Deferred Income Bond (i) as of any Valuation Date, the amount set forth for such date in the Series Resolution authorizing such Deferred Income Bond or in the Series Certificate relating to such Bond and (ii) as of any date other than a Valuation Date, the sum of (a) the Appreciated Value on the preceding Valuation Date and (b) the product of (1) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and the denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date, calculated based on the assumption that Appreciated Value accrues during any semiannual period in equal daily amounts on the basis of a year of twelve 30-day months, and (2) the difference between the Appreciated Values for such Valuation Dates, and (iii) as of any date of computation on and after the Interest Commencement Date, the Appreciated Value on the Interest Commencement Date.

Arbitrage Rebate Fund means the fund so designated, created and established pursuant to the Resolution.

Authorized Newspaper means The Bond Buyer or any other newspaper of general circulation printed in the English language and customarily published at least once a day for at least five days (other than legal holidays) in each calendar week in the Borough of Manhattan, City and State of New York, designated by the Fund.

Authorized Officer means (i) in the case of the Fund, any member of the Fund or the Fund's Executive Director, Director of Finance, General Counsel or other officer or employee who is authorized by resolution or by-laws of the Fund to perform the act or execute and deliver the document in question; and (ii) in the case of the Trustee, any Vice President, Assistant Vice President, Assistant Treasurer or Assistant Secretary regularly employed in the conduct of the Trustee's corporate trust business, and when used with reference to any act or document also means any person authorized to perform any act or sign any document by or pursuant to a resolution of the Board of Directors of the Trustee or the by-laws of the Trustee.

Bond means any Bond authorized and issued pursuant to the Resolution and to a Series Resolution, and, except as expressly limited by the Resolution or otherwise expressly provided in
the Resolution, any Hedge Agreement Payments and Parity Reimbursement Obligations; provided, however, that neither a Hedge Agreement nor a Parity Reimbursement Obligation shall be considered a Bond for purposes of the Resolution and the provisions of the Resolution regarding amendment of the Resolution shall not apply to amendments of a Hedge Agreement, a Parity Reimbursement Obligation or the agreement with the Provider of the Credit Facility or Liquidity Facility to which such Parity Reimbursement Obligation relates.

Bond Counsel means Nixon Peabody LLP or another attorney or law firm, appointed by the Fund, having a national reputation in the field of municipal law whose opinions are generally accepted by purchasers of municipal bonds.

Bondholder, Holder of Bonds or Holder or any similar term, when used with reference to a Bond or Bonds, means the registered owner of any Bond.

Book Entry Bond means a Bond authorized to be issued to, and issued to and registered in the name of, a Depository for the participants in such Depository.

Business Day means, unless with respect to any Bonds of a Series the Series Resolution or Series Certificate relating to such Bonds provides otherwise, any day which is not a Saturday, Sunday or a day on which the Trustee or banking institutions chartered by the State or the United States of America are legally required or authorized to close in The City of New York, or a day that is a legal holiday for the Department.

Capital Appreciation Bond means any Bond as to which interest is compounded on each Valuation Date therefor and is payable only at the maturity or prior redemption thereof.

Capitalized Interest means interest on Bonds payable from money on deposit in the Capitalized Interest Account.

Capitalized Interest Account means the account within the Construction Fund so designated, created and established pursuant to the Resolution.

City means The City of New York, a municipal corporation of the State, constituting a political subdivision thereof.

Code means the Internal Revenue Code of 1986, as amended, or any successor provision of law, and the applicable regulations thereunder.

Combined Occupancy Structure means any improvement on real property or interests therein or thereto as is defined in subdivision 5 of Section 452 of the Act, with respect to which the Fund shall have issued Bonds for the purpose of obtaining money to construct, acquire, reconstruct, rehabilitate, improve or otherwise finance the school portion thereof, or for the purpose of funding or providing for the payment of Notes or Bonds issued to obtain such money.

Construction Fund means the fund so designated, created and established pursuant to the Resolution.

Costs of Issuance means the items of expense incurred in connection with the authorization, sale and issuance of the Bonds, which items of expense shall include, but not be limited to, document printing and reproduction costs, filing and recording fees, costs of credit ratings, initial fees and charges of the Trustee or a Depository, legal fees and charges, professional consultants' fees, fees and charges for execution, transportation and safekeeping of Bonds, premiums, fees and charges for insurance on Bonds, commitment fees or similar charges of a Remarketing Agent or relating to a Credit Facility or a Liquidity Facility, costs and expenses of refunding Bonds and other costs, charges and fees, including those of the Fund, in connection with the foregoing.

Costs of Issuance Account means the account within the Construction Fund so designated, created and established pursuant to the Resolution.

Costs of the Project means all of the costs, as authorized by law, of acquiring, designing, constructing, reconstructing, rehabilitating, improving or otherwise providing, furnishing and equipping of a Project, including, without limiting the generality of the foregoing, the following items: (i) principal of and interest on Notes issued to finance the costs of any Project, or issued to refund or provide for the payment of any such Notes; (ii) costs of providing indemnity and surety bonds and insurance against risks during the period of construction if not provided by the Developer or any contractor; (iii) costs incurred for architectural, engineering, designing, accounting, legal, financial, labor and materials, payments to contractors, builders and materialmen, and any other necessary services in connection with the acquiring, designing, constructing, reconstructing, rehabilitating, improving or otherwise providing, furnishing and equipping of a Project; (iv) Administrative Expenses of the Fund applicable to the Project; (v) the repayment to the City or the Department of money advanced or paid by it for costs relating to a Project; (vi) costs and expenses required for the acquisition and installation of equipment or machinery; (vii) all other costs which are approved by an Authorized Officer of the Fund and to which the Fund shall be required to pay for the acquisition, construction, reconstruction, rehabilitation, repair, improvement or otherwise providing, furnishing and equipping of a Project; (viii) interest on the Bonds prior to, during and for a reasonable period after the acquisition, construction, reconstruction, rehabilitation, repair, improvement or otherwise providing, furnishing and equipping of a project is complete; (ix) fees, expenses and liabilities of the Fund incurred in connection with a project or pursuant to the Resolution; and (x) fees, expenses and liabilities of the Fund incurred in connection with a Project or pursuant to the Resolution or to the Agreement, a Credit Facility, a Liquidity Facility, a Remarketing Agreement or a Hedge Agreement.

Counterparty means an entity with which the Fund has entered into a Hedge Agreement.
Credit Facility means an irrevocable letter of credit, surety bond, loan agreement, Standby Purchase Agreement or other agreement, facility or insurance or guaranty arrangement issued or extended by:
(i) a bank, a trust company, a national banking association, an organization subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956 or any successor provisions of law;
(ii) a federal branch pursuant to the International Banking Act of 1978 or any successor provisions of law;
(iii) a domestic branch or agency of a foreign bank which branch or agency is duly licensed or authorized to do business under the laws of any state or territory of the United States of America;
(iv) a savings bank;
(v) a savings and loan association;
(vi) an insurance company or association chartered or organized under the laws of any state of the United States of America;
(vii) the Government National Mortgage Association or any successor thereto, the Federal National Mortgage Association or any successor thereto;
(viii) an entity affiliated with or which is a subsidiary of any entity described above or affiliated with or a subsidiary of any registered securities dealer; or
(ix) any other entity approved by the Fund.

Debt Service Account means the account within the Debt Service Fund so designated, created and established pursuant to the Resolution.

Debt Service Fund means the fund so designated, created and established pursuant to the Resolution.

Debt Service Reserve Fund means the fund so designated, created and established pursuant to the Resolution.

Debt Service Reserve Requirement means, as of any particular date of computation, an amount equal to Maximum Annual Debt Service; provided however, that, notwithstanding the foregoing, the Fund may if permitted by the Act reduce the Debt Service Reserve Fund Requirement if prior to such reduction the Fund delivers Rating Confirmations to the Trustee.

## Defeasance Security means:

(i) a Government Obligation, excluding obligations described in clause (iii)(b) of this definition, but including the interest component of REFCORP bonds for which the separation of principal and interest is made by request of the Federal Reserve Bank of New York in book-entry form, that is not subject to redemption prior to maturity other than at the option of the holder thereof or that has been irrevocably called for redemption on a stated future date;
(ii) a Municipal Obligation (a) that is not subject to redemption prior to maturity other than at the option of the holder thereof or as to which irrevocable instructions have been given to the trustee of such Municipal Obligation by the obligor thereof to
give due notice of redemption and to call such Municipal Obligation for redemption on the date or dates specified in such instructions and such Municipal Obligation is not otherwise subject to redemption prior to such specified date other than at the option of the holder thereof, (b) the timely payment of the principal or redemption price thereof and interest thereon is fully secured by a fund consisting only of cash or obligations described in clause (i) above, which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such Municipal Obligation on the maturity date thereof or the redemption date specified in the irrevocable instructions referred to in clause (a) above, and (c) that at the time an investment therein is made is rated in the highest rating category by at least two Rating Services;
(iii) a note, bond, debenture, mortgage or other evidence of indebtedness, that, at the time acquired, is (a) not subject to redemption prior to maturity other than at the option of the holder thereof or as to which irrevocable instructions have been given to the trustee of such obligation by the obligor thereof to give due notice of redemption and to call such obligation for redemption on the date or dates specified in such instructions and such obligation is not otherwise subject to redemption prior to such specified date other than at the option of the holder thereof, (b) issued or guaranteed by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association, the Student Loan Marketing Association, the Federal Farm Credit System or any other instrumentality of the United States of America and (c) is rated in the highest rating category by at least two Rating Services; and
(iv) an investment agreement or guaranteed investment agreement that is an Eligible Investment described in clause (ix) of the definition of Eligible Investment, but only if either (a) the same is with a person whose senior unenhanced long-term debt obligations are rated, at the time such agreement or contract is entered into, in the highest rating category by at least two Rating Services, without regard to qualification of such rating by symbols such as " + " or "-" and numerical notation, or (b) the obligations of the person providing such agreement or contract are guaranteed by a financial institution or corporation, a registered broker/dealer or a domestic commercial bank whose senior unenhanced long-term debt obligations are rated, at the time such agreement or contract is entered into, in the highest rating category by at least two Rating Services, without regard to qualification of such rating by symbols such as " + " or "-" and numerical notation; provided, however, that such term shall not mean any interest in a unit investment trust or mutual fund.

Deferred Income Bond means any Bond as to which interest accruing thereon prior to the Interest Commencement Date of such Bond is compounded on each Valuation Date for such Deferred Income Bond, and as to which interest accruing after the Interest Commencement Date is payable semiannually on April 1 and October 1 of each year.

Department means the Department of Education of the City, the successor to the Board of Education of the City of New York, or its successors.

Depository means The Depository Trust Company, New York, New York, a limited purpose trust company organized under the laws of the State, or its nominee, or any other person, firm, association or corporation designated in the Series Resolution authorizing a Series of Bonds or a Series Certificate relating to a Series of Bonds to serve as securities depository for the Bonds of such Series.

Determination of Taxability means, when used with respect to a Tax Exempt Bond, a final determination by a court of competent jurisdiction or a final determination by the Internal Revenue Service to which the Fund shall consent or from which no timely appeal shall have been taken, in each case to the effect that interest on such Bond is includable in the gross income of the Holder thereof for purposes of federal income taxation.

Developer means and includes any person, partnership, trust or private or public corporation with which the Fund is authorized by the Act, and approved by the Department as being qualified and eligible, to enter into one or more leases, sub-leases or other agreements providing for the construction, acquisition, reconstruction, rehabilitation or improvement of one or more Combined Occupancy Structures, which agreements shall be subject to approval by the Department.

## Eligible Investments means:

(i) Defeasance Securities;
(ii) Government Obligations;
(iii) demand and time deposits in or certificates of deposit of, or bankers' acceptances issued by, any bank or trust company, savings and loan association or savings bank, payable on demand or on a specified date no more than three months after the date acquired as an investment under the Resolution, if such deposits or instruments are at the time an investment therein is made rated "A-1+" by $\mathrm{S} \& \mathrm{P}$ and " $\mathrm{P}-1$ " by Moody's;
(iv) Municipal Obligations that at the time an investment therein is made are rated in at least the second highest long-term rating category by at least two Rating Services;
(v) commercial or finance company paper (including both non-interest bearing discount obligations and interest bearing obligations) payable on demand or on a specified date not more than 270 days after the date acquired as an investment under the Resolution that is rated "A-1+" by S\&P and "P-1" by Moody's;
(vi) repurchase obligations with respect to any security described in clause (i) or (ii) above entered into with a (a) primary dealer, depository institution or trust company (acting as principal) that at the time an investment therein is made is rated at least "A-1" by S\&P and "P-1" by Moody's (if payable on demand or on a specified date no more than three months after the date acquired as an investment under the Resolution) or at least in one of the two highest long-term rating categories by Moody's and S\&P, or if not so rated, such obligations are collateralized by securities described in clause (i) or (ii) above or by obligations of
the Government National Mortgage Association or any successor thereto, or (b) with any registered broker/dealer or any domestic commercial bank whose longterm debt obligations are rated "investment grade" by at least two Rating Services; provided, however, that (1) a specific written agreement governs the transactions, (2) the securities that are the subject of the repurchase agreement are held free and clear of any lien, by the Trustee of an independent third party acting solely as the agent of the Trustee that is (A) a Federal Reserve Bank or (B) a member of the Federal Deposit Insurance Corporation that has combined surplus and undivided profits of not less than twenty-five million dollars $(\$ 25,000,000)$, and the Trustee shall have received written confirmation from such third party that it hold such securities, free and clear of any lien, as agent for the Trustee, (3) the agreement has a term of thirty days or less, or the Trustee will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within five Business Days of such valuation, and (4) the fair market value of the collateral securities in relation to the amount of the obligation, including principal and interest, is equal to at least $102 \%$;
securities bearing interest or sold at a discount (payable on demand or on a specified date no more than 90 days after the date acquired as an investment under the Resolution) that are issued by any corporation incorporated under the laws of the United States of America or any state thereof are rated "P-1" by Moody's and "A$1+"$ by S\&P at the time of such investment or contractual commitment providing for such investment; provided, however, that securities issued by any such corporation will not be Eligible Investment to the extent that investment therein would cause the then outstanding principal amount of securities issued by such corporation and held as investments under the Resolution to exceed $20 \%$ of the aggregate principal amount of all Eligible Investments then held under the Resolution;
(viii) units of taxable money market funds which are regulated investment companies and seek to maintain a constant net asset value per share and which at the time an investment therein is made are rated at least "Aal" by Moody's and at least "AAm" or "AAm-G" by S\&P, including if so rated any such fund which the Trustee or an affiliate of the Trustee serves as an investment advisor, administrator, shareholder, servicing agent and/or custodian or sub-custodian, notwithstanding that (a) the Trustee or an affiliate of the Trustee charges and collects fees and expenses (not exceeding current income) from such funds for services rendered, (b) the Trustee charges and collects fees and expenses for services rendered pursuant to the Resolution and (c) services performed for such funds and pursuant to the Resolution may converge at any time (the Fund specifically authorizes the Trustee or an affiliate of the Trustee to charge and collect all fees and expenses from such funds for services rendered to such funds, in addition to any fees and expenses the Trustee may charge and collect for services rendered pursuant to the Resolution); and
(ix) investment agreements or guaranteed investment contracts with any financial institution or corporation, a registered broker/dealer or a domestic commercial bank
whose senior long-term debt obligations are rated, or guaranteed by a financial institution whose senior long-term debt obligations are rated, at the time such agreement or contract is entered into, at least in one of the two highest long-term rating categories by at least two Rating Services, without regard to qualification of such rating by symbols such as "+" or "-" and numerical notation; provided, however, that in the event that such rating is suspended, withdrawn or reduced below the rating assigned to Outstanding Bonds without regard to any insurance or other credit enhancement either (a) the Fund has an option to terminate such agreement or contract, or (b) such agreement or contract is required to be collateralized by securities described in clause (i) or (ii) above or by obligations of the Government National Mortgage Association or any successor thereto; provided, further, that (1) a specific written agreement governs the transactions, (2) the collateral securities, if any, are held free and clear of any lien, by the Trustee of an independent third party acting solely as the agent of the Trustee that is (A) a Federal Reserve Bank or (B) a member of the Federal Deposit Insurance Corporation that has combined surplus and undivided profits of not less than twenty-five million dollars $(\$ 25,000,000)$, and the Trustee shall have received written confirmation from such third party that it hold such securities, free and clear of any lien, as agent for the Trustee, (3) the agreement has a term of 30 days or less, or the Trustee will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within five Business Days of such valuation, and (4) the fair market value of the collateral securities in relation to the amount of the obligation, including principal and interest, is equal to at least $102 \%$ of such obligation.

Fiscal Year means a period of 12 consecutive months beginning July 1st of a calendar year and ending on June 30th of the succeeding calendar year.

Fitch means Fitch, Inc. and its successors and assigns; provided, however, that reference in the Resolution to Fitch shall be effective so long as Fitch is a Rating Service.

Fund means the New York City Educational Construction Fund, the corporate governmental agency created by the Act, or any body, agency or instrumentality of the State which shall hereafter succeed to the powers, duties and functions of the Fund.

Fund Budget means the budget prepared by the Fund for each Fiscal Year in accordance with the Resolution for all Administrative Expenses and Acquired Project Expenses.

Fund Income means (i) all money, rents, rates, payments in lieu of taxes, fees and charges authorized to be collected by the Fund pursuant to the Act and collected by the Fund from Developers, owners or lessees of the non-school portion of a Combined Occupancy Structure or any of them pursuant to the terms and provisions of leases or other agreements and (ii) all Acquired Project Operating Income collected by the Fund.

Funded Bond means, as of any particular date of determination, a Bond, other than a Tax Exempt Bond, for which provision for the payment has not been made in accordance with the
provisions of the Resolution described herein under the heading "Defeasance" and remains Outstanding, but for which:
(i) the Trustee or other banking institution then holds, in trust, either money in an amount which shall be sufficient, or Government Obligations the principal of and interest on which when due will provide money which, together with the money, if any, so held, shall be sufficient in the judgment of a firm of certified public accountants to pay when due the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, and interest due and to become due on said Bond on and prior to the redemption date or maturity date thereof, as the case may be;
(ii) in case any of said Bond is to be redeemed on any date prior to its maturity, the Fund shall have given to the Trustee, in form satisfactory to it, irrevocable instructions to give as provided in the Resolution notice of redemption on said date of such Bond;
(iii) the Fund shall have no right to withdraw or expend any money or Government Obligations held in trust for such Funded Bond other than for the payment of such Funded Bond in accordance with its terms and the terms of the trust; and
(iv) the Fund shall have delivered to the Trustee an opinion of Bond Counsel to the effect that making provision for payment of said Bond in accordance with the foregoing clauses (i), (ii) and (iii) would not (A) cause said Bonds to be considered to have been "reissued" for purposes of Section 1001 of the Code and (B) adversely effect the exclusion of interest on any Tax Exempt Bond from gross income for purposes of federal income taxation;
provided, however, that such Bond shall no longer be a Funded Bond if at any time the money and Eligible Investments are no longer sufficient to meet the aforesaid requirements.

Government Obligation means (i) a direct obligation of, or an obligation the timely payment of the principal of any interest on which is guaranteed by, the United States of America, the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association, the Federal Home Loan Bank or the Federal Farm Credit System, and (ii) an obligation of the United States of America which has been stripped by the United States Department of the Treasury or by any Federal Reserve Bank (not including "CATS," "TIGRS" and "TRS" unless the Fund obtains Rating Confirmations with respect thereto.

Hedge Agreement means any financial arrangement entered into by the Fund with another person that is an Interest Rate Exchange Agreement, an interest rate cap or collar or other exchange or rate protection transaction.

Hedge Agreement Payment means any periodic or regularly scheduled payments required to be made by the Fund pursuant to a Hedge Agreement, but does not include any payment required to be made solely as a consequence of the termination of a Hedge Agreement.

Independent Consultant means a firm appointed by the Fund, but which shall not include members, officers or employees of the Fund, that is of recognized standing on matters relating to
the financial affairs of municipal corporations such as the Fund and that is acceptable to each Provider.

Interest Commencement Date means, with respect to any particular Deferred Income Bond, the date prior to the maturity date thereof specified in the Series Resolution authorizing such Bond or in the Series Certificate relating to such Bond, after which interest accruing on such Bond shall be payable on the interest payment date immediately succeeding such Interest Commencement Date and semiannually thereafter on April 1st and October 1st of each calendar year.

Interest Rate Exchange Agreement means an agreement entered into by the Fund in connection with the issuance of or which relates to Bonds of one or more Series which provides that during the term of such agreement the Fund is to pay to the Counterparty an amount based on the interest accruing at a fixed or variable rate per annum on an amount equal to the principal amount of such Bonds and that the Counterparty is to pay to the Fund an amount based on the interest accruing on such principal amount at a fixed or variable rate per annum, in each case computed according to a formula set forth in such agreement, in each case computed according to a formula set forth in such agreement, or that one shall pay to the other any net amount due under such agreement.

Liquidity Facility means an irrevocable letter of credit, surety bond, loan agreement, Standby Purchase Agreement, line of credit or other agreement or arrangement pursuant to which money may be obtained by the Fund upon the terms and conditions contained therein for the purchase or redemption of Option Bonds tendered for purchase or redemption in accordance with the terms of the Resolution and of the Series Resolution authorizing such Bonds or the Series Certificate relating thereto, which is issued or provided by:
(i) a bank, a trust company, a national banking association, an organization subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956 or any successor provisions of law;
(ii) a federal branch pursuant to the International Banking Act of 1978 or any successor provisions of law;
(iii) a domestic branch or agency of a foreign bank which branch or agency is duly licensed or authorized to do business under the laws of any state or territory of the United States of America;
(iv) a savings bank;
(v) a savings and loan association,
(vi) an insurance company or association chartered or organized under the laws of any state of the United States of America;
(vii) the Government National Mortgage Association or any successor thereto, the Federal National Mortgage Association or any successor thereto; or
(viii) an entity affiliated with or which is a subsidiary of any entity described above or affiliated with or a subsidiary of any registered securities dealer; or
(ix) any other entity approved by the Fund.

Maximum Annual Debt Service means, as of any date of computation, an amount equal to the greatest amount required in the then current or any future calendar year to pay the sum of principal and Sinking Fund Installments of and interest on Outstanding Bonds during such calendar year; provided, however, that for purposes of this definition:
(a) the Accreted Value of a Capital Appreciation Bond and the Appreciated Value of a Deferred Income Bond becoming due at maturity or by virtue of a Sinking Fund Installment shall be included in the calculations of interest and principal payable during the calendar year in which such Capital Appreciation Bond or Deferred Income Bond matures or in which such Sinking Fund Installment is due;
(b) that an Option Bond Outstanding shall be assumed to mature on the stated maturity date thereof;
(c) it shall be assumed that a Variable Interest Rate Bond bears interest during any calendar year at the lesser of:
(1) a fixed rate of interest equal to the rate, as estimated by an Authorized Officer of the Fund, after consultation with the Remarketing Agent for such Variable Interest Rate Bond that is also an Option Bond or, if it not an Option Bond, with an investment banking firm which is regularly engaged in the underwriting of or dealing in bonds of substantially similar character, on a day not more than 20 days prior to the date of initial issuance of such Variable Interest Rate Bond, which such Variable Interest Rate Bond would have to bear to be marketed at par on such date as a fixed rate obligation maturing on the maturity date of such Variable Interest Rate Bond; and
(2) if the Fund has in connection with such Variable Rate Bonds entered into a Hedge Agreement which provides that the Fund is to pay to the Counterparty an amount determined based upon a fixed rate of interest on the Outstanding principal amount of such Variable Rate Bonds to which such agreement relates and the Counterparty is to pay to the Fund with respect to a like principal amount a variable rate expected to be reasonably equivalent to the variable rate of interest on such Bond, the fixed rate of interest set forth in or determined in accordance with such agreement;
(d) that the foreign exchange rate applicable to Bonds of a Series payable in a foreign currency shall be assumed to be the average rate of exchange of one United States dollar to such foreign currency over the shorter of the immediately preceding twelve (12) month period (including the month of such determination) or the period during which such Bonds have been Outstanding; and
(e) the principal and Sinking Fund Installments of and interest on a Funded Bond shall be excluded from such calculation.

Maximum Interest Rate means, with respect to any particular Variable Interest Rate Bond, the numerical rate of interest, if any, set forth in the Series Resolution authorizing such Bond or in the Series Certificate relating to such Bond, that shall be the maximum rate at which such Bond may bear interest at any time.

Minimum Interest Rate means, with respect to any particular Variable Interest Rate Bond, a numerical rate of interest, if any, set forth in the Series Resolution authorizing such Bond or in the Series Certificate relating to such Bond, that shall be the minimum rate at which such Bond may bear interest at any time.

Moody's means Moody's Investors Service, and its successors and assigns; provided, however, that reference in the Resolution to Moody's shall be effective so long as Moody's is a Rating Service.

Municipal Obligation means full faith and credit obligations of any state or territory of the United States of America, any political subdivision of any state or territory of the United States of America, or any agency, authority, public benefit corporation or instrumentality of such state, territory or political subdivision.

Net Revenues means, for any Bond Year, the Revenues received in such Bond Year less the Administrative Expenses and the Acquired Project Expenses paid or to be paid from the Acquired Project Expense Fund during such Bond Year.

Non-School Lease means the documents evidencing the lease and other agreements made by the Fund with the owner, lessee or Developer of the non-school portion of a Combined Occupancy Structure.

Option Bond means any Bond which by its terms may be tendered by and at the option of the Holder thereof for redemption by the Fund prior to the stated maturity thereof or for purchase thereof, or the maturity of which may be extended by and at the option of the Holder thereof in accordance with the Series Resolution authorizing such Bonds or the Series Certificate related to such Bonds.

Outstanding, when used in reference to Bonds, means, as of a particular date, all Bonds authenticated and delivered under the Resolution and under any applicable Series Resolution except:
any Bond cancelled by the Trustee at or before such date;
(ii) any Bond deemed to have been paid in accordance with the provisions of the Resolution described herein under the heading "Defeasance";
(iii) any Bond in lieu of or in substitution for which another Bond shall have been authenticated and delivered pursuant to the Resolution;
(iv) Option Bonds tendered or deemed tendered in accordance with the provisions of the Series Resolution authorizing such Bonds or the Series Certificate related to such Bonds on the applicable adjustment or conversion date, if interest thereon shall
have been paid through such applicable date and the purchase price thereof shall have been paid or amounts are available for such payment as provided in the Resolution and in the Series Resolution authorizing such Bonds; and
(v) Parity Reimbursement Obligations arising out of a Credit Facility if and to the extent that such Parity Reimbursement Obligations are evidenced by Bonds to which the Credit Facility relates and such Bonds are Registered in the name of the Provider thereof or its nominee.

Parity Reimbursement Obligation means an obligation of the Fund to pay or reimburse the Provider of a Credit Facility or Liquidity Facility for amounts paid thereunder, including interest thereon, whether or not such obligation is evidenced by a note, bond or similar instrument, but which is secured by a security interest in, pledge of and lien on the Trust Estate on a parity with the lien created by the Resolution.

Paying Agent means, with respect to the Bonds of any Series, the Trustee and any other bank or trust company and its successor or successors, appointed pursuant to the provisions of the Resolution or of a Series Resolution, a Series Certificate or any other resolution of the Fund relating to the Series of Bonds for which such Paying Agent or Paying Agents shall be so appointed.

Project means the acquisition, design, construction, reconstruction, rehabilitation, improvement and equipping of the school portion of a Combined Occupancy Structure.

Project Account means the account within the Construction Fund so designated, created and established pursuant to the Resolution.

Project Costs Requisition means a requisition signed by an Authorized Officer of the Fund substantially in the form annexed to the Resolution as Exhibit A, stating with respect to each payment to be made to any person, (i) the name of the payee(s), (ii) the purpose for which the payment is to be made in terms sufficient for identification, (iii) the respective amount of each such payment and (iv) that such purpose constitutes a proper purpose for which money may be withdrawn from the subaccount within the Project Account from which payment is to be made and that such payment has not been the basis of any previous withdrawal from such subaccount.

Provider means the issuer of a Credit Facility, a Liquidity Facility or a Reserve Fund Facility.

Provider Payments means the amount, certified by a Provider to the Trustee, as payable to such Provider on account of amounts advanced by it under a Credit Facility, a Liquidity Facility or a Reserve Fund Facility, including interest on amounts advanced and fees and charges with respect thereto.

Rating Confirmation means the written confirmation of each Rating Service to the effect that the rating assigned, without regard to any insurance or other credit enhancement, to each of the Bonds rated by such Rating Service will remain unchanged and will not be withdrawn, suspended or reduced as a consequence of some act or occurrence.

Rating Service means, as of any particular date of determination, each of Fitch, Moody's and S\&P, or their respective successors, that then has a rating on Outstanding Bonds assigned at the request of the Fund.

Record Date means, unless the Series Resolution authorizing Variable Interest Rate Bonds or Option Bonds or the Series Certificate relating thereto provides otherwise with respect to such Variable Rate Bonds or Option Bonds, the 15th day (whether or not a Business Day) of the calendar month next preceding an interest payment date.

Redemption Account means the account within the Debt Service Fund so designated, created and established pursuant to the Resolution.

Redemption Price, when used with respect to a Bond, means the principal amount of such Bond plus the applicable premium, if any, payable upon redemption prior to maturity thereof pursuant to the Resolution or to the applicable Series Resolution or Series Certificate.

Refunding Bonds means all Bonds, whether issued in one or more Series of Bonds, authenticated and delivered on original issuance pursuant to the Resolution, and any Bonds thereafter authenticated and delivered in lieu of or in substitution for such Bonds pursuant to the Resolution.

Remarketing Agent means the person appointed by or pursuant to a Series Resolution authorizing the issuance of Option Bonds to remarket such Option Bonds tendered or deemed to have been tendered for purchase in accordance with such Series Resolution or the Series Certificate relating to such Option Bonds.

Remarketing Agreement means, with respect to Option Bonds of a Series, an agreement between the Fund and the Remarketing Agent relating to the remarketing of such Bonds.

Reserve Fund Facility means a surety bond, insurance policy, letter of credit or other financial guaranty commitment or undertaking delivered to the Trustee pursuant to the provisions of the Resolution described herein in paragraph (b) under the heading "Debt Service Reserve Fund" below to meet all or any part of the Debt Service Reserve Requirement if the same is on the date of its delivery issued by:
(i) in the case of a surety bond or insurance policy, an insurance company or association duly authorized to do business in the State and either (A) the claims paying ability of such insurance company is rated in the highest rating category accorded by a nationally recognized insurance rating agency or (B) obligations insured by such company or association are rated at the time such surety bond or insurance policy is delivered, without regard to qualification of such rating by symbols such as " + " or "-" or numerical notation, in the highest rating category by at least two Rating Services; or
(ii) in the case of a letter of credit, a bank, a trust company, a national banking association, a corporation subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956 or any successor provision of law, a federal branch pursuant to the International Banking

Act of 1978 or any successor provision of law, or a domestic branch or agency of a foreign bank which branch or agency is duly licensed or authorized to do business under the laws of any state or territory of the United States of America, the unsecured or uncollateralized long term debt obligations of which, or long term obligations secured or supported by a letter or credit issued by such person, are rated at the time the letter of credit is delivered for the Debt Service Reserve Fund, without regard to qualification of such rating by symbols such as "+" or "-" or numerical notation, at least as high as the rating on any unenhanced Outstanding Bond, other than a Funded Bond;
(iii) any other entity provided that, together with the Reserve Fund Facility, the Fund delivers to the Trustee Rating Confirmations from each Rating Service.

Resolution means this Revenue Bond Resolution, as from time to time amended or supplemented by Supplemental Resolutions or Series Resolutions in accordance with the terms and provisions of the Resolution.

Revenues means, collectively, but without duplication, (i) the Annual Rentals, (ii) the Fund Income and (iii) payments made to the Fund by a Counterparty pursuant to a Hedge Agreement.

S\&P means Standard \& Poor's Rating Services and its successors and assigns; provided, however, that references in the Resolution to $\mathrm{S} \& \mathrm{P}$ shall be effective so long as $\mathrm{S} \& \mathrm{P}$ is a Rating Service.

Serial Bonds means the Bonds so designated in a Series Resolution or a Series Certificate.
Series means all of the Bonds authenticated and delivered on original issuance and pursuant to the Resolution and to the Series Resolution authorizing such Bonds as a separate Series of Bonds, and any Bonds thereafter authenticated and delivered in lieu of or in substitution for such Bonds pursuant to the Resolution, regardless of variations in maturity, interest rate, Sinking Fund Installments or other provisions.

Series Certificate means the certificate of an Authorized Officer of the Fund fixing terms, conditions and other details of Bonds of a Series in accordance with the delegation of power to do so under the Resolution or under the Series Resolution authorizing the issuance of such Bonds.

Series Resolution means a resolution of the Fund authorizing the issuance of a Series of Bonds, adopted by the Fund pursuant to the Resolution.

Sinking Fund Installment means, as of any date of calculation, so long as any such Bonds are Outstanding, the amount of money required by the Resolution or by the Series Resolution pursuant to which such Bonds were issued or by the Series Certificate relating thereto, to be paid on a single future date for the retirement of any Outstanding Bonds of said Series which mature after said future date, but does not include any amount payable by the Fund by reason only of the maturity of a Bond; provided, however, that when used with respect to any Term Bonds of a Series that are Option Bonds or Variable Interest Rate Bonds, if such future date is not an interest payment
date for such Term Bonds, the Sinking Fund Installment shall be payable on the interest payment date next succeeding such future date.

Standby Purchase Agreement means an agreement by and between the Fund and another person or by and among the Fund and another person, pursuant to which such person is obligated to purchase an Option Bond tendered for purchase.

State means the State of New York.
Supplemental Resolution means any resolution of the Fund amending or supplementing the Resolution, any Series Resolution or any Supplemental Resolution adopted and becoming effective in accordance with the terms and provisions of the Resolution.

Surplus Fund means the fund so designated, created and established pursuant to the Resolution.

Tax Certificate means a certificate or certificates of the Fund as to arbitrage and other aspects of compliance with the provisions of Section 103(a) of the Code executed in connection with the issuance of a Series of Tax Exempt Bonds

Tax Exempt Bond means any Bond as to which Bond Counsel has rendered any opinion to the effect that interest on it is excluded from gross income for purposes of federal income taxation.

Term Bond means a Bond so designated in a Series Resolution or a Series Certificate and payable from one or more Sinking Fund Installments.

Trust Estate shall have the meaning given to such term in the Resolution.
Trustee means the bank or trust company appointed as Trustee for the Bonds pursuant to the Resolution and having the duties, responsibilities and rights provided for in the Resolution, and its successor or successors and any other bank or trust company which may at any time be substituted in its place pursuant to the Resolution.

Valuation Date means (i) with respect to any Capital Appreciation Bond, the date or dates set forth in the Series Resolution authorizing such Bond or in the Series Certificate relating to such Bond on which specific Accreted Values are assigned to such Capital Appreciation Bond, and (ii) with respect to any Deferred Income Bond, the date or dates prior to the Interest Commencement Date and the Interest Commencement Date set forth in the Series Resolution authorizing such Bond or in the Series Certificate relating to such Bond on which specific Appreciated Values are assigned to such Deferred Income Bond.

Variable Interest Rate means the rate or rates of interest to be borne by a Series of Bonds or by any one or more maturities within a Series of Bonds which is or may be varied from time to time in accordance with the method of computing such interest rate or rates specified in the Series Resolution authorizing such Bonds or the Series Certificate relating to such Bonds, which shall be based on (i) a percentage or percentages or other function of an objectively determinable interest rate or rates (e.g., a prime lending rate) which may be in effect from time to time or at a particular
time or times or (ii) a stated interest rate that may be changed from time to time as provided in the Series Resolution authorizing such Bonds or the Series Certificate relating to such Bond; provided, however, that such Variable Interest Rate may be subject to a Maximum Interest Rate and a Minimum Interest Rate and that there may be an initial rate specified, in each case as provided in such Series Resolution or a Series Certificate; provided, further, that such Series Resolution or Series Certificate shall also specify either (x) the particular period or periods of time or manner of determining such period or periods of time for which each Variable Interest Rate shall remain in effect or $(\mathrm{y})$ the time or times at which any change in such Variable Interest Rate shall become effective or the manner of determining such time or times.

Variable Interest Rate Bond means any Bond which bears a Variable Interest Rate; provided, however, that a Bond the interest rate on which shall have been fixed for the remainder of the term thereof shall no longer be a Variable Interest Rate Bond.

Verification Agent means a certified public accountant or a firm of certified public accountants or any other person regularly engaged in making determination of the type required by the provisions of the Resolution described herein under the heading "Defeasance."
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## Summary of Certain Provisions of the Resolution

The following is a summary of certain provisions of the Resolution. Such summary does not purport to be complete and reference is made to the Resolution for full and complete statements of such and all provisions.

Resolution and Bonds Constitute a Contract
With respect to the Bonds, in consideration of the purchase and acceptance of any and all of the Bonds authorized to be issued under the Resolution by those who shall hold or own the same from time to time, the Resolution shall be deemed to be and shall constitute a contract among the Fund, the Trustee and the Holders from time to time of such Bonds, and the pledge made in the Resolution and, except as otherwise provided in the Resolution, the covenants and agreements set forth to be performed by or on behalf of the Fund shall be for the equal and ratable benefit, protection and security of the Holders of any and all of such Bonds, all of which, regardless of the time or times of their issue or maturity, shall be of equal rank without preference, priority or distinction of any such Bonds over any other Bonds except as expressly provided in the Resolution or permitted by the Resolution.
(Section 1.04)

## Provisions for Issuance of Bonds

The issuance of Bonds of each Series shall be authorized by a Series Resolution or Series Resolutions adopted at the time of or subsequent to the adoption of the Resolution. The Bonds of a Series authorized to be issued shall be executed by the Fund and delivered to the Trustee. Such Bonds shall from time to time and in such amounts as directed by the Fund be authenticated by the Trustee and by it delivered to or upon the order of the Fund upon receipt of the consideration therefor and upon delivery to the Trustee of: (i) a copy of the Resolution and the Series Resolution authorizing such Bonds, certified by an Authorized Officer of the Fund; (ii) a copy of the Series Certificate executed in connection with such Bonds; (iii) a copy of each Agreement of Lease and Non-School Lease, certified by an Authorized Officer of the Fund; (iv) a written order as to the delivery of such Bonds, signed by an Authorized Officer of the Fund, describing the Bonds to be delivered, designating the purchaser or purchasers to whom such Bonds are to be delivered and stating the consideration for such Bonds; (v) a certificate of an Authorized Officer of the Fund stating the value of the assets of the Debt Service Reserve Fund as of a date not more than five (5) days prior to the sale of such Bonds, the amount required to be in the Debt Service Reserve Fund after issuance of the Bonds then to be issued, and that after deposit in the Debt Service Reserve Fund of the amount, if any, to be deposited therein in connection with the issuance of such Bonds, the amount on deposit in the Debt Service Reserve Fund will not be less than the Debt Service Reserve Fund Requirement; (vi) except in the case of Refunding Bonds, a certificate of an Authorized Officer of the Fund to the effect that no "event of default" under the Resolution has occurred and is continuing nor will an "event of default" under the Resolution occur as a result of the issuance of such Bonds; (vii) a certificate of an officer of the City to the effect that the City is not in default in the performance of any of its obligations under any Agreement of Lease; (viii) if a Credit Facility or a Reserve Fund Facility is to be provided in connection with the issuance of the Bonds of such Series, such Credit Facility or Reserve Fund Facility; (ix) if Bonds of such

Series are Book Entry Bonds, unless the Trustee is a party thereto, a copy of the agreement, if any, between the Fund and the Depository for such Bonds; and an opinion of Bond Counsel stating, in the opinion of Bond Counsel, that the Resolution and the applicable Series Resolution authorizing the Series of Bonds have been duly and lawfully adopted by the Fund; that the Resolution and the applicable Series Resolution are in full force and effect and are valid and binding upon the Fund and enforceable in accordance with their terms; that the Resolution creates the valid pledge and the valid lien upon the Revenues which it purports to create, subject only to the provisions of the Resolution permitting the withdrawal, payment, setting apart or appropriation thereof for the purposes and on the terms and conditions set forth in the Resolution and each applicable Series Resolution; and that the Fund is duly authorized and entitled to issue such Series of Bonds and, upon the execution and delivery thereof and upon authentication by the Trustee, such Series of Bonds will be duly and validly issued and will constitute valid and binding special obligations of the Fund entitled to the benefits of the Resolution; provided, however, that such opinion may be qualified to the extent that enforceability of rights and remedies may be limited by bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally or as to the availability of any particular remedy.
(Section 2.02)

## Lease Provisions

No Bonds shall be issued by the Fund unless (i) Agreements of Lease relating to the school portion of each Combined Occupancy Structure have been executed and delivered by the Fund and the City, (ii) such Agreements of Lease provide that the Annual Rentals to be paid by the City thereunder shall be sufficient to provide funds to pay the principal and Sinking Fund Installments of and interest on the Outstanding Bonds as the same becomes due without condition or limitation thereon or right of set-off, other than auction on account of Fund Income derived from Non-School Leases available for the payment of the Principal and Sinking Fund Installments of and interest on Outstanding Bonds and (iii) the Fund has received an opinion of counsel to the City to the effect that each such Agreement of Lease has been duly authorized, executed and delivered by the City, and constitutes a legal, valid and binding obligation of the City enforceable in accordance with its terms except to the extent that the enforceability thereof may be limited bankruptcy, insolvency, moratorium, reorganization or other laws affecting creditors' rights generally or as to the availability of any particular remedy.
(Section 7.11)

## Refunding Bonds

Refunding Bonds of a Series may be authenticated and delivered upon original issuance to refund all Outstanding Bonds, one or more Series of Outstanding Bonds, a portion of a Series of Outstanding Bonds or a portion of a maturity of a Series of Outstanding Bonds. The Fund may issue Refunding Bonds in an aggregate principal amount sufficient, together with other money available therefor, to accomplish such refunding and to make such deposits required by the provisions of this paragraph and of the Series Resolution authorizing such Series of Refunding Bonds. Refunding Bonds to be issued pursuant to this paragraph shall be authenticated and delivered by the Trustee only upon receipt by the Trustee of: (i) the documents required by the
provisions of the Resolution described above under the heading "Provisions for Issuance of Bonds", other than clause (vi) thereof; (ii) if the Bonds to be refunded are to be redeemed, irrevocable instructions to the Trustee, satisfactory to it, to give due notice of redemption of all the Bonds to be refunded on a redemption date specified in such instructions; (iii) irrevocable instructions to the Trustee, satisfactory to it, to duly give the notice provided for in the provisions of the Resolution described herein under the heading "Defeasance" to the Holders of the Bonds being refunded; and (iv) either (i) money in an amount sufficient to effect payment of the principal at maturity or the Redemption Price at the applicable Redemption Price of the Bonds to be refunded, together with accrued interest on such Bonds to the maturity or redemption date, which money shall be held by the Trustee or any one or more of the Paying Agents in a separate account irrevocably in trust for and assigned to the respective Holders of the Bonds to be refunded or (ii) Defeasance Securities in such principal amounts, of such maturities, bearing such interest and otherwise having such terms and qualifications, as shall be necessary to comply with the provisions of said the provisions of the Resolution described herein under the heading "Defeasance", which Defeasance Securities and money shall be held in trust and used only as provided in said section.
(Section 2.04)

## Parity Reimbursement Obligations

In connection with a Series of Bonds, the Fund may obtain or cause to be obtained one or more Credit Facilities, Liquidity Facilities or Hedge Agreement. In connection therewith the Fund may enter into such agreements with the Provider of such Credit Facility or Liquidity Facility or the Counterparty to a Hedge Agreement providing for, inter alia: (i) the payment of fees and expenses to such Provider or Counterparty; (ii) the terms and conditions of such Credit Facility, Liquidity Facility or Hedge Agreement, (iii) the Series of Bonds to which it relates; and (iv) the security, if any, for the Fund's obligations thereunder.

The Fund may in an agreement with the Provider of such Credit Facility or Liquidity Facility or the Counterparty to a Hedge Agreement agree to directly reimburse the Provider for amounts paid by it pursuant to the Credit Facility or Liquidity Facility, together with interest thereon, or to make Hedge Agreement Payments to the Counterparty (collectively, the "Reimbursement Obligation"); provided, however, that no Reimbursement Obligation under a Credit Facility or Liquidity Facility shall be created, for purposes of the Resolution, until amounts are paid under the Credit Facility or Liquidity Facility. Any Reimbursement Obligation may be a Parity Reimbursement Obligation secured by a pledge of and a lien on the Trust Estate on a parity with the lien created by the Resolution, except that in the case of a Hedge Agreement only the obligation to make Hedge Agreement Payments may be secured by a lien on the Trust Estate that is on a parity with the lien created by the Resolution. A Parity Reimbursement Obligation shall be deemed to be a part of the Series of Bonds to which the Credit Facility, Liquidity Facility or Hedge Agreement which gave rise to such Parity Reimbursement Obligation relates.
(Section 2.05)

## Calculation of Obligations Under City Leases

At the time of issuance and delivery of each Series of Bonds and at the time of each purchase and cancellation, redemption or defeasance in accordance with the provisions of the Resolution described herein under the heading "Defeasance" of Bonds, the Fund shall compute or recompute and furnish the Trustee with a certificate setting forth (a) the principal amount, schedule of maturities and interest rates on the Bonds of each Series then remaining Outstanding and (b) the schedule of Annual Rentals payable by the City thereunder without regard to any rentals payable pursuant to the Non-School Lease applicable to the Combined Occupancy Structure to which the Agreement of Lease relates. The Annual Rentals payable shall be based upon the amount of Bonds issued by the Fund for the purpose of financing or refinancing Costs of the Project, including the principal amount of Bonds issued to reimburse the City for money advanced by it, or to fund notes of the Fund issued for the to finance Costs of the Project, and to provide the money deposited in the Construction Fund or in any account therein relating to the Project and the money deposited in the Debt Service Reserve Fund (the proportionate amount of Bonds issued by the Fund for the purpose of obtaining money with which to establish the Debt Service Reserve Fund is determined by the ratio that the total of the Costs of each Project bears to the total of the Costs of all Projects), and shall include the payments for Administrative Expenses.
(Section 5.15)

## Additional Obligations

The Fund reserves the right to issue bonds, notes or other obligations or otherwise incur indebtedness pursuant to other and separate resolutions or agreements of the Fund, so long as such bonds, notes or other obligations are not, or such other indebtedness is not, except as provided in the Resolution, entitled to a charge, lien or right prior or equal to the charge or lien created by the Resolution, or prior or equal to the rights of the Fund and Holders of Bonds.
(Section 2.06)

## Place And Medium Of Payment

The Bonds shall be payable, with respect to interest, principal and Redemption Price, in any coin or currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts; provided, however, that the Bonds of a Series or of any maturity within a Series may be payable in any coin or currency of any other nation as may be authorized by the Series Resolution authorizing the issuance of such Bonds or by the Series Certificate relating to such Bonds. Except as otherwise provided in the Resolution, upon presentation and surrender of Bonds, the principal or Redemption Price of such Bonds shall be payable at the principal corporate trust office of the Trustee. Except as otherwise provided in a Series Resolution authorizing the issuance of Variable Interest Rate Bonds or Option Bonds or the Series Certificate relating to such Bonds, interest on the Bonds shall be paid by check or draft mailed to the registered owner thereof at the address thereof as it appears on the registry books of the Fund; provided, however, that interest on Bonds of a Series shall be paid, at the option of the registered owner of at least one million dollars $(\$ 1,000,000)$ in principal amount of Bonds of such Series, by wire transfer to such registered owner at the wire transfer address in the continental

United States to which such registered owner has, not less than five (5) days prior to the Record Date immediately preceding such interest payment date for such Bonds, directed the Trustee to wire such interest payment. For purposes of this section, interest is payable to the registered owner of a Bond at the close of business on the Record Date for such Bond. All payments of principal, Sinking Fund Installments or Redemption Price of or interest on Bonds shall specify the CUSIP number or numbers of the Bonds in connection with which such payment is made.
(Section 3.01)

## Pledge of Trust Estate

The Fund, to secure the payment of the principal and Redemption Price of and interest on the Bonds and performance and observance of all of the covenants and conditions in the Resolution does pledge to the Trustee, its successor or successors and its or their assigns forever, all and singular, the property described in the Resolution (such property being hereinafter sometimes referred to as the "Trust Estate"), to wit: (i) all right, title and interest of the Fund in and to the Revenues, including, without limitation, the present and continuing right to make claim for, collect, receive and receipt for the Revenues, and to bring actions and proceeds for the enforcement of the payment thereof; (ii) except as otherwise expressly provided in the Resolution, all funds and accounts established by the Resolution, other than the Arbitrage Rebate Fund, the Operating Fund and the Acquired Project Expense Fund; provided, however, that the priority in which such money and securities are applied to the repayment of Bonds shall be as expressly specified in the Resolution; and (iii) the proceeds from the sale of the Bonds until applied for the purposes expressly provided for in the Resolution; to have and to hold, all and singular, the properties and the rights and privileges pledged by the Fund or intended so to be, unto the Trustee and its successors and assigns forever, in trust, nevertheless, with power of sale and for the equal and pro rata benefit and security of each and every owner of the Bonds issued and to be issued under the Resolution, without preference, priority or distinction as to participation in the lien, benefit and protection of the Resolution of one Bond over or from the others, by reason of priority in the issue or negotiation or maturity thereof, or for any other reason whatsoever, except as otherwise expressly provided in the Resolution, so that each of such Bonds shall have the same right, lien and privilege under the Resolution and shall be equally secured by the Resolution with the same effect as if the same shall have been made, issued and negotiated simultaneously with the delivery of the Resolution and were expressed to mature on one and the same date; provided, nevertheless, these presents are upon the express condition that if the Fund or its successors or assigns shall well and truly pay or cause to be paid the principal of such Bonds with interest, according to the provisions set forth in the Bonds and each of them or shall provide for the payment of such Bonds by depositing or causing to be deposited with the Trustee the entire amount of funds or securities requisite for payment thereof, when and as authorized by the provisions of the Resolution described herein under the heading "Defeasance", and shall also pay or cause to be paid all other sums payable under the Resolution by the Fund, then these presents and the estate and rights granted by the Resolution shall cease, determine and become void, and thereupon the Trustee, on payment of its lawful charges and disbursements then unpaid, on demand of the Fund and upon the payment of the cost and expenses thereof, shall duly execute, acknowledge and deliver to the Fund such instruments of satisfaction or release as may be specified by the Fund as necessary or proper to discharge the Resolution, including, if appropriate, any required discharge of record, and if necessary shall grant, reassign and deliver to the Fund, its successors or assigns, all and singular
the property, rights, privileges and interest by it granted by the Resolution, conveyed and assigned, and all substitutes therefor, or any part thereof, not previously disposed of or released as provided in the Resolution; otherwise the Resolution shall be and remain in full force and effect.

The pledge of the Trust Estate shall constitute a first lien thereon. Such pledge is valid, binding and perfected from the time when the pledges attach and the proceeds from the sale of the Bonds, the Revenues and the funds and accounts established by the Resolution and by any Series Resolution which are pledged by the Resolution shall immediately be subject to the lien of such pledges without any physical delivery thereof or further act, and the lien of such pledge shall be valid, binding and perfected as against all parties having claims of any kind in tort, contract or otherwise against the Fund irrespective of whether such parties have notice thereof. No instrument by which such pledges are created nor any financing statement need be recorded or filed.

The Bonds shall be special obligations of the Fund payable solely from and secured by a pledge of the Trust Estate as and to the extent provided in the Resolution.
(Section 5.01)

## Establishment of Funds and Accounts

The following funds and separate accounts within funds are established by the Resolution and, except for the Project Account of the Construction Fund, the Acquired Project Expense Fund and the Operating Fund which shall be held and maintained by the Comptroller of the City, as agent of the Fund, in accordance with Section 459 of the Act, shall be held and maintained by the Trustee:

```
Construction Fund:
    Project Account;
    Capitalized Interest Account; and
    Costs of Issuance Account;
Debt Service Fund:
    Debt Service Account; and
    Redemption Account;
Debt Service Reserve Fund:
Acquired Project Expense Fund;
Operating Fund;
Arbitrage Rebate Fund; and
Surplus Fund.
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All money at any time deposited in any fund or account created and pledged by the Resolution or by any Series Resolution or required thereby to be created shall be held, subject to the provisions of the Resolution described above under the heading "Pledge if Trust Estate", in trust for the benefit of the Holders of Bonds, but shall nevertheless be disbursed, allocated and applied solely for the uses and purposes provided in the Resolution; provided, however, that the money derived from the remarketing of Option Bonds tendered or deemed to have been tendered for purchase or redemption in accordance with the Series Resolution authorizing the issuance of such Bonds or the Series Certificate relating to such Bonds or derived from a Liquidity Facility or
a Credit Facility relating to such Bonds, and any special fund or account established by or pursuant to such Series Resolution for the payment of the purchase price or Redemption Price of Option Bonds so tendered or deemed to have been tendered, shall not be held in trust for the benefit of the Holders of Bonds other than the Holders of such Option Bonds, and such money and each such fund and account and are pledged by the Resolution for the payment of the purchase price or Redemption Price of such Option Bonds.
(Section 5.02)

## Application of Money in the Construction Fund

(a) For purposes of internal accounting, the Construction Fund shall consist of the Project Account, Costs of Issuance Account and the Capitalized Interest Account. The Project Account shall contain a subaccount for each Project for which there are Costs of the Project remaining to be paid. In addition, any account or subaccount within the Construction Fund may contain one or more subaccounts as the Fund may deem proper. As soon as practicable after the delivery of each Series of Bonds there shall be deposited in each account and subaccount within the Construction Fund the amount required to be deposited therein pursuant to the Series Resolution authorizing such Series or the Series Certificate relating thereto. In addition, the Fund shall deposit in the Project Account any money paid to the Fund pursuant to the Resolution.
(b) Except as otherwise expressly provided in the Resolution, money in the Costs of Issuance Account shall be used solely to pay the Costs of Issuance. Payments from the Costs of Issuance Account shall be made by the Trustee in accordance with a requisition submitted by the Fund. Money, if any, remaining in the Costs of Issuance Account after all Costs of Issuance have been paid or provision has been made for their payment in accordance with the written direction of an Authorized Officer of the Fund, may at the written direction of the Fund be withdrawn and transferred to any other fund or account established by the Resolution.
(c) Except as otherwise expressly provided in the Resolution, money in the Capitalized Interest Account shall be used solely to pay interest on Outstanding Bonds and shall be transferred by the Trustee to the Debt Service Fund on the fourth Business Day next preceding an interest payment date in such amounts as may be required to pay when due the interest on Outstanding Bonds payable on such interest payment date.
(d) Except as otherwise provided in the Resolution, money within a subaccount within the Project Account shall be used solely to pay the Costs of the Project for which such subaccount was created. Payments from the Project Account shall be made by the Fund upon the filing in the records of the Fund and with the Trustee of, and in accordance with, a Project Costs Requisition. Money, if any, remaining in a subaccount of the Project Account after Substantial Completion of the Project for which such subaccount was established and provision in accordance with the direction of an Authorized Officer of the Fund for the payment of any Costs of such Project then unpaid and for the payment of claims and the discharge of or security for liens arising out of the construction of the Project, may at the written direction of an Authorized Officer of the Fund, be withdrawn and transferred to any other subaccount within the Project Account or, if not so transferred, shall be applied as follows and in the following order of priority:

First: To the Arbitrage Rebate Fund, the amount determined by the Fund to be required to be deposited therein;

Second: To the Debt Service Reserve Fund, such amount as shall be necessary to make the amount on deposit therein equal to the Debt Service Reserve Requirement; and

Third: To any account of the Debt Service Fund, any balance remaining to be applied in accordance with the provisions of the Resolution described herein under the heading "Debt Service Fund."
(Section 5.04)

## Deposit of Revenues and Allocation Thereof

(a) Except as hereinafter provided in this section, all Revenues held or collected by the Fund or the Trustee shall, upon receipt, be paid or deposited in the following funds and accounts in the following amounts and in the following order of priority:

First: To the Fund for deposit in the Operating Fund, the amount required to make the amount deposited therein during the Fiscal Year equal to the Administrative Expenses for such Fiscal Year as set forth in the Fund Budget for such Fiscal Year;

Second: To the Debt Service Account, in the case of Revenues received during the twelve month period beginning April $1^{\text {st }}$ of a Fiscal Year and ending March $31^{\text {st }}$ of the next succeeding Fiscal Year, the amount necessary to make the amount deposited in the Debt Service Account during such period equal to the sum of (i) the interest payable on Outstanding Bonds (other than Funded Bonds) on or prior to the next succeeding April $1^{\text {st }}$, assuming in connection with a Variable Interest Rate Bond that such Bond will bear interest at the higher of the rate it then bears interest and the rate certified to the Trustee by the Fund as the rate it has projected that such Bond will bear interest during the then current Fiscal Year, (ii) the principal and Sinking Fund Installments of Outstanding Bonds (other than Funded Bonds) payable on or prior to the next succeeding April $1^{\text {st }}$ or, in the case of Sinking Fund Installments on Variable Interest Rate Bonds, the first interest payment date therefore next succeeding such April et, and (iii) the Hedge Agreement Payments and Parity Reimbursement Obligations payable on or prior to the next succeeding April $1^{\text {st, }}$

Third: To reimburse, pro rata, each Provider for Provider Payments which are then unpaid, in proportion to the respective Provider Payments then unpaid to such Providers;

Fourth: To the Debt Service Reserve Fund, such amount, if any, necessary to make the amount on deposit therein equal to the Debt Service Reserve Requirement;

Fifth: Upon the direction of an Authorized Officer of the Fund, to the Arbitrage Rebate Fund the amount set forth in such direction;

Sixth: To the Fund for deposit in the Acquired Project Expense Fund, the amount required to make the amount deposited therein during the Fiscal Year equal to the Acquired Project Expenses for such Fiscal Year after subtracting therefrom the Acquired Project Operating Income, in each case as set forth in the Fund Budget for such Fiscal Year; and

Seventh: To the Fund for deposit to the Surplus Fund, any remaining Revenues.
(b) Notwithstanding the provisions of paragraph (a) of this section, the Revenues that constitute or are derived from (i) Advance Rental Payments, (ii) the net proceeds from the sale, lease or other disposition of any non-school portion of a Combined Occupancy Structure or the site thereof and (iii) money paid to the Trustee for the purchase of Bonds pursuant to the provisions of the Resolution or the redemption of Bonds pursuant to the Resolution shall, in each case, be deposited into the Redemption Account of the Debt Service Fund.
(Section 5.05)

## Debt Service Fund

(a) The Trustee shall pay from the Debt Service Account: (i) the interest payable on Outstanding Bonds (other than Funded Bonds), including upon the redemption of an Outstanding Bond prior to its maturity date, Hedge Agreement Payments and interest on Parity Reimbursement Obligations, in each case as the same is due and payable; and (ii) the principal and Sinking Fund Installments payable on Outstanding Bonds (other than Funded Bonds) and the principal of Parity Reimbursement Obligations as the same is due and payable, in each case as the same is due and payable.

If on the third Business Day preceding each interest payment date the amount in the Debt Service Account, after transfers, if any, first, from the Surplus Fund and, then, from the Redemption Account, is less than the amount required to provide for the payments to be made therefrom in accordance with this paragraph (a), the Trustee shall withdraw from the Debt Service Fund and deposit in the Debt Service Account the amount necessary to make up such deficiency; provided, however, that the Trustee shall not transfer from the Redemption Account any money required for the payment of Bonds theretofore called for redemption or contracted to be purchased in accordance with paragraph (b) of this section.

The amounts paid out pursuant to the provisions of the Resolution described under this heading shall be irrevocably pledged to and applied to such payments, subject to the provisions of the Resolution described herein under the heading "Defeasance."

Notwithstanding the provisions of this paragraph (a), the Fund may, not less than 45 days prior to the succeeding date on which a Sinking Fund Installment is scheduled to be due, direct the Trustee to purchase, at a price not in excess of par plus interest accrued and unpaid to the date of such purchase, Outstanding Term Bonds to be redeemed from such Sinking Fund Installment. Any Term Bond so purchased and delivered to the Trustee shall be cancelled upon receipt thereof by the Trustee and evidence of such cancellation shall be given to the Fund. The principal amount of each Term Bond so cancelled shall be credited against the Sinking Fund Installment with respect to such Term Bonds due on such date.
(b) Money in the Redemption Account may be applied in accordance with the written direction of the Fund to the purchase or redemption of Outstanding Bonds or to make provision for the payment of Outstanding Bonds in accordance with the provisions of the Resolution described herein under the heading "Defeasance." In no event, however, may the Fund call for redemption, contract for purchase or make provision for the payment of any Outstanding Bond with money in the Redemption Account if at such time the amount on deposit in the Debt Service Fund or the Debt Service Reserve Fund is less than the amount then required to be on deposit therein.

Notwithstanding the foregoing, money in the Redemption Account not required to pay the Redemption Price or purchase price of Outstanding Bonds theretofore called for redemption or contracted to be purchased shall in accordance with paragraph (a) of this section be withdrawn from the Redemption Account and deposited in the Debt Service Account at any time money is required for the purposes of such fund.
(Section 5.06)

## Debt Service Reserve Fund

(a) The Trustee shall deposit to the credit of the Debt Service Reserve Fund such proceeds of the sale of Bonds, if any, as shall be prescribed in the Series Resolution authorizing the issuance of such Series of Bonds or the Series Certificate relating to such Series. All money received by the Fund from the Department, the City or the State pursuant to any certification made by the Chairman of the Fund in accordance with the provisions of paragraph (c) of subdivision 3 of Section 462 of the Act shall be deposited in the Debt Service Reserve Fund when received.
(b) In lieu of or in substitution for money or another Reserve Fund Facility, the Fund may deliver or cause to be delivered to the Trustee a Reserve Fund Facility for the benefit of the Holders of the Bonds for all or any part of the Debt Service Reserve Requirement; provided, however, as a condition to delivery thereof the Trustee shall also receive (i) a Rating Confirmation, if such Reserve Fund Facility is being delivered in substitution of money or another Reserve Fund Facility then funding the Debt Service Reserve Fund, (ii) an opinion of counsel to the Provider acceptable to the Trustee to the effect that such Reserve Fund Facility has been duly authorized, executed and delivered by the Provider thereof and is valid, binding and enforceable in accordance with its terms, (iii) in the event such Provider is not a domestic entity, an opinion of foreign counsel in form and substance satisfactory to the Trustee and to each Provider and (iv) in the event such Reserve Fund Facility is a letter of credit, an opinion of counsel acceptable to the Trustee substantially to the effect that payments under such letter of credit will not constitute a voidable preferences under Section 547 of the United States Bankruptcy Code in a case commenced by or against the Fund.

Each such surety bond, insurance policy or letter of credit shall be payable (upon the giving of such notice as may be required thereby) on any date on which money is required to be withdrawn from the Debt Service Reserve Fund and such withdrawal cannot be made without obtaining payment under such Reserve Fund Facility.

For the purposes of the Resolution, in computing the amount on deposit in the Debt Service Reserve Fund, a Reserve Fund Facility shall be valued at the amount available to be paid thereunder on the date of computation.
(c) Money in the Debt Service Reserve Fund shall be withdrawn by the Trustee and deposited to the credit of the Debt Service Account at the times and in the amounts required to comply with the provisions of the Resolution described above under the heading "Debt Service Fund"; provided, however, that no payment under a Reserve Fund Facility funding all or a portion of the Debt Service Reserve Requirement shall be sought unless and until money is not available in such fund and the amount required to be withdrawn from such fund pursuant to this paragraph (c) cannot be withdrawn therefrom without obtaining payment under such Reserve Fund Facility; provided, further, that, if more than one Reserve Fund Facility is funding all or a portion of the Debt Service Reserve Requirement at the time money is to be withdrawn therefrom, the Trustee shall obtain payment under each such Reserve Fund Facility, pro rata, based upon the respective amounts then available to be paid thereunder.

With respect to any demand for payment under any Reserve Fund Facility, the Trustee shall make such demand for payment in accordance with the terms of such Reserve Fund Facility at the earliest time provided therein to assure the availability of money on the date for which such money is required.
(d) The income or interest earned on investments held for the credit of the Debt Service Reserve Fund shall be withdrawn by the Trustee, as received, and deposited in the Debt Service Account. If on June $30^{\text {th }}$ of a Fiscal Year the value of the money and investments held for the credit of the Debt Service Reserve Fund exceeds the Debt Service Reserve Requirement, such excess shall, upon the written direction of the Fund, be withdrawn therefrom and in accordance with the such direction deposited in or paid to the Arbitrage Rebate Fund, the Debt Service Account, the Surplus Fund or to the Fund for deposit to the Project Account in the respective amounts set forth in such direction; provided, however, that if such excess results from the substitution of a Reserve Fund Facility for money or investments in the Debt Service Reserve Fund, such excess shall not be so applied unless in the opinion of Bond Counsel such application will not adversely affect the exclusion of interest on any Tax Exempt Bond from gross income for federal income tax purposes.
(e) Notwithstanding the provisions of the Resolution, if, upon a Bond having been deemed to have been paid in accordance with the provisions of the Resolution described herein under the heading "Defeasance", the money and investments held for the credit of the Debt Service Reserve Fund will exceed the Debt Service Reserve Requirement, then the Trustee shall, in accordance with the written direction of the Fund, withdraw all or any portion of such excess and either (iii) apply such amount to the payment of the principal or Redemption Price of and interest on such Bond in accordance with the irrevocable instructions of the Fund or to fund any reserve for the payment of the principal and sinking fund installments of or interest on the bonds, notes or other obligations, if any, issued to provided for the payment of such Bond or (iii) pay such amount to or upon the order of the Fund if, in the opinion of Bond Counsel, such payment of will not adversely affect the exclusion of interest on any Tax Exempt Bond from gross income for federal income tax purposes; provided, however, that after such withdrawal the amount remaining in the Debt Service Reserve Fund shall not be less than the Debt Service Reserve Requirement.
(f) If on the last Business Day of any January the value of the money and investments held for the credit of the Debt Service Reserve Fund is less than the Debt Service Reserve Requirement, the Trustee shall promptly give notice of such deficiency to the Fund.
(Section 5.07)

## Acquired Project Expense Fund

(a) Money paid to the Fund for deposit in the Acquired Project Expense Fund shall be held separate and apart from all other money of the Fund in an account or accounts of which the Comptroller of the City shall be the custodian. There shall be deposited to the credit of the Acquired Project Expense Fund all Acquired Project Operating Income and all Revenues required to be deposited therein pursuant to clause SIXTH of paragraph (a) of the section herein entitled "Deposit of Revenues and Allocation Thereof."
(b) Money in the Acquired Project Expense Fund shall be used for and applied to the payment of Acquired Project Expenses. Payments from the Acquired Project Expense Fund shall be made by the Comptroller of the City, or any depository holding the Acquired Project Expense Fund, upon receipt of a requisition, signed by an Authorized Officer of the Fund, stating in respect to each payment to be made, at least, (i) the item number of the payment, (ii) the Acquired Project with respect to which such Acquired Project Expenses are to be paid and the nature of such Acquired Project Expenses, (iii) the name of the person or party to whom payment is to be made, (iv) the amount to be paid, and (v) that items in the stated amounts are properly payable by the Fund with respect to the specified Acquired Project. Upon receipt of each such requisition, the Comptroller of the City, or any depository holding the Acquired Project Expense Fund, shall pay each such item directly to the person or party entitled thereto as named in such requisition, or shall deliver to the Fund a check, draft or warrant for the payment thereof.
(Section 5.08)

## Operating Fund

(a) Money paid to the Fund for deposit in the Operating Fund shall be held separate and apart from all other money of the Fund in an account or accounts of which the Comptroller of the City, at the request of the Fund, may be the custodian. There shall be deposited to the credit of the Operating Fund all Revenues required to be deposited therein pursuant to clause FIRST of paragraph (a) of the section herein entitled "Deposit of Revenues and Allocation Thereof."
(b) Money in the Operating Fund shall be used for and applied to, without priority or preference, payment of Administrative Expenses and shall be withdrawn by the Fund at such times and in such amounts as are necessary to make such payments. Payments from the Operating Fund shall be made in the following manner: (a) if made by the Comptroller of the City, upon receipt of a requisition signed by an Authorized Officer of the Fund, stating in respect to each payment to be made, at least the item number of the payment, the name of the person or party to whom payment is made, the amount to be paid, and that, where applicable, obligations in the stated amounts have been incurred or will be by the Fund, and that each item thereof is a proper charge against the money in the Operating Fund and whether or not it has been paid. Upon receipt of each such requisition, the Comptroller of the City, shall deliver to the Fund a check, draft or warrant for the
payment thereof; or (b) if made by check, draft or warrant drawn on the depository of the Operating Fund, the Fund shall draw said check, draft or warrant upon a requisition of the Fund stating in respect to each payment to be made, at least the item number of the payment, the name of the person or party to whom payment is made, the amount to be paid, and that, where applicable, obligations in the stated amounts have been incurred or will be by the Fund, and that each item thereof is a proper charge against the money in the Operating Fund and whether or not it has been paid.

If at any time the Fund in its sole discretion shall determine that there are excess moneys in the Operating Fund not necessary for the payment of Administrative Expenses, upon the written request of an Authorized Officer of the Fund, the Trustee shall transfer such excess to and deposit the same in the Surplus Fund.
(Section 5.09)

## Arbitrage Rebate Fund

The Trustee shall deposit to the Arbitrage Rebate Fund any money delivered to it by the Fund for deposit therein and, notwithstanding any other provisions of the Resolution, shall transfer to the Arbitrage Rebate Fund, in accordance with the directions of an Authorized Officer of the Fund, money on deposit in any other funds held by the Trustee under the Resolution at such times and in such amounts as shall be set forth in such directions.

Money in the Arbitrage Rebate Fund shall be applied by the Trustee in accordance with the direction of an Authorized Officer of the Fund to make payments to the Department of the Treasury of the United States of America at such times and in such amounts as the Fund shall determine to be required by the Code to be rebated to the Department of the Treasury of the United States of America. Money which an Authorized Officer of the Fund certifies to the Trustee to be in excess of the amount required to be so rebated shall be deposited to any fund or account established under the Resolution in accordance with the written direction of such Authorized Officer.

If and to the extent required by the Code, the Fund shall periodically, at such times as may be required to comply with the Code, determine the amount required by the Code to be rebated to the Department of the Treasury of the United States of America with respect to Tax Exempt Bonds and (i) transfer or direct the Trustee to transfer from any other of the funds and accounts held under the Resolution and deposit to the Arbitrage Rebate Fund, such amount as the Fund shall have determined to be necessary in order to enable it to comply with its obligation to rebate money to the Department of the Treasury of the United States of America with respect to Tax Exempt Bonds and (ii) pay out of the Arbitrage Rebate Fund to the Department of the Treasury of the United States of America the amount, if any, required by the Code to be rebated thereto.
(Section 5.10)

## Surplus Fund

Money in the Surplus Fund during a Fiscal Year may be used for and applied to any corporate purpose of the Fund, including without limitation to make payments to the Department.

Notwithstanding the foregoing, money in the Surplus Fund shall in accordance with the provisions of the Resolution described herein in paragraph (a) of the section entitled "Deposit of Revenues and Allocation Thereof' be withdrawn from the Redemption Account and deposited in the Debt Service Account at any time money is required for the purposes of such fund.
(Section 5.11)

## Application of Money in Certain Funds for Retirement of Bonds

Notwithstanding any other provisions of the Resolution, if at any time the amounts held in the Debt Service Fund and the Debt Service Reserve Fund are sufficient to pay the principal or Redemption Price of all Outstanding Bonds and the interest accrued and unpaid and to accrue on such Bonds to the next date of redemption when all such Bonds are redeemable, or to make provision pursuant to the provisions of the Resolution described herein under the heading "Defeasance" for the payment of the Outstanding Bonds at the maturity or redemption dates thereof, the Fund may (i) direct the Trustee to redeem all such Outstanding Bonds, whereupon the Trustee shall proceed to redeem or provide for the redemption of such Outstanding Bonds in the manner provided for redemption of Bonds by the Resolution and by each Series Resolution as provided in the Resolution, or (ii) give the Trustee irrevocable instructions in accordance with the provisions of the Resolution described herein under the heading "Defeasance" and make provision for the payment of the Outstanding Bonds at the maturity or redemption dates thereof in accordance therewith.
(Section 5.12)

## Transfer of Investments

Whenever money in any fund or account established under the Resolution is to be paid in accordance herewith to another such fund or account, such payment may be made, in whole or in part, by transferring to such other fund or account investments held as part of the fund or account from which such payment is to be made, whose value, together with the money, if any, to be transferred, is at least equal to the amount of the payment then to be made; provided, however, that no such transfer of investments would result in a violation of any investment standard or guideline applicable to such fund.
(Section 5.13)

## Computation of Assets of Certain Funds

The Trustee, on the last Business Day of each January and upon written request of an Authorized Officer of the Fund (but no more frequently than once per calendar month), shall compute the value of the assets in each account within the Debt Service Reserve Fund as of such last Business Day of January or, in the case of a valuation upon the request of the Fund, as of the date of such request, and notify the Fund and the Provider of each Reserve Fund Facility on deposit in such account as to the results of such computation and the amount by which the value of the assets in such account exceeds or is less than the Debt Service Reserve Requirement applicable thereto.
(Section 5.14)

## Security for Deposits

All money held under the Resolution by the Trustee shall be continuously and fully secured, for the benefit of the Fund and, subject to the provisions of the Resolution described herein under the heading "Pledge of Trust Estate", the Holders of the Bonds, by direct obligations of the United States of America or obligations the principal of and interest on which are guaranteed by the United States of America of a market value equal at all times to the amount of the deposit so held by the Trustee; provided, however, (a) that if the securing of such money is not permitted by applicable law, then in such other manner as may then be required or permitted by applicable State or federal laws and regulations regarding the security for, or granting a preference in the case of, the deposit of trust funds, and (b) that it shall not be necessary for the Trustee or any Paying Agent to give security for the deposit of any money with them pursuant to the Resolution and held in trust for the payment of the principal, Sinking Fund Installments, if any, or Redemption Price of or interest on any Bonds, or for the Trustee to give security for any money which shall be represented by obligations purchased or other investments made under the provisions of the Resolution as an investment of such money.
(Section 6.01)

## Investment of Funds and Accounts

(a) Money held under the Resolution, if permitted by law, shall, as nearly as practicable, be invested in any Eligible Investments, upon direction of the Fund given or confirmed in writing, signed by an Authorized Officer; provided, however, that money in the Debt Service Account shall only be invested in Eligible Investments of the type described in clause (ii), (iii) or (viii) of the definition of the term "Eligible Investments" set forth above, but, with respect to Eligible Investments described in said clause (viii), only if at the time such investment is made such securities are rated in the highest rating category of each Rating Service; provided, further, that no investment of money in the Debt Service Reserve Fund shall mature more than five years after the date such investment is purchased or made unless either: (1) the Fund or the Trustee may, at its election, put or tender such investment not later than one Business Day prior to each April ${ }^{\text {st }}$ and October $1^{\text {st }}$ prior to the investment's stated maturity date for ( x ) purchase at a price not less than $100 \%$ of the stated principal amount of such investment by the issuer or an entity whose senior unenhanced long-term debt obligations are rated by at least two Rating Services at least as high as the rating assigned by such Rating Services on the Fund's Outstanding unenhanced Bonds or (y) redemption by the issuer at a price not less than $100 \%$ of the stated principal amount thereof; or (2) such investment is an Eligible Investment described in clause (vi) or (ix) of the definition of the term "Eligible Investments" and the Fund or the Trustee may withdraw all or a portion of the amount invested therein at $100 \%$ of the notional amount of the amount withdrawn. Each investment shall permit the money so deposited or invested to be available for use at the times at, and in the amounts in, which the Fund reasonably believes such money will be required for the purposes of the Resolution.
(b) Obligations purchased or other investments made as an investment of money in any fund or account held under the provisions of the Resolution shall be deemed at all times to be a part of such fund or account and the income or interest earned, profits realized or losses suffered
by a fund or account due to the investment thereof shall be credited or charged, as the case may be, to such fund or account.
(c) In computing the amount in any fund or account held by the Trustee under the provisions of the Resolution, obligations purchased as an investment of money therein or held therein shall be valued at the Amortized Value thereof, plus accrued interest to the date of valuation, except that an investment held in the Debt Service Reserve Fund shall be valued at the lower of its cost or par. Amortized Value, when used with respect to an obligation purchased at a premium above or a discount below par, means the value as of any given time obtained by dividing the total premium or discount at which such obligation was purchased by the number of interest payments remaining on such obligation after such purchase and, in the case of an obligation purchased at a premium, deducting the amount thus calculated from each interest payment date after such purchase from the purchase price and, in the case of an obligation purchased at a discount, adding the amount thus calculated from each interest payment date after such purchase to the purchase price.
(d) Notwithstanding anything to the contrary in the Resolution, the Fund, in its discretion, may, and the Trustee at the direction of an Authorized Officer of the Fund, shall sell, present for redemption or exchange any investment held pursuant to the Resolution and the proceeds thereof may be reinvested as provided in this section. Except as otherwise provided in the Resolution, such investments shall be sold at the best price obtainable by it, or presented for redemption or exchange, whenever it shall be necessary in order to provide money to meet any payment or transfer from the fund or account in which such investment is held. The Trustee shall advise the Fund in writing, on or before the 15th day of each calendar month, of the amounts required to be on deposit in each fund and account under the Resolution and of the details of all investments held for the credit of each fund and account in its custody under the provisions of the Resolution as of the end of the preceding month and as to whether such investments comply with the provisions of paragraphs (a) and (b) of this section. The details of such investments shall include the par value, if any, the cost and the current market value of such investments as of the end of the preceding month. The Trustee shall also describe all withdrawals, substitutions and other transactions occurring in each such fund and account in the previous month.
(Section 6.02)

## Liability for Investments

Neither the Fund nor the Trustee shall have any liability arising out of or in connection with the making of any investment authorized by the provisions of the Resolution, in the manner provided in the Resolution, for any depreciation in value of any such investment, or for any loss, direct or indirect, resulting from any such investment.
(Section 6.03)

## Agreement of the State

The State pledges to and agrees with the Holders of Bonds that it will not limit or alter the rights vested by the Act in the Fund to fulfill the terms of any agreements made with Bondholders, or in any way impair the rights and remedies of such Holders until the Bonds, together with the
interest thereon, with interest on any unpaid installments of interest, and all costs and expenses in connection with any action or proceeding by or on behalf of such Holders, are fully met and discharged. This pledge and agreement of the State is included in the Resolution by the Fund.

The Fund acknowledges that the State's pledge and agreement is an important security provision of the Resolution and the Bonds, and, to the fullest extent permitted by applicable federal and State law, the Fund hereby waives any right to assert any claim to the contrary and agrees that it will neither, directly or indirectly, assert nor support any assertion or claim made by or on behalf of the State, or by any other person, to the contrary.
(Section 7.05)

## Creation of Liens

Except as permitted by the Resolution, the Fund shall not create or cause to be created any lien or charge on, or pledge of, the Trust Estate prior or equal to the lien, charge and pledge created by the Resolution securing payment of the principal and Sinking Fund Installments of and interest on the Bonds; provided, however, that nothing contained in the Resolution shall prevent the Fund from issuing bonds, notes or other obligations or otherwise incurring indebtedness so long as the charge or lien on the Trust Estate created to secure the same is not prior or equal to the charge or lien on the Trust Estate created by the Resolution.
(Section 7.07)

## Maintenance of Debt Service Reserve Fund

In order to assure the maintenance of the Debt Service Reserve Fund in compliance with the requirements of paragraph (c) of subdivision 3 of Section 462 of the Act, the Chairman of the Fund shall annually, on or before February $15^{\text {th }}$ in each year, make and deliver to the Department, the Mayor and Director of Management and Budget of the City a certificate stating the amount, if any, required to restore each account within the Debt Service Reserve Fund to the amount required by the Act. In the event of the failure or inability of the Department to pay over the stated amount to the Fund on or before August $1^{\text {st }}$ of the same year, the Chairman of the Fund shall forthwith make and deliver to the Comptroller of the State a further certificate restating the amount so required and, after the Comptroller of the State shall have given written notice to the Commissioner of Education of the State, the Mayor and the Director of Management and Budget in accordance with the Act, such amount shall be paid over to the Fund by the Comptroller of the State out of the next payment of State aid apportioned to the City on behalf of the City School District of the City for the support of common schools or such other aid or assistance payable in support of common schools as shall supersede or supplement such State aid for the support of common schools, including federal money apportioned by the State to the City on behalf of the City School District of the City. In accordance with the provisions of the Resolution described herein under paragraph (a) of the heading "Debt Service Reserve Fund", all money received by the Fund from the Department, the City or the state pursuant to any such certification, in accordance with the provisions of paragraph (c) of subdivision 3 of Section 462 of the Act, shall be deposited in the Debt Service Reserve Fund.
(Section 7.10)

## Modification of Terms

The Fund shall not consent to the modification of, or modify, the Annual Rentals, or the amount or time of payment of any installment, or the amount or time of payment of any money payable with respect to any Agreement of Lease, or the security for or any terms or provisions of any Agreement of Lease in a manner detrimental to Bondholders; provided, however, that, the Fund may consent to the modification of and modify an Agreement of Lease and the Annual Rentals to be made thereunder so long as such payments, together with the Annual Rentals payable under all other Agreements of Lease, are sufficient in the amount and payable at the times required for the payment of the principal and Sinking Fund Installments of and interest on the Outstanding Bonds as the same becomes due; provided, further, that the Fund may consent to a termination of an Agreement of Lease prior to the date upon which no Bonds are Outstanding so long as the Annual Rentals payable pursuant to the remaining Agreements of Lease are sufficient in the amount and payable at the times required for the payment of the principal and Sinking Fund Installments of and interest on the Outstanding Bonds as the same becomes due; and, provided, further, that, in the event the Fund has during any Fiscal Year deposited money with the Trustee from Non-School Leases or payments equivalent to real estate taxes sufficient in amount and payable at the times required for the payment of the principal of and interest on the Bonds issued with respect to the Project and all other payments required to be made at the time, by the Resolution, the Fund may reduce the Annual Rentals payable during such Fiscal Year to an amount, which together with such other money of the Funds as have been deposited with the Trustee, will be sufficient to pay the principal and Sinking Fund Installments of and interest on the Bonds and to make all other payments required to be made at the time by the Resolution.

The Fund may consent to the modification of, or modify, any Non-School Lease in any respect or waive any provision thereof or any failure by a party thereto to comply with the terms thereof.
(Section 7.12)

## Disposition of Advance Rental Payments

In the event the Fund shall receive an Advance Rental Payment, the Fund shall transfer such Advance Rental Payment, except an amount thereof equal to any sums repayable to the City by the Fund remaining unpaid and the costs and expenses of the Fund in effecting the purchase or redemption of the Bonds to be purchased or redeemed upon such Advance Rental Payment, to the Trustee, and the Trustee, at the written direction of an Authorized Officer of the Fund, shall deposit such Advance Rental Payment into either (i) if Outstanding Bonds are then subject to redemption in accordance with the Resolution, the Redemption Account of the Debt Service Fund for application to the purchase of Outstanding Bonds of any Series at a price not in excess of the then applicable Redemption Price of such Bonds plus interest accrued and unpaid to the date of such purchase or to the redemption of Outstanding Bonds of any Series in accordance with the provisions of the Resolution or (ii) a special account to provide, pursuant to the provisions of the Resolution described herein under the heading "Defeasance", for the payment of Outstanding Bonds of any Series upon maturity or redemption thereof.
(Section 7.13)

## Enforcement of Leases and Other Agreements

The Fund shall diligently enforce, and take all reasonable steps, actions and proceedings necessary for the enforcement of, all terms, covenants and conditions of Agreements of Lease, Non-School Leases and other agreements made by the Fund, including the prompt collection of Annual Rentals and Fund Income. Whenever necessary, the Fund shall commence summary proceedings against the lessee in default under the provisions of a Non-School Lease or other agreement. In protection and enforcement of its rights under such Non-School Lease or other agreement, the Fund may re-enter or bid for and purchase the portion of the Combined Occupancy Structure covered by such Non-School Lease or other agreement and acquire and take possession thereof. Notwithstanding the foregoing provisions of this section, nothing contained in this section shall limit or be construed to limit the Fund's right to modify or consent to the modification of, or waive any provision of or any failure to comply with any Non-School Lease.

Upon default under an Agreement of Lease, the Fund may at any time thereafter to the extent permitted by law, relet such portion of the Project and make payments to pay the Costs of the Project, if not already completed. The Agreement of Lease shall contain the terms, conditions, provisions and limitations required by the provisions of the Resolution described herein under the heading "Modification of Terms." Upon default, and so long as the Fund shall have title thereto or be in possession thereof, the Fund shall, as the case may be, construct and administer such Project in the place and instead of the City and in the manner required of the City by the terms and provisions of the Agreement of Lease. In so doing, the Fund, to the extent it may have money available for such purpose, including any money on deposit in the subaccount within the Project Account of the Construction Fund applicable to such Project, shall complete the construction and development of any incomplete Project, and shall pay from the Acquired Project Expense Fund established by the Fund with respect to such Project the Annual Rentals which the City was obligated to pay pursuant to the terms and provisions of the Agreement of Lease. Any depository holding the Project Account shall be authorized to pay to the Fund upon its requisition any money on deposit in the subaccount within the Project Account applicable to a Project repossessed by the Fund to the extent that the Fund shall certify in writing to the depository that such money is required by the Fund to pay any item that would have been included in the Project Costs of such Project had the Fund not re-entered or repossessed the same.
(Section 7.14)

## Sale, Lease or Disposition of a Combined Occupancy Structure; Insurance Proceeds and Condemnation Awards

In the event that either (i) the Fund shall sell, lease or otherwise dispose of any school portion of a Combined Occupancy Structure or (ii) the Fund receives any proceeds of any insurance or condemnation award which are not to be used for the repair or replace such school portion of a Combined Occupancy Structure, then, in either case, the proceeds of such sale, lease of other disposition or of such insurance or condemnation award (net of costs, fees and expenses incurred by the Fund in connection therewith including, without limitation, reasonable attorneys' fees and appraisal fees, if any) shall (i) to the extent Outstanding Bonds are then subject to redemption in accordance with the Resolution, be paid to the Trustee for deposit in the Redemption Account for application to the redemption of such Bonds on the next succeeding interest payment
date on which such Bonds may be redeemed in accordance with the provisions of the Resolution, (ii) to the extent of any such net proceeds then remaining, be paid to the Trustee to make provision for the payment of Outstanding Bonds pursuant to the provisions of the Resolution described herein under the heading "Defeasance" in accordance with the irrevocable instructions of the Fund given pursuant to such section, or (iii) be applied to any other purpose provided that, in the opinion of Bond Counsel, such application will not affect the exclusion of interest on any Tax Exempt Bond from gross income for purposes of federal income taxation.

## (Section 7.17)

## Tax Covenants

In order to maintain the exclusion from gross income for purposes of federal income taxation of interest on the 2018A Bonds, the Fund shall comply with the provisions of the Code applicable to the 2018A Bonds, including without limitation the provisions of the Code relating to the computation of the yield on investments of the "gross proceeds" of the 2018A Bonds, as such term is defined in the Code, reporting of the earnings on such gross proceeds and rebates of earnings on such gross proceeds to the Department of the Treasury of the United States of America. In furtherance of the foregoing, the Fund shall comply with the provisions of the Tax Certificate executed by the Fund in connection with the 2018A Bonds.

The Fund shall not take any action or fail to take any action which would cause the 2018A Bonds to be "arbitrage bonds" within the meaning of Section 148(a) of the Code; nor shall any part of the proceeds of the 2018A Bonds or any other funds of the Fund be used directly or indirectly to acquire any securities or obligations the acquisition of which would cause any 2018A Bond to be an "arbitrage bond" within the meaning of Section 148(a) of the Code.

The Fund shall make any and all payments required to be made to the United States Department of the Treasury in connection with the 2018A Bonds pursuant to Section 148(f) of the Code from amounts on deposit in the Arbitrage Rebate Fund and available therefor.

The obligation of the Fund to comply with the provisions of the Resolution with respect to the rebate to the Department of the Treasury of the United States of America relating to the 2018A Bonds shall remain in full force and effect until the 2018A Bonds have been fully paid notwithstanding that the 2018A Bonds are no longer Outstanding.
(Series Resolution Sections 5.01 and 5.02)

## Removal of Trustee

The Trustee, or any successor thereof, may be removed at any time by the Holders of a majority in principal amount of the Outstanding Bonds, excluding any Bonds held by or for the account of the Fund, by an instrument or concurrent instruments in writing signed and acknowledged by such Bondholders or by their attorneys-in-fact duly authorized and delivered to the Fund. The Trustee, or any successor thereof, may also be removed at any time for cause or any breach of trust or for acting or proceeding in violation of, or failing to act or proceed in accordance with, any provisions of the Resolution or of any Series Resolution with respect to the duties and obligations of the Trustee by any court of competent jurisdiction upon application by
the Holders of not less than $25 \%$ in aggregate principal amount of the Outstanding Bonds, excluding any Bonds held by or for the account of the Fund. The Trustee may also be removed at any time, other than during the continuance of an event of default under the Resolution, by the Fund, by an instrument in writing signed and acknowledged by an Authorized Officer of the Fund. No removal under the Resolution shall take effect until a successor Trustee has been appointed. A copy of each instrument or order providing for the removal of the Trustee, or any successor thereof, shall be delivered by the Fund to the Trustee or such successor thereof and to each Provider.
(Section 8.09)

## Successor Trustee

In case the Trustee, or any successor thereof, shall resign or shall be removed or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver, liquidator or conservator of the Trustee or of its property shall be appointed, or if any public officer shall take charge or control of the Trustee or of its property or affairs, the Fund shall forthwith appoint a Trustee to act as Trustee and Paying Agent. Copies of any resolution of the Fund providing for any such appointment shall be delivered by the Fund to the Trustee so appointed, the predecessor Trustee and to each Provider. The Fund shall give notice of any such appointment to each registered owner of a Bond. Such notice shall be sent not later than 30 days after such appointment, by first class mail, postage prepaid, to each registered owner at its last known address, if any appearing on the registration books of the Fund.

If in a proper case no appointment of a successor shall be made within 45 days after the giving of written notice in accordance with the Resolution or after the occurrence of any other event requiring or authorizing such appointment, the Trustee or any Bondholder may apply to any court of competent jurisdiction for the appointment of such a successor, and such court may thereupon, after such notice, if any, as such court may deem proper, appoint such successor. Any successor appointed under the provisions of this section shall be a bank located in the State having trust powers or a trust company organized under the laws of the State or national banking association located in the State having a capital and surplus aggregating at least $\$ 50,000,000$, if there be such a bank having trust powers or trust company or national banking association willing and able to accept the appointment on reasonable and customary terms and authorized by law to perform all the duties required by the Resolution and by each Series Resolution.
(Section 8.10)

## Modification and Amendment without Consent

The Fund may adopt at any time or from time to time Series Resolutions or Supplemental Resolutions for any one or more of the following purposes, and any such Series Resolutions or Supplemental Resolution shall become effective in accordance with its terms upon the filing with the Trustee of a copy thereof certified by an Authorized Officer of the Fund: (a) to provide for the issuance of a Series of Bonds pursuant to the provisions of the Resolution and to prescribe the terms and conditions pursuant to which such Bonds may be issued, paid or redeemed; (b) to add additional covenants and agreements of the Fund for the purpose of further securing the payment of the Bonds, provided such additional covenants and agreements are not contrary to or
inconsistent with the covenants and agreements of the Fund contained in the Resolution; (c) to prescribe further limitations and restrictions upon the issuance of Bonds and the incurring of indebtedness by the Fund which are not contrary to or inconsistent with the limitations and restrictions thereon theretofore in effect; (d) to surrender any right, power or privilege reserved to or conferred upon the Fund by the terms of the Resolution, provided that the surrender of such right, power or privilege is not contrary to or inconsistent with the covenants and agreements of the Fund contained in the Resolution; (e) to confirm, as further assurance, any pledge under the Resolution, and the subjection to any lien, claim or pledge created or to be created by the provisions of the Resolution, of the Revenues, or any pledge of any other money, investments thereof or funds; (f) to modify any of the provisions of the Resolution or of any previously adopted Series Resolution or Supplemental Resolution in any other respects, provided that such modifications shall not be effective until after all Bonds of any Series of Bonds Outstanding as of the date of adoption of such Supplemental Resolution or Series Resolution shall cease to be Outstanding, and all Bonds issued under any subsequent Series Resolution shall contain a specific reference to the modifications contained in such subsequent Resolutions; or (g) with the consent of the Trustee, to cure any ambiguity or defect or inconsistent provision in the Resolution or to insert such provisions clarifying matters or questions arising under the Resolution as are necessary or desirable, provided that any such modifications are not contrary to or inconsistent herewith as theretofore in effect, or to modify any of the provisions of the Resolution or of any previously adopted Series Resolution or Supplemental Resolution in any other respect, provided that such modification shall not adversely affect the interests of the Bondholders in any material respect.
(Section 9.01)

## Powers of Amendment

Any modification or amendment of the Resolution and of the rights and obligations of the Fund and of the Holders of the Bonds under the Resolution, in any particular, may be made by a Supplemental Resolution, with the written consent given as hereinafter provided in the next paragraph, (i) of the Holders of at least a majority in principal amount of the Bonds Outstanding at the time such consent is given, exclusive of Funded Bonds, or (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Holders of at least a majority in principal amount of the Bonds of each Series so affected and Outstanding at the time such consent is given, or (iii) in case the modification or amendment changes the amount or date of any Sinking Fund Installment, of the Holders of at least a majority in principal amount of the Outstanding Bonds of the particular Series and maturity entitled to such Sinking Fund Installment, at the time such consent is given; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the consent of the Holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds under this section. No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or in the rate of interest thereon without the consent of the Holder of such Bond, or shall reduce the percentages or otherwise affect the Bonds the consent of the Holders of which is required to effect any such modification or amendment without the consent of the Holders of at least a majority in principal amount of the Bonds Outstanding at the time such consent is given.

For the purposes of this section, Bonds shall be deemed to be affected by a modification or amendment of the Resolution if the same adversely affects or diminishes the rights of the Holders of such Bonds in any material respect. The Trustee may in its discretion determine whether or not, in accordance with the foregoing provisions, any particular Bonds of a Series or maturity would be affected by any modification or amendment of the Resolution and any such determination shall be binding and conclusive on the Fund and all Holders of Bonds. The Trustee may receive an opinion of counsel, including an opinion of Bond Counsel, as conclusive evidence as to whether Bonds of any particular Series or maturity would be so affected by any such modification or amendment of the Resolution.
(Section 10.01)

## Consent of Bondholders

The Fund may at any time adopt a Supplemental Resolution making a modification or amendment permitted by the provisions of the preceding paragraph to take effect when and as provided in this section. A copy of such Supplemental Resolution (or brief summary thereof or reference thereto in form approved by the Trustee) together with a request to the Bondholders for their consent thereto in form satisfactory to the Trustee, shall promptly after adoption be mailed by the Fund to the Bondholders (but failure to mail such copy and request to any particular Bondholder shall not affect the validity of the Supplemental Resolution when consented to as provided in this section). Such Supplemental Resolution shall not be effective unless and until (i) there shall have been filed with the Trustee (a) the written consent of the Holders of the percentages of Outstanding Bonds specified in the preceding paragraph and (b) an opinion of Bond Counsel stating that such Supplemental Resolution has been duly and lawfully adopted and filed by the Fund in accordance with the provisions of the Resolution, is authorized or permitted by the Resolution, and is valid and binding upon the Fund and enforceable in accordance with its terms, and (ii) a notice shall have been mailed as hereinafter in this section provided. Each such consent shall be effective only if accompanied by proof of the holding or owning at the date of such consent, of the Bonds with respect to which such consent is given, which proof shall be such as is permitted by the Resolution. A certificate or certificates by the Trustee filed with the Trustee that it has examined such proof and that such proof is sufficient in accordance with the Resolution shall be conclusive proof that the consents have been given by the Holders of the Bonds described in the certificate or certificates of the Trustee. Any consent given by a Bondholder shall be binding upon the Bondholder giving such consent and, anything in the Resolution to the contrary notwithstanding, upon any subsequent Holder of such Bond and of any Bonds issued in exchange therefor (whether or not such subsequent Holder thereof has notice thereof), unless such consent is revoked in writing by the Bondholder giving such consent or a subsequent Holder thereof by filing such revocation with the Trustee, prior to the time when the written statement of the Trustee hereinafter in this section provided for is filed. The fact that a consent has not been revoked may likewise be proved by a certificate of the Trustee filed with the Trustee to the effect that no revocation thereof is on file with the Trustee. At any time after the Holders of the required percentages of Bonds shall have filed their consents to the Supplemental Resolution, the Trustee shall make and file with the Fund and the Trustee a written statement that such Holders of such required percentages of Bonds have filed such consents. Such written statement shall be conclusive that such consents have been so filed. At any time thereafter notice, stating in substance that the Supplemental Resolution (which may be referred to as a Supplemental Resolution adopted
by the Fund on a stated date, a copy of which is on file with the Trustee) has been consented to by the Holders of the required percentages of Bonds and will be effective as provided in this section, shall be given to the Bondholders by the Fund by mailing such notice to the Bondholders and, at the discretion of the Fund, by publishing the same at least once not more than 90 days after the Holders of the required percentages of Bonds shall have filed their consents to the Supplemental Resolution and the written statement of the Trustee hereinabove provided for is filed (but failure to publish such notice shall not prevent such Supplemental Resolution from becoming effective and binding as in this section provided). The Fund shall file with the Trustee proof of the mailing of such notice, and, if the same shall have been published, of the publication thereof. A transcript, consisting of the papers required or permitted by this section to be filed with the Trustee, shall be proof of the matters therein stated. Such Supplemental Resolution making such amendment or modification shall be deemed conclusively binding upon the Fund, the Trustee, each Paying Agent, and the Holders of all Bonds upon the filing with the Trustee of proof of the mailing of such notice or at the expiration of 30 days after the filing with the Trustee of the proof of the first publication of such last mentioned notice, if such notice is published, except in the event of a final decree of a court of competent jurisdiction setting aside such Supplemental Resolution in a legal action or equitable proceeding for such purpose commenced within such 30 day period; provided, however, that the Fund, the Trustee and any Paying Agent during such 30 day period and any such further period during which any such action or proceeding may be pending shall be entitled in their reasonable discretion to take such action, or to refrain from taking such action, with respect to such Supplemental Resolution as they may deem expedient.
(Section 10.02)

## Modifications by Unanimous Consent

The terms and provisions of the Resolution and the rights and obligations of the Fund and of the Holders of the Bonds may be modified or amended in any respect upon the adoption and filing with the Trustee by the Fund of a copy of a Supplemental Resolution certified by an Authorized Officer of the Fund and the consent of the Holders of all of the Bonds then Outstanding, such consent to be given as provided in the preceding paragraph, except that no notice to the Bondholders either by mailing or publication shall be required.
(Section 10.03)

## Consent of Providers and Counterparties

Whenever by the terms of the Resolution the consent of any of the Holders of the Bonds to a modification or amendment of the Resolution made by a Series Resolution or Supplemental Resolution is required, such modification or amendment shall not become effective until the written consent of each Provider has been obtained; provided, however, that the consent of a Provider who has provided a Credit Facility or Liquidity Facility shall not be required unless the modification or amendment requires the consent of the Holders of any percentage in principal amount of Outstanding Bonds or of the Holders of any percentage in principal amount of the Bonds of the Series in connection with which the Credit Facility, Liquidity Facility was provided; provided, further, that in any event, no modification or amendment of the Resolution which adversely affects a Provider shall be made without the written consent thereto of the Provider
affected thereby, and no modification or amendment of the Resolution which adversely affects a Counterparty shall be made without the written consent thereto of the Counterparty affected thereby. Notice of the adoption of any such Series Resolution or Supplemental Resolution and of the effectiveness of the modification or amendment made thereby shall be given to each Provider and to each Counterparty by mail at the times and in the manner provided in the Resolution with respect to notices thereof required to be given to the Holders of the Bonds. Notice thereof shall also be given to each Rating Service as soon as practical after adoption of such Supplemental Resolution and of the effectiveness thereof. The Trustee may in its discretion determine whether or not, in accordance with the foregoing provisions, any particular Provider or Counterparty would be affected by any modification or amendment of the Resolution and any such determination shall be binding and conclusive on the Fund, all Holders of Bonds, all Providers, if any, and all Counterparties, if any. The Trustee may receive an opinion of counsel, including an opinion of Bond Counsel, an opinion of counsel to a Provider or an opinion of counsel to a Counterparty, as conclusive evidence as to whether any Provider or Counterparty would be so affected by any such modification or amendment of the Resolution.
(Section 10.04)

## Events of Default

An event of default shall exist under the Resolution and under each Series Resolution (herein called an "event of default") if:
(a) Payment of the interest on or the principal, Sinking Fund Installments or Redemption Price of any Bond shall not be made by the Fund when the same shall become due and payable; or
(b) The Fund shall fail or refuse to comply with the provisions of paragraph (c) of subdivision 3 of Section 462 of the Act, or the Department shall fail to apportion and pay to the Fund for deposit in the Debt Service Reserve Fund such sum as shall be certified by the chairman of the Fund pursuant to such provision of the Act and the sum so certified shall not be paid over to the Fund by the Comptroller of the State out of the next payment of state aid apportioned to the City on behalf of the City school district of the City for the support of common schools; or
(c) With respect to a Tax Exempt Bond, there has been a Determination of Taxability; or
(d) The Fund shall default in the due and punctual performance of any other of the covenants, conditions, agreements and provisions contained in the Resolution or in the Bonds or in any Series Resolution on the part of the Fund to be performed, other than the payment of the principal, Sinking Fund Installments or Redemption Price of or interest on Outstanding Bonds, and such default shall continue for 30 days after written notice specifying such default and requiring same to be remedied shall have been given to the Fund by the Trustee, which may give such notice in its discretion and shall give such notice at the written request of the Holders of not less than $25 \%$ in principal amount of the Outstanding Bonds, unless, if such default is not capable of being cured within 30 days, the Fund has commenced to cure such default within said 30 days and diligently prosecutes the cure thereof; provided, however, that an event of default shall not be
deemed to exist under the provisions of this paragraph upon the failure of the Fund to enforce any obligation pursuant to the provisions of an Agreement of Lease, including the payment of the stipulated Annual Rentals, so long as the Fund may be otherwise directed by law and so long as the Fund shall be provided with money from the State or otherwise, other than withdrawals from or reimbursements of the Debt Service Reserve Fund, sufficient in amount to pay the principal of and interest on all Bonds as the same shall become due during the period for which the Fund shall be directed by law to abstain from enforcing the obligations under the applicable Agreements of Lease; or
(e) The Fund shall (1) be generally not paying its debts as they become due, (2) commence a voluntary case or other proceeding seeking liquidation, reorganization, dissolution, rehabilitation or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its property, or consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against it, (3) make a general assignment for the benefit of its creditors, (4) declare a moratorium or (5) take any corporate action to authorize any of the foregoing; or
(f) A trustee in bankruptcy, custodian or receiver for the Fund or any substantial part of its property shall have been appointed and the same has not been discharged within 60 days after such appointment.
(Section 11.02)

## Acceleration of Maturity

Upon the happening and continuance of any event of default specified in paragraphs (a), (b), (d), (e) or (f) of the preceding section, then and in every such case the Trustee may, and, upon the written request of the Holders of not less than $25 \%$ in principal amount of the Outstanding Bonds, shall, by a notice in writing to the Fund, declare the principal of and interest on all of the Outstanding Bonds to be due and payable. At the expiration of 30 days after such notice is given, such principal and interest shall become and be immediately due and payable, anything in the Resolution or in any Series Resolution or in the Bonds to the contrary notwithstanding. At any time after the principal of the Bonds shall have been so declared to be due and payable, and before the entry of final judgment or decree in any suit, action or proceeding instituted on account of such default, or before the completion of the enforcement of any other remedy under the Resolution, the Trustee shall, with the written consent of the Holders of not less than $25 \%$ in principal amount of the Bonds not then due by their terms and then Outstanding and by written notice to the Fund, annul such declaration and its consequences if: (i) money shall have accumulated in the Debt Service Fund sufficient to pay all arrears of interest, if any, upon all of the Outstanding Bonds (except the interest accrued on such Bonds since the last interest payment date); (ii) money shall have accumulated and be available sufficient to pay the charges, compensation, expenses, disbursements, advances and liabilities of the Trustee and any Paying Agent; (iii) all other amounts then payable by the Fund under the Resolution and under each Series Resolution (other than principal amounts payable only because of a declaration and acceleration under this paragraph) shall have been paid or a sum sufficient to pay the same shall have been deposited with the Trustee;
and (iv) every other default known to the Trustee in the observance or performance of any covenant, condition or agreement contained in the Resolution or in any Series Resolution or in the Bonds (other than a default in the payment of the principal of such Bonds then due only because of a declaration under this paragraph) shall have been remedied to the satisfaction of the Trustee. No such annulment shall extend to or affect any subsequent default or impair any right consequent thereon.
(Section 11.03)

## Enforcement of Remedies

Upon the happening and continuance of any event of default specified in the provisions of the Resolution described above under the heading "Events of Default", then and in every such case, the Trustee may proceed, and upon the written request of the Provider relating to Bonds, or of the Holders of not less than $25 \%$ in principal amount of the Outstanding Bonds or, in the case of a happening and continuance of an event of default specified in paragraph (c) of the heading "Events of Default", upon the written request of the Holders of not less than $25 \%$ in principal amount of the Outstanding Bonds of the Series affected thereby, shall proceed (subject to the provisions of the Resolution), to protect and enforce its rights and the rights of the Bondholders or of such Provider under the Resolution or under any Series Resolution or under the laws of the State by such suits, actions or special proceedings in equity or at law, either for the specific performance of any covenant contained under the Resolution or under any Series Resolution or in aid or execution of any power granted in the Resolution or the Series Resolution, or for an accounting against the Fund as if the Fund were the trustee of an express trust, or for the enforcement of any proper legal or equitable remedy as the Trustee shall deem most effectual to protect and enforce such rights.

In the enforcement of any remedy under the Resolution and under each Series Resolution the Trustee shall be entitled to sue for, enforce payment of, and receive any and all amounts then, or during any default becoming, and at any time remaining, due from the Fund for principal or interest or otherwise under any of the provisions of the Resolution or of any Series Resolution or of the Bonds, with interest on overdue payments of the principal of or interest on the Bonds at the rate or rates of interest specified in such Bonds, together with any and all costs and expenses of collection and of all proceedings under the Resolution and under any Series Resolution and under such Bonds, without prejudice to any other right or remedy of the Trustee or of the Holders of such Bonds, and to recover and enforce judgment or decree against the Fund but solely as provided in the Resolution, in any Series Resolution and in such Bonds, for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect in any manner provided by law, the money adjudged or decreed to be payable.
(Section 11.04)

## Priority of Payments after Default

If at any time the money held by the Trustee under the Resolution and under each Series Resolution shall not be sufficient to pay the principal and Sinking Find Installments of and interest on the Bonds as the same become due and payable (either by their terms or by acceleration of
maturity under the provisions of the Resolution described above under the heading "Acceleration of Maturity"), such money together with any money then available or thereafter becoming available for such purpose, whether through exercise of the remedies provided for in the Resolution or otherwise, shall be applied (after payment of all amounts owing to the Trustee under the Resolution) as follows:
(a) Unless the principal of all the Bonds shall have become or been declared due and payable, all such money shall be applied: first, to the payment to the persons entitled thereto, interest on all arrears in payment of the principal of or interest on Outstanding Bonds at the respective rate of interest specified in each Bond; second, to the payment to the persons entitled thereto of all installments of interest on such Bonds then due in the order of the maturity of the installments of such interest, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment thereof ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference; and third, to the payment to the persons entitled thereto of the unpaid principal, Sinking Fund Installments or Redemption Price of any such Bonds which shall have become due whether at maturity or by call for redemption in the order of their due dates and, if the amount available shall not be sufficient to pay in full all such amounts due on any date, then to the payment thereof ratably, according to the amount of principal, Sinking Fund Installments or Redemption Price due on such date, to the persons entitled thereto, without any discrimination or preference.
(b) If the principal of all Bonds shall have become or been declared due and payable, all such money shall be applied to the payment of the principal and interest then due and unpaid upon such Bonds without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto, without any discrimination or preference except as to the difference in the respective rates of interest specified in the Bonds.

Whenever money is to be applied by the Trustee pursuant to the provisions of this section, such money shall be applied by the Trustee at such times, and from time to time, as the Trustee in its sole discretion shall determine, having due regard to the amount of such money available for application and the likelihood of additional money becoming available for such application in the future. The setting aside of such money in trust for application in accordance with the provisions of this section shall constitute proper application by the Trustee, and the Trustee shall incur no liability whatsoever to the Fund, to any Holder of Bonds or to any other person for any delay in applying any such money so long as the Trustee acts with reasonable diligence, having due regard to the circumstances, and ultimately applies the same in accordance with such provisions of the Resolution as may be applicable at the time of application by the Trustee. Whenever the Trustee shall exercise such discretion in applying such money, it shall fix the date (which shall be on an interest payment date unless the Trustee shall deem another date more suitable) upon which such application is to be made, and upon such date interest on the amounts of principal to be paid on such date shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the fixing of any such date. The Trustee shall not be required to make payment to the Holder of any Bond unless such Bond shall be presented to the Trustee for appropriate endorsement.
(Section 11.05)

## Bondholders' Direction of Proceedings

The Holders of a majority in principal amount of the Outstanding Bonds or, in the case of an event of default specified in paragraph (c) of the heading "Events of Default", the Holders of a majority in principal amount of the Outstanding Bonds of the Series affected thereby shall, subject to the provisions of the Resolution, have the right by an instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial proceedings to be taken by the Trustee under the Resolution and under each Series Resolution relating to such Bonds, provided, such direction shall not be otherwise than in accordance with law and the provisions of the Resolution and of each Series Resolution, and that the Trustee shall have the right to decline to follow any such direction which in the opinion of the Trustee would be unjustly prejudicial to Holders of Bonds not parties to such direction.
(Section 11.07)

## Waiver and Non-Waiver of Default

No delay or omission of the Trustee or any Bondholder to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein. Every power and remedy given by the Resolution to the Trustee and the Bondholders, respectively, may be exercised from time to time and as often as may be deemed expedient. The Trustee may, and upon written request of the Holders of not less than $25 \%$ in principal amount of the Outstanding Bonds or, in the case of a default specified in paragraph (c) of the heading "Events of Default" above, the Holders of not less than $25 \%$ in principal amount of the Outstanding Bonds of the Series affected thereby, shall waive any default which in its opinion shall have been remedied before the entry of final judgment or decree in any suit, action or proceeding instituted by it under the provisions of the Resolution or before the completion of the enforcement of any other remedy under the Resolution; provided, however, that no such waiver shall extend to or affect any other existing or any subsequent default or defaults or impair any rights or remedies consequent thereon.
(Section 11.11)

## Defeasance

If the Fund shall pay or cause to be paid to the Holders of Bonds of a Series the principal or Redemption Price of and interest thereon, at the times and in the manner stipulated therein, in the Resolution, and in the applicable Series Resolution, then the pledge of the Trust Estate and all other rights granted by the Resolution to such Bonds shall be discharged and satisfied. In such event, the Trustee shall, upon the request of the Fund, execute and deliver such documents to evidence such discharge and satisfaction as may be reasonably required by the Fund, and all money or investments thereof held by it pursuant to the Resolution and to the applicable Series Resolution which are not required for the payment or redemption of Bonds of such Series shall be paid or delivered by the Trustee as follows: First, to the Arbitrage Rebate Fund, the amount required to be deposited therein in accordance with the direction of an Authorized Officer of the Fund; second, to each Provider the Provider Payments which have not been repaid, pro rata, based upon the respective Provider Payments then unpaid to each Provider; and, third, the balance thereof to the

Fund. Such money or investments thereof so paid or delivered shall be released from any trust, pledge, lien, encumbrance or security interest created by the Resolution.

Bonds for the payment or redemption of which money shall have been set aside and shall be held in trust by the Trustee (through deposit of money for such payment or redemption or otherwise) at the maturity or redemption date thereof shall be deemed to have been paid within the meaning and with the effect expressed in paragraph (a) of this section. All Outstanding Bonds of any Series or any maturity within a Series or a portion of a maturity within a Series shall prior to the maturity or redemption date thereof be deemed to have been paid within the meaning and with the effect expressed in paragraph (a) of this section if: (i) in case any of said Bonds are to be redeemed on any date prior to their maturity, the Fund shall have given to the Trustee, in form satisfactory to it, irrevocable instructions to give as provided in the Resolution notice of redemption on said date of such Bonds; (ii) there shall have been deposited with the Trustee either money in an amount which shall be sufficient, or Defeasance Securities the principal of and interest on which when due will provide money which, together with the money, if any, deposited with the Trustee at the same time, shall be sufficient in the judgment of a Verification Agent to pay when due the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, and interest due and to become due on said Bonds on and prior to the redemption date or maturity date thereof, as the case may be; (iii) in the event said Bonds are not by their terms subject to redemption within the next succeeding 60 days, the Fund shall have given the Trustee, in form satisfactory to it, irrevocable instructions to give, as soon as practicable, by first class mail, postage prepaid, to the Holders of said Bonds at their last known addresses appearing on the registration books, a notice to the Holders of such Bonds that the deposit required by (ii) above has been made with the Trustee and that said Bonds are deemed to have been paid in accordance with this section and stating such maturity or redemption date upon which money is to be available for the payment of the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, of and interest on said Bonds; (iv) in the event said Bonds do not then bear interest at a stated rate per annum to their respective maturity dates or are subject to mandatory or optional tender, the Fund shall have delivered Rating Confirmations to the Trustee; and (v) the Fund shall have delivered to the Trustee an opinion of Bond Counsel to the effect that said Bonds having been deemed to have been paid as provided in this section would not (A) cause said Bonds to be considered to have been "reissued" for purposes of Section 1001 of the Code and (B) adversely affect the exclusion of interest on any Tax Exempt Bond from gross income for purposes of federal income taxation.

The Fund shall give written notice to the Trustee of its selection of the Series and maturity payment of which shall be made in accordance with this section. The Trustee shall select the Bonds of like Series and maturity payment of which shall be made in accordance with this section in the manner provided in the Resolution. Neither the Defeasance Securities nor money deposited with the Trustee pursuant to this section nor principal or interest payments on any such Defeasance Securities shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, of and interest on said Bonds; provided, however, that any money received from such principal or interest payments on such Defeasance Securities deposited with the Trustee, if not then needed for such purpose, shall, to the extent practicable, be reinvested in Defeasance Securities maturing at times and in amounts sufficient to pay when due the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, of and interest to become due on said Bonds on and prior to such redemption date or maturity date of the Resolution, as the case may be. Any income or
interest earned by, or increment to, the investment of any such money so deposited, shall, to the extent certified by the Trustee to be in excess of the amounts required hereinabove to pay the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, of and interest on such Bonds, as realized, be paid by the Trustee as follows: first, to the Arbitrage Rebate Fund, the amount required to be deposited therein in accordance with the direction of an Authorized Officer of the Fund; second, to each Provider the Provider Payments which have not been repaid, pro rata, based upon the respective Provider Payments then unpaid to each Provider; and, third, the, the balance thereof to the Fund. The money so paid by the Trustee shall be released of any trust, pledge, lien, encumbrance or security interest created by the Resolution.

For purposes of determining whether Variable Interest Rate Bonds shall be deemed to have been paid prior to the maturity or redemption date thereof, as the case may be, by the deposit of money, or Defeasance Securities and money, if any, in accordance with clause (ii) of the second sentence of the second paragraph herein under the heading "Defeasance", the interest to come due on such Variable Interest Rate Bonds on or prior to the maturity date or redemption date thereof, as the case may be, shall be calculated at the Maximum Interest Rate permitted by the terms thereof, provided, however, that if on any date, as a result of such Variable Interest Rate Bonds having borne interest at less than such Maximum Interest Rate for any period, the total amount of money and Defeasance Securities on deposit with the Trustee for the payment of interest on such Variable Interest Rate Bonds is in excess of the total amount which would have been required to be deposited with the Trustee on such date in respect of such Variable Interest Rate Bonds in order to satisfy clause (ii) of the second sentence of the second paragraph herein under the heading "Defeasance," the Trustee shall pay the amount of such excess as follows: first, to the Arbitrage Rebate Fund, the amount required to be deposited therein in accordance with the direction of an Authorized Officer of the Fund; second, to each Provider the Provider Payments which have not been repaid, pro rata, based upon the respective Provider Payments then unpaid to each Provider; and, third, the balance thereof to the Fund. The money so paid by the Trustee shall be released of any trust, pledge, lien, encumbrance or security interest created by the Resolution.

Option Bonds shall be deemed to have been paid in accordance with clause (ii) of the second sentence of the second paragraph herein under the heading "Defeasance" only if, in addition to satisfying the requirements of clauses (i) and (iii) of such sentence, there shall have been deposited with the Trustee money in an amount which shall be sufficient to pay when due the maximum amount of principal of and premium, if any, and interest on such Bonds which could become payable to the Holders of such Bonds upon the exercise of any options provided to the Holders of such Bonds; provided, however, that if, at the time a deposit is made with the Trustee pursuant to paragraph (b) of under this heading, the options originally exercisable by the Holder of an Option Bond are no longer exercisable, such Bond shall not be considered an Option Bond for purposes of this paragraph. If any portion of the money deposited with the Trustee for the payment of the principal of and premium, if any, and interest on Option Bonds is not required for such purpose, the Trustee shall, if requested by the Fund, pay the amount of such excess as follows: first, to the Arbitrage Rebate Fund, the amount required to be deposited therein in accordance with the direction of an Authorized Officer of the Fund; second, to each Provider the Provider Payments which have not been repaid, pro rata, based upon the respective Provider Payments then unpaid to each Provider; and, third, the balance thereof to the Fund. The money so paid by the Trustee shall be released of any trust, pledge, lien, encumbrance or security interest created by the Resolution.

Anything in the Resolution to the contrary notwithstanding, any money held by the Trustee or a Paying Agent in trust for the payment and discharge of any of the Bonds of a Series or the interest thereon which remain unclaimed for one (1) year after the date when all of the Bonds of such Series have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such money was held by the Trustee or Paying Agent at such date, or for one (1) year after the date of deposit of such money if deposited with the Trustee or Paying Agent after said date when all of the Bonds of such Series become due and payable, or one (1) year after the date when the principal or Redemption Price of or interest on the Bonds for which said money is held was due and payable, shall, at the written request of the Fund, be repaid by the Trustee or Paying Agent to the Fund as its absolute property and free from trust, and the Trustee or Paying Agent shall thereupon be released and discharged with respect thereto and the Holders of Bonds shall look only to the Fund for the payment of such Bonds.
(Section 12.01)

## No Recourse under Resolution or on the Bonds

All covenants, stipulations, promises, agreements and obligations of the Fund contained in the Resolution shall be deemed to be the covenants, stipulations, promises, agreements and obligations of the Fund and not of any member, officer or employee of the Fund in his individual capacity, and no recourse shall be had for the payment of the principal, Sinking Fund Installments, if any, or Redemption Price of or interest on the Bonds or for any claims based thereon, hereon or on any Series Resolution against any member, officer or employee of the Fund or any person executing the Bonds, all such liability, if any, being expressly waived and released by every Holder of Bonds by the acceptance of the Bonds.
(Section 14.04)

## Certain Provisions Relating to Capital Appreciation Bonds and Deferred Income Bonds

For the purposes of (i) receiving payment of the Redemption Price if a Capital Appreciation Bond is redeemed prior to maturity or (ii) receiving payment of a Capital Appreciation Bond if the principal of all Bonds is declared immediately due and payable following an "event of default", as provided in the provisions of the Resolution described above under the heading "Acceleration of Maturity", the principal amount of such Bond shall be deemed to be then current Accreted Value of such Bond. For purposes of computing the principal amount of Bonds held by the registered owner of a Capital Appreciation Bond in giving to the Fund or the Trustee any notice, consent, request, or demand pursuant to the Resolution for any purpose whatsoever, the Accreted Value of such Bond as of the Valuation Date immediately preceding the date of such computation, or the then current Accreted Value on the date of computation if such date is a Valuation Date or if the principal of all Bonds is declared immediately due and payable, shall be deemed to be its principal amount. Notwithstanding any other provision of the Resolution, the amount payable at any time with respect to the principal of and interest on any Capital Appreciation Bond shall not exceed the Accreted Value thereof at such time. For purposes of receiving payment of the Redemption Price or principal of a Capital Appreciation Bond called for redemption prior to maturity or the principal of which has been declared to be immediately due and payable pursuant to provisions of the Resolution described above under the heading "Acceleration of Maturity", the difference between
the Accreted Value of such Bond as of the Valuation Date immediately preceding the date on which the Redemption Price or principal thereof is due upon such redemption or declaration, or the Accreted Value as of such date if such date is a Valuation Date, and the principal of such Bond on the date the Bonds of the Series of which it is a part were first issued shall be deemed not to be accrued and unpaid interest thereon.
(Section 14.07)

## Non-Business Days

Except as otherwise provided in the Series Resolution authorizing Bonds of a particular Series, if the date for making any payment or the last date for performance of any act or the exercising of any right, as provided in the Resolution, shall not be a Business Day, such payment may be made or act performed or right exercised on the next succeeding Business Day with the same force and effect as if done on the nominal date provided in the Resolution, and no interest shall accrue for the period after such nominal date.
(Section 14.11)
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## APPENDIX B

CERTAIN INFORMATION CONCERNING THE CITY OF NEW YORK
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## THE CITY OF NEW YORK

This Appendix consists of information which was furnished to ECF by The City of New York (the "City"). Although ECF considers the sources to be reliable, ECF has made no independent verification of the information presented herein and does not warrant its accuracy. The City will not be liable on the 2018A Bonds and the 2018A Bonds will not be a debt of the City. The obligation of the City to pay the amounts due under the School Leases is subject to annual appropriation of moneys by the City and the availability of moneys for such purpose. References in this Appendix to Appendix A refer to Appendix A to this Appendix, references in this Appendix to Appendix B refer to Appendix B to this Appendix and references in this Appendix to Appendix C refer to Appendix C to this Appendix.

Because the City is a large and complex entity, information about it changes on an ongoing basis. This Appendix has been updated to include certain information not included in the Appendix to the Preliminary Official Statement. "Section VII: Financial Plan-Long-Term Capital Program" and "-Financing Program" have been updated to reflect the release of the 2019-2022 Capital Commitment Plan (as defined herein) on October 10, 2018. The 2019-2022 Capital Commitment Plan reflects increases in the Capital Budget adopted in June 2018, among other changes. "Section II: Recent Financial Developments" and "Section ViI: Financial Plan-Assumptions-Expenditure Assumptions-1. Personal Service Costs" have been updated to reflect a tentative settlement with the United Federation of Teachers.

## SECTION I: INTRODUCTORY STATEMENT

The purpose of this Appendix is to provide information on certain factors affecting the City and its general economic background to those considering purchasing the 2018A Bonds.

This Appendix contains forecasts, projections and estimates that are based on expectations and assumptions which existed at the time such forecasts, projections and estimates were prepared. In light of the important factors that may materially affect economic conditions in the City, the inclusion in this Appendix of such forecasts, projections and estimates should not be regarded as a representation by the City or its independent auditors that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results. If and when included in this Appendix, the words "expects," "forecasts," "projects," "intends," "anticipates," "estimates" and analogous expressions are intended to identify forward-looking statements and any such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include, among others, general economic and business conditions, changes in political, social and economic conditions, regulatory initiatives and compliance with governmental regulations, litigation and various other events, conditions and circumstances, many of which are beyond the control of the City. These forward-looking statements speak only as of the date they were prepared. The City disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in the City's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based between modifications to the City's financial plan required by law.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Appendix for purposes of Rule 15c2-12 adopted by the United States Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934.

The City, with an estimated population of approximately 8.6 million, is an international center of business and culture. Its non-manufacturing economy is broadly based, with the banking, securities, insurance, technology, information, publishing, fashion, design, retailing, education and health care industries accounting for a significant portion of the City's total employment earnings. Additionally, the City is a leading tourist destination. Manufacturing activity in the City is conducted primarily in apparel and printing.

For each of the 1981 through 2017 fiscal years, the City's General Fund had an operating surplus, before discretionary and other transfers, and achieved balanced operating results as reported in accordance with then applicable generally accepted accounting principles ("GAAP"), after discretionary and other transfers and except for the application of Governmental Accounting Standards Board ("GASB") Statement No. 49 ("GASB 49"), as described below. City fiscal years end on June 30 and are referred to by the calendar year in which they end. The City has been required to close substantial gaps between forecast revenues and forecast expenditures in order to maintain balanced operating results. There can be no assurance that the City will continue to maintain balanced operating results as required by New York State (the "State") law without proposed tax or other revenue increases or reductions in City services or entitlement programs, which could adversely affect the City's economic base.

As required by the New York State Financial Emergency Act For The City of New York (the "Financial Emergency Act" or the "Act") and the New York City Charter (the "City Charter"), the City prepares a four-year annual financial plan, which is reviewed and revised on a quarterly basis and which includes the City's capital, revenue and expense projections and outlines proposed gap-closing programs for years with projected budget gaps. The City's current financial plan projects budget balance in the 2018 and 2019 fiscal years in accordance with GAAP except for the application of GASB 49. In 2010, the Financial Emergency Act was amended to waive the budgetary impact of GASB 49 by enabling the City to continue to finance with bond proceeds certain pollution remediation costs. The City's current financial plan projects budget gaps for the 2020 through 2022 fiscal years. A pattern of current year balance and projected future year budget gaps has been consistent through the entire period since 1982, during which the City has achieved an excess of revenues over expenditures, before discretionary transfers, for each fiscal year. For information regarding the current financial plan, see "Section II: Recent Financial Developments" and "Section VII: Financial Plan." For information regarding the June 2010 amendment of the Financial Emergency Act with respect to the application of GASB 49 to the City budget, see "Section III: Government and Financial Controls." The City is required to submit its financial plans to the New York State Financial Control Board (the "Control Board"). For further information regarding the Control Board, see "Section III: Government and Financial Controls-City Financial Management, Budgeting and Controls-Financial Review and Oversight."

For its normal operations, the City depends on aid from the State both to enable the City to balance its budget and to meet its cash requirements. There can be no assurance that there will not be delays or reductions in State aid to the City from amounts currently projected; that State budgets for future State fiscal years will be adopted by the April 1 statutory deadline, or interim appropriations will be enacted; or that any such reductions or delays will not have adverse effects on the City's cash flow or expenditures. In addition, the City has made various assumptions with respect to federal aid. Future federal actions or inactions could have adverse effects on the City's cash flow or revenues. See "Section II: Recent Financial Developments-2018-2022 Financial Plan."

The Mayor is responsible for preparing the City's financial plan which relates to the City and certain entities that receive funds from the City. The financial plan is modified quarterly. The City's projections set forth in the financial plan are based on various assumptions and contingencies which are uncertain and which may not materialize. Such assumptions and contingencies include the condition of the international, national, regional and local economies, the provision of State and federal aid, the impact on City revenues and expenditures of any future federal or State legislation and policies affecting the City and the cost of pension structures and healthcare. See "Section II: Recent Financial Developments."

Implementation of the financial plan is dependent on the City's ability to market successfully its bonds and notes. Implementation of the financial plan is also dependent upon the ability to market the securities of other financing entities including the New York City Municipal Water Finance Authority (the "Water Authority") and the New York City Transitional Finance Authority ("TFA"). See "Section VII: Financial Plan-Financing Program." The success of projected public sales of City, Water Authority, TFA and other bonds and notes will be subject to prevailing market conditions. Future developments in the financial markets generally, as well as future developments concerning the City, and public discussion of such developments, may affect the market for outstanding City general obligation bonds and notes.

The City Comptroller and other agencies and public officials, from time to time, issue reports and make public statements which, among other things, state that projected revenues and expenditures may be different from those forecast in the City's financial plans. See "Section VII: Financial Plan-Certain Reports."

The factors affecting the City's financial condition described throughout this Appendix are complex and are not intended to be summarized in this Introductory Statement. The economic and financial condition of the City may be affected by various changes in laws, including tax law, financial, social, economic, political, geo-political and environmental factors, cybersecurity threats, terrorist events, hostilities or war, and other factors which could have a material effect on the City. For a discussion of additional factors affecting the City's financial condition, see above under "Introductory Statement" and below under "Section VII: Financial PlanAssumptions." This Appendix should be read in its entirety.

## SECTION II: RECENT FINANCIAL DEVELOPMENTS

For the 2017 fiscal year, the City's General Fund had a total surplus of $\$ 4.185$ billion, before discretionary and other transfers, and achieved balanced operating results in accordance with GAAP, except for the application of GASB 49 as described above, after discretionary and other transfers. The 2017 fiscal year is the thirty-seventh consecutive year that the City has achieved balanced operating results when reported in accordance with GAAP, except for the application of GASB 49.

## 2018-2022 Financial Plan

On June 7, 2017, the City submitted to the Control Board the financial plan for the 2018 through 2021 fiscal years (the "June 2017 Financial Plan"), which was consistent with the City's capital and expense budgets as adopted for the 2018 fiscal year. Subsequently, the June 2017 Financial Plan was modified during the 2018 fiscal year. On June 14, 2018, the City submitted to the Control Board the financial plan for the 2019 through 2022 fiscal years, which is consistent with the City's capital and expense budgets as adopted for the 2019 fiscal year, and a modification to the June 2017 Financial Plan with respect to the 2018 fiscal year (together, the "Financial Plan").

The Financial Plan projects revenues and expenses for the 2018 and 2019 fiscal years balanced in accordance with GAAP, except for the application of GASB 49, and projects gaps of approximately $\$ 3.26$ billion, $\$ 2.89$ billion and $\$ 2.29$ billion in fiscal years 2020 through 2022, respectively. The June 2017 Financial Plan had projected revenues and expenses for the 2018 fiscal year balanced in accordance with GAAP, except for the application of GASB 49, and had projected gaps of approximately $\$ 3.47$ billion, $\$ 2.81$ billion and $\$ 2.33$ billion in fiscal years 2019 through 2021, respectively.

The Financial Plan reflects, since the June 2017 Financial Plan, increases in projected net revenues of $\$ 2.61$ billion, $\$ 626$ million, $\$ 100$ million and $\$ 180$ million in fiscal years 2018 through 2021, respectively. Changes in projected revenues include: (i) increases in real property tax revenues of $\$ 402$ million, $\$ 250$ million, $\$ 390$ million and $\$ 683$ million in fiscal years 2018 through 2021, respectively (inclusive of increases of $\$ 53$ million in fiscal years 2019 through 2021, respectively, which are included in the Citywide savings program described below); (ii) increases in personal income tax revenues of $\$ 1.52$ billion, $\$ 305$ million, $\$ 345$ million and $\$ 224$ million in fiscal years 2018 through 2021, respectively; (iii) decreases in business tax revenues of $\$ 414$ million, $\$ 360$ million, $\$ 397$ million and $\$ 507$ million in fiscal years 2018 through 2021, respectively; (iv) an increase in sales tax revenues of $\$ 92$ million in fiscal year 2018 and decreases in sales tax revenues of $\$ 119$ million, $\$ 78$ million and $\$ 101$ million in fiscal years 2019 through 2021, respectively; (v) increases in real estate transaction taxes of $\$ 178$ million and $\$ 38$ million in fiscal years 2018 and 2019, respectively, and decreases in real estate transaction taxes of $\$ 103$ million and $\$ 73$ million in fiscal years 2020 and 2021, respectively; (vi) decreases in State School Tax Relief Program ("STAR Program") revenues of \$13 million, \$15 million, \$16 million and \$16 million in fiscal years 2018 through 2021, respectively; (vii) increases in hotel tax revenues of \$14 million, \$14 million, $\$ 6$ million and $\$ 7$ million in fiscal years 2018 through 2021, respectively; and (viii) a decrease in other tax revenues of $\$ 10$ million in fiscal year 2018 and increases in other tax revenues of $\$ 122$ million, $\$ 117$ million and $\$ 108$ million in fiscal years 2019 through 2021, respectively. Changes in projected revenues also include: (i) increases in tax audit revenues of $\$ 449$ million and $\$ 335$ million in fiscal years 2018 and 2019, respectively; and (ii) net increases in other revenues of $\$ 395$ million and $\$ 56$ million in fiscal years 2018 and 2019, respectively, and net decreases in other revenues of $\$ 164$ million and $\$ 145$ million in fiscal years 2020 and 2021, respectively (inclusive of additional increases of $\$ 24$ million, $\$ 29$ million, $\$ 14$ million and $\$ 13$ million in fiscal years 2018 through 2021, respectively, which are included in the Citywide Savings Program described below).

The Financial Plan also reflects, since the June 2017 Financial Plan, a decrease in projected net expenditures of $\$ 1.96$ billion in fiscal year 2018 and increases in projected net expenditures of $\$ 1.73$ billion, $\$ 553$ million and $\$ 739$ million in fiscal years 2019 through 2021, respectively. Changes in projected expenditures include: (i) increases in agency expenses of $\$ 871$ million, $\$ 1.74$ billion, $\$ 1.23$ billion and $\$ 1.33$ billion in fiscal years 2018
through 2021, respectively; (ii) an increase of $\$ 388$ million in fiscal year 2019 as a result of City Council initiatives; (iii) an increase of $\$ 106$ million in fiscal year 2019 reflecting funding for the Fair Fares program through the City's Human Resources Administration to provide reduced fares to low income subway and bus riders for the period from January through June 2019; (iv) decreases in debt service of $\$ 91$ million, $\$ 37$ million and $\$ 47$ million in fiscal years 2018, 2020 and 2021, respectively, and an increase in debt service of $\$ 24$ million in fiscal year 2019, in addition to debt service reductions in the Citywide Savings Program described below; (v) decreases in the labor reserve of $\$ 40$ million in fiscal year 2018 and $\$ 75$ million in each of fiscal years 2019 through 2021; (vi) increases in pension contributions of $\$ 61$ million and $\$ 156$ million in fiscal years 2018 and 2021, respectively, and decreases in pension contributions of $\$ 20$ million and $\$ 39$ million in fiscal years 2019 and 2020, respectively, primarily as a result of strong investment earnings in fiscal year 2017 offset by establishment of a reserve for potential costs associated with future audit recommendations; (vii) a decrease of \$1 million in fiscal year 2018 and increases of $\$ 531$ million, $\$ 295$ million and $\$ 296$ million in fiscal years 2019 through 2021, respectively, primarily reflecting the impact of the State Enacted Budget (as defined below); (viii) a decrease in the general reserve of $\$ 1.18$ billion in fiscal year 2018 and an increase in the general reserve of $\$ 125$ million in fiscal year 2019; (ix) a decrease in the capital stabilization reserve of $\$ 250$ million in fiscal year 2018; (x) a decrease of $\$ 400$ million in fiscal year 2018 reflecting a re-estimate of prior years' expenses and receivables; and (xi) an increase of $\$ 100$ million in contributions to the Retiree Health Benefits Trust in fiscal year 2018. Changes in projected net expenditures also include decreases in net expenditures (which reflect certain increases in revenues described above) of $\$ 1.03$ billion, $\$ 1.09$ billion, $\$ 817$ million and $\$ 925$ million in fiscal years 2018 through 2021, respectively, as a result of the Citywide Savings Program.

The Financial Plan reflects, since the June 2017 Financial Plan, provision for $\$ 4.58$ billion for the prepayment in fiscal year 2018 of fiscal year 2019 expenses and an expenditure reduction of $\$ 4.58$ billion in fiscal year 2019.

The Financial Plan also reflects the financial impact of a recent Consent Decree relating to lead-based paint and other health and safety concerns in New York City Housing Authority ("NYCHA") properties. The Consent Decree, which has been agreed to by the U.S. Attorney for the Southern District of New York, NYCHA and the City but has not yet been entered by the court, includes the appointment of a monitor to oversee NYCHA's progress toward complying with regulations relating to such health and safety concerns. In addition, the Consent Decree includes the City's commitment to provide a total of \$1 billion of capital funds in fiscal years 2019 through 2022, and $\$ 200$ million in capital funds in each subsequent fiscal year until such health and safety concerns have been addressed. Such funds for fiscal years 2019 through 2022 are currently reflected in the Financial Plan and the 2019-2022 Capital Commitment Plan (as defined herein) and are in addition to amounts previously provided for NYCHA in the Financial Plan and previous Capital Commitment Plan. The Consent Decree also contemplates that $\$ 550$ million of funding from the State will be available to NYCHA to address such health and safety concerns. NYCHA recently announced that it may be out of compliance with federal requirements beyond the lead-based paint and other health and safety concerns that were included in the Consent Decree. NYCHA has also estimated the total cost of its outstanding repairs, including those beyond the scope of the Consent Decree, at more than $\$ 32$ billion.

Contracts with unions for the 2010-2017 round of collective bargaining, including with the District Council 37 of AFSME ("DC 37") and the Patrolmen's Benevolent Association ("PBA"), representing approximately 50\% of the City's workforce, have expired. Nearly all remaining contracts will have expired by the end of fiscal year 2019. The Financial Plan includes a reserve for collective bargaining containing funding for the settlements from the period beyond the 2010-2017 round of collective bargaining, assuming annual increases of $1 \%$ per year. The Financial Plan does not reflect a contract settlement with DC 37 (representing approximately $25 \%$ of the City's workforce) ratified on August 14, 2018 (the "DC 37 Settlement") or a tentative settlement with the United Federation of Teachers ("UFT") announced on October 11, 2018 (the "UFT Settlement"), which is consistent with the pattern reflected in the DC 37 Settlement. The DC 37 Settlement covers the period from September 26, 2017 through May 25, 2021 and provides for a retroactive increase of $2 \%$ effective September 26, 2017, followed by increases of $2.25 \%$ effective September 26, 2018 and $3 \%$ effective October 26, 2019. Such settlements also include health insurance savings as part of a new Municipal Labor Committee ("MLC") agreement, in addition to those previously agreed upon, which are contractually enforceable through arbitration. The gross costs of the

DC 37 Settlement and the UFT Settlement, without reflecting the current reserve for labor settlements of $1 \%$ per year or such health insurance savings, are approximately $\$ 66$ million, $\$ 296$ million, $\$ 632$ million, $\$ 1.1$ billion and $\$ 1.5$ billion in fiscal years 2018 through 2022, respectively. The net costs of such settlements, after reflecting the labor reserve and health insurance savings, are approximately $\$ 33$ million, $\$ 46$ million, $\$ 175$ million, $\$ 260$ million and $\$ 481$ million in fiscal years 2018 through 2022, respectively. The application of the DC 37 and UFT pattern to all City employees would result in gross costs, without reflecting the current reserve for labor settlements or the health insurance savings, of approximately $\$ 255$ million, $\$ 781$ million, $\$ 1.7$ billion, $\$ 2.7$ billion, and $\$ 3.4$ billion in fiscal years 2018 through 2022, respectively. The application of the DC 37 and UFT pattern to all City employees would result in net costs, after reflecting the labor reserve and health insurance savings, of $\$ 142$ million, $\$ 227$ million, $\$ 704$ million, $\$ 929$ million and $\$ 1.3$ billion in fiscal years 2018 through 2022, respectively. For further information, see "Section VII: Financial Plan-Assumptions-Expenditure Assumptions-1. Personal Service Costs" and "Section V: City Services and ExpendituresEmployees and Labor Relations-Labor Relations."

The Financial Plan does not reflect potential increases to City tax revenues as a direct result of the recently enacted Federal Tax Cuts and Jobs Act of 2017 ("TCJA") which, among other provisions, lowered corporate and personal income tax rates but limited the deductibility of state and local taxes and mortgage interest. Similarly, the Financial Plan does not reflect the impact of tax reform legislation included in the State Enacted Budget in response to the TCJA which is expected to offset, in whole or in part, potential increases in tax revenues to the City described above. Such legislation includes decoupling certain linkages between federal and local income tax and corporate taxes, increasing the opportunities for charitable contributions, and providing an option to employers to shift to an employer compensation tax and reduce State personal income taxes.

The Financial Plan does not currently include funding for the Fair Fares program beyond fiscal year 2019; however, it is expected that, prior to its expiration, funding sources will be identified for the continuation of the program.

The Financial Plan does not reflect future increases in the charter school per-pupil tuition rate, which if not offset by changes to State education aid to the City that occur each year during the State budget process, are preliminarily estimated to have no cost to the City in fiscal year 2019 and to cost the City $\$ 119$ million in fiscal year 2020, $\$ 281$ million in fiscal year 2021 and $\$ 478$ million in fiscal year 2022. These figures are based on preliminary data. Final figures that would determine the actual costs to the City will not be finalized until the time of the State budget process for the applicable year.

The Financial Plan assumes that the City's direct costs (including costs of New York City Health and Hospitals ("NYCHH") and NYCHA) as a result of Superstorm Sandy ("Sandy") will largely be paid from nonCity sources, primarily the federal government. For further information, see "SECTION X: OTHER Information-Environmental Matters."

The City receives significant funding from the federal government for community development, social services, education and other purposes pursuant to various federal programs. The federal government has made and discussed a number of proposals which would lead to reductions in existing federal spending programs, including Medicaid, the repeal of the Affordable Care Act, reduction of funding for housing, including public housing, and changes to regulations affecting numerous industries in the City, including the financial services industry. The TCJA and other federal actions and proposed legislation could also affect the State budget and economy, which could have an impact on the City. It is not possible at this time to predict the form such proposals will ultimately take and, when taken as a whole, the effect they will have on the City's economy and the Financial Plan.

In January 2017, GASB issued Statement No. 84, Fiduciary Activities, effective for fiscal years beginning after December 15, 2018 (City Fiscal Year 2020). For a description, see "Section III: Government and Financial Controls-City Financial Management, Budgeting and Controls-Financial Reporting and Control Systems."

From time to time, the City Comptroller, the Control Board staff, the Office of the State Deputy Comptroller for the City of New York ("OSDC"), the Independent Budget Office ("IBO") and others issue reports and make
public statements regarding the City's financial condition, commenting on, among other matters, the City's financial plans, projected revenues and expenditures and actions by the City to eliminate projected operating deficits. It is reasonable to expect that reports and statements will continue to be issued and may contain different perspectives on the City's budget and economy and may engender public comment. For information on reports issued on the Financial Plan by the City Comptroller and others reviewing, commenting on and identifying various risks therein, see "Section VII: FinAncial Plan-Certain Reports."

## The State

The State ended its 2018 fiscal year with a balance of $\$ 4.4$ billion in its general fund (the "General Fund"), excluding the impact of $\$ 5.0$ billion in monetary settlements with financial institutions. The State Legislature completed action on the $\$ 168.3$ billion State budget for its 2019 fiscal year (the "State Enacted Budget") on March 30, 2018. The State Enacted Budget provides for balanced operations on a cash basis in the General Fund, as required by law. The State released its Annual Information Statement, which reflects the State Enacted Budget and the State's financial plan for fiscal years 2019-2022 (the "State Financial Plan"), on July 2, 2018 (the "Annual Information Statement"). In August 2018, the State released the First Quarterly Update to the State Financial Plan, which is described in the Update to the Annual Information Statement dated September 24, 2018 (the "AIS Update"). The State ended June 2018 with a General Fund balance of $\$ 6.3$ billion, $\$ 1.8$ billion above the estimate in the State Enacted Budget. The higher balance is comprised of $\$ 295$ million in unexpected monetary settlements with financial institutions and $\$ 1.5$ billion in timing-related underspending. The State projects a balanced budget, on a cash basis, in fiscal year 2019, and potential gaps in fiscal years 2020, 2021 and 2022 of $\$ 780$ million, $\$ 1.4$ billion and $\$ 487$ million, respectively. Such projections are unchanged from the projections included in the State Financial Plan. The State's projections for fiscal year 2019 and thereafter reflect an assumption that the Governor will continue to propose, and the State Legislature will continue to enact, balanced budgets in future years that limit annual growth in State operating funds to no greater than 2 percent.

The AIS Update identifies a number of risks inherent in the implementation of the State Enacted Budget and the State Financial Plan. Such risks include, but are not limited to, the performance of the national and State economies; national and international events; ongoing financial risks in the Euro-zone; changes in consumer confidence, oil supplies and oil prices; cybersecurity threats; major terrorist events, hostilities or war; climate change and extreme weather events; federal statutory and regulatory changes concerning financial sector activities; the impact of the TCJA and the implementation of tax reforms enacted by the State in response thereto; changes concerning financial sector bonus payouts and any future legislation governing the structure of compensation; shifts in monetary policy affecting interest rates and the financial markets; the impact of financial and real estate market developments on bonus income and capital gains realizations; the effect of household debt on consumer spending and State tax collections; the outcome of litigation and other claims affecting the State; wage and benefit increases for State employees that exceed projected annual costs; changes in the size of the State's workforce; the realization of the projected rate of return for pension fund assets and current assumptions with respect to wages for State employees affecting the State's required pension fund contributions; the willingness and ability of the federal government to provide the aid expected in the State Financial Plan; the ability of the State to implement cost reduction initiatives and the success with which the State controls expenditures; and the ability of the State and public authorities to issue securities successfully in the public credit markets.

## SECTION III: GOVERNMENT AND FINANCIAL CONTROLS

## Structure of City Government

The City of New York is divided into five counties, which correspond to its five boroughs. The City, however, is the only unit of local government within its territorial jurisdiction with authority to levy and collect taxes, and is the unit of local government primarily responsible for service delivery. Responsibility for governing the City is currently vested by the City Charter in the Mayor, the City Comptroller, the City Council, the Public Advocate and the Borough Presidents.

- The Mayor. Bill de Blasio, the Mayor of the City, took office on January 1, 2014 and was elected to a second term commencing on January 1, 2018. The Mayor is elected in a general election for a four-year term and is the chief executive officer of the City. The Mayor has the power to appoint the commissioners of the City's various departments. The Mayor is responsible for preparing and administering the City's annual Expense and Capital Budgets (as defined below) and financial plan. The Mayor has the power to veto local laws enacted by the City Council, but such a veto may be overridden by a two-thirds vote of the City Council. The Mayor has powers and responsibilities relating to land use and City contracts and all residual powers of the City government not otherwise delegated by law to some other public official or body. The Mayor is also a member of the Control Board.
- The City Comptroller. Scott M. Stringer, the Comptroller of the City, took office on January 1, 2014 and was elected to a second term commencing on January 1, 2018. The City Comptroller is elected in a general election for a four-year term and is the chief fiscal officer of the City. The City Comptroller has extensive investigative and audit powers and responsibilities which include keeping the financial books and records of the City. The City Comptroller's audit responsibilities include a program of performance audits of City agencies in connection with the City's management, planning and control of operations. In addition, the City Comptroller is required to evaluate the Mayor's budget, including the assumptions and methodology used in the budget. The Office of the City Comptroller is responsible under the City Charter and pursuant to State law and City investment guidelines for managing and investing City funds for operating and capital purposes. The City Comptroller is also a member of the Control Board and is a trustee, the custodian and the delegated investment advisor of the City's five pension systems.
- The City Council. The City Council is the legislative body of the City and consists of the Public Advocate and 51 members elected for four-year terms who represent various geographic districts of the City. Under the City Charter, the City Council must annually adopt a resolution fixing the amount of the real estate tax and adopt the City's annual Expense Budget and Capital Budget. The City Council does not, however, have the power to enact local laws imposing other taxes, unless such taxes have been authorized by State legislation. The City Council has powers and responsibilities relating to franchises and land use and as provided by State law.
- The Public Advocate. Letitia James, the Public Advocate, took office on January 1, 2014 and was elected to a second term commencing on January 1, 2018. The Public Advocate is elected in a general election for a four-year term. The Public Advocate is first in the line of succession to the Mayor in the event of the disability of the Mayor or a vacancy in the office, pending an election to fill the vacancy. The Public Advocate appoints a member of the City Planning Commission and has various responsibilities relating to, among other things, monitoring the activities of City agencies, the investigation and resolution of certain complaints made by members of the public concerning City agencies and ensuring appropriate public access to government information and meetings.
- The Borough Presidents. Each of the City's five boroughs elects a Borough President who serves for a four-year term concurrent with other City elected officials. The Borough Presidents consult with the Mayor in the preparation of the City's annual Expense Budget and Capital Budget. Five percent of discretionary increases proposed by the Mayor in the Expense Budget and, with certain exceptions, five percent of the appropriations supported by funds over which the City has substantial discretion
proposed by the Mayor in the Capital Budget, must be based on appropriations proposed by the Borough Presidents. Each Borough President also appoints one member to the Panel for Educational Policy (as described below) and has various responsibilities relating to, among other things, reviewing and making recommendations regarding applications for the use, development or improvement of land located within the borough, monitoring and making recommendations regarding the performance of contracts providing for the delivery of services in the borough and overseeing the coordination of a borough-wide public service complaint program.

On November 2, 2010, the City Charter was amended to provide that no person shall be eligible to be elected to or serve in the office of Mayor, Public Advocate, City Comptroller, Borough President or Council member if that person has previously held such office for two or more consecutive full terms, unless one full term or more has elapsed since that person last held such office. Such term limit applies only to officials first elected to office on or after November 2, 2010.

## City Financial Management, Budgeting and Controls

The Mayor is responsible under the City Charter for preparing the City's annual expense and capital budgets (as adopted, the "Expense Budget" and the "Capital Budget," respectively, and collectively, the "Budgets") and for submitting the Budgets to the City Council for its review and adoption. The Expense Budget covers the City's annual operating expenditures for municipal services, while the Capital Budget covers expenditures for capital projects, as defined in the City Charter. Operations under the Expense Budget must reflect the aggregate expenditure limitations contained in financial plans.

The City Council is responsible for adopting the Expense Budget and the Capital Budget. Pursuant to the City Charter, the City Council may increase, decrease, add or omit specific units of appropriation in the Budgets submitted by the Mayor and add, omit or change any terms or conditions related to such appropriations. The City Council is also responsible, pursuant to the City Charter, for approving modifications to the Expense Budget and adopting amendments to the Capital Budget beyond certain latitudes allowed to the Mayor under the City Charter. However, the Mayor has the power to veto any increase or addition to the Budgets or any change in any term or condition of the Budgets approved by the City Council, which veto is subject to an override by a two-thirds vote of the City Council, and the Mayor has the power to implement expenditure reductions subsequent to adoption of the Expense Budget in order to maintain a balanced budget. In addition, the Mayor has the power to determine the non-property tax revenue forecast on which the City Council must rely in setting the property tax rates for adopting a balanced City budget.

## Office of Management and Budget

The City's Office of Management and Budget ("OMB"), with a staff of approximately 340, is the Mayor's primary advisory group on fiscal issues and is also responsible for the preparation, monitoring and control of the City's Budgets and four-year financial plans. In addition, OMB is responsible for the preparation of a Ten-Year Capital Strategy.

State law and the City Charter require the City to maintain its Expense Budget balanced when reported in accordance with GAAP. For fiscal years 2009 and 2010, the City was authorized to phase in implementation of GASB 49 for budgetary purposes. In June 2010, the Financial Emergency Act was amended to permanently waive the budgetary impact of GASB 49 by allowing the City to include certain pollution remediation costs in its capital budget and to finance such costs with the issuance of bonds. In addition to the Budgets, the City prepares a four-year financial plan which encompasses the City's revenue, expenditure, cash flow and capital projections. All Covered Organizations (as defined below) are also required to maintain budgets that are balanced when reported in accordance with GAAP. From time to time certain Covered Organizations have had budgets providing for operations on a cash basis but not balanced under GAAP.

To assist in achieving the goals of the financial plan and budget, the City reviews its financial plan periodically and, if necessary, prepares modifications to incorporate actual results and revisions to projections and assumptions to reflect current information. The City's revenue projections are continually reviewed and periodically updated with the benefit of discussions with a panel of private economists analyzing the effects of changes in economic indicators on City revenues and information from various economic forecasting services.

## Office of the Comptroller

The City Comptroller is the City's chief fiscal officer and is responsible under the City Charter for reviewing and commenting on the City's Budgets and financial plans, including the assumptions and methodologies used in their preparation. The City Comptroller, as an independently elected public official, is required to report annually to the City Council on the state of the City's economy and finances and periodically to the Mayor and the City Council on the financial condition of the City and to make recommendations, comments and criticisms on the operations, fiscal policies and financial transactions of the City. Such reports, among other things, have differed with certain of the economic, revenue and expenditure assumptions and projections in the City's financial plans and Budgets. See "Section VII: Financial Plan-Certain Reports."

The Office of the City Comptroller establishes the City's accounting and financial reporting practices and internal control procedures. The City Comptroller is also responsible for the preparation of the City's annual financial statements, which, since 1978, have been required to be reported in accordance with GAAP.

The Comprehensive Annual Financial Report of the Comptroller (the "CAFR") for the 2017 fiscal year, which includes, among other things, the City's financial statements for the 2017 and 2016 fiscal years, was issued on October 30, 2017. The CAFR for the 2017 fiscal year received the Government Finance Officers Association award of the Certificate of Achievement for Excellence in Financial Reporting, the thirty-eighth consecutive year the CAFR has won such award.

All contracts for goods and services requiring the expenditure of City monies must be registered with the City Comptroller. No contract can be registered unless funds for its payment have been appropriated by the City Council or otherwise authorized. The City Comptroller also prepares vouchers for payments for such goods and services and cannot prepare a voucher unless funds are available in the Budgets for its payment.

The City Comptroller is also required by the City Charter to audit all City agencies and has the power to audit all City contracts. The Office of the Comptroller conducts both financial and management audits and has the power to investigate corruption in connection with City contracts or contractors.

The Mayor and City Comptroller are responsible for the issuance of City indebtedness. The City Comptroller oversees the payment of such indebtedness and is responsible for the custody of certain sinking funds.

## Financial Reporting and Control Systems

Since 1978, the City's financial statements have been required to be audited by independent certified public accountants and to be presented in accordance with GAAP. The City has completed thirty-seven consecutive fiscal years with a General Fund surplus when reported in accordance with then applicable GAAP, except with regard to the application of GASB 49.

In fiscal year 2014, the City implemented GASB Statement No. 68, Accounting and Financial Reporting for Pensions ("GASB 68"). The adoption of GASB 68 resulted in the restatement of the City's fiscal year 2013 government-wide financial statements. The City implemented GASB 68 concurrently with the implementation by the five major actuarial pension systems of GASB Statement No. 67 ("GASB 67"), Financial Reporting for Pension Plans. For further information about the implementation of GASB 67 and GASB 68 and the resulting impact on the City's financial statements, see "Section IX: Pension Systems and OPEB."

In January 2017, GASB issued Statement No. 84, Fiduciary Activities ("GASB 84"), effective for fiscal years beginning after December 15, 2018 (City Fiscal Year 2020), with early implementation encouraged. Implementation of GASB 84 could affect the City's financial statements by requiring that certain activities currently accounted for as fiduciary activities be reported as governmental activities going forward. This might result in certain resources being reported as operating revenue in periods prior to the related expenditures being incurred, negatively affecting the City's ability to meet its obligation to balance each year's operating budget in accordance with GAAP unless there is a change in applicable law. The City has not completed the process of evaluating the impact of GASB 84 on its financial statements.

Both OMB and the Office of the Comptroller utilize a financial management system which provides comprehensive current and historical information regarding the City's financial condition. This information, which is independently evaluated by each office, provides a basis for City action required to maintain a balanced budget and continued financial stability.

The City's operating results and forecasts are analyzed, reviewed and reported on by each of OMB and the Office of the Comptroller as part of the City's overall system of internal control. Internal control systems are reviewed regularly, and the City Comptroller requires an annual report on internal control and accountability from each agency. Comprehensive service level and productivity targets are formulated and monitored for each agency by the Mayor's Office of Operations and reported publicly in a semiannual management report.

The City has developed and utilizes a cash forecasting system which forecasts its daily cash balances. This enables the City to predict its short-term borrowing needs and maximize its return on the investment of available cash balances. Monthly statements of operating revenues and expenditures, capital revenues and expenditures and cash flow are reported after each month's end, and major variances from the financial plan are identified and explained.

City funds held for operating and capital purposes are managed by the Office of the City Comptroller, with specific guidelines as to investment vehicles. The City invests primarily in obligations of the United States Government, its agencies and instrumentalities, high grade commercial paper and repurchase agreements with primary dealers. The repurchase agreements are collateralized by United States Government treasuries, agencies and instrumentalities, held by the City's custodian bank and marked to market daily.

More than $97 \%$ of the aggregate assets of the City's five defined benefit pension systems are managed by outside managers, supervised by the Office of the City Comptroller, and the remainder is held in cash or managed by the City Comptroller. Allocations of investment assets are determined by each fund's board of trustees. As of July 31, 2018, aggregate pension assets were allocated approximately as follows: $29 \%$ U.S. equity; $28 \%$ fixed income; $20 \%$ international equity; $9 \%$ alternative credit; $6 \%$ private equity; $4 \%$ private real estate; $2 \%$ hedge funds; $1 \%$ real estate investment trusts; $1 \%$ infrastructure investments; and $1 \%$ cash (percentages do not add to $100 \%$ due to rounding).

## Financial Emergency Act and City Charter

The Financial Emergency Act requires that the City submit to the Control Board, at least 50 days prior to the beginning of each fiscal year (or on such other date as the Control Board may approve), a financial plan for the City and certain State governmental agencies, public authorities or public benefit corporations which receive or may receive monies from the City directly, indirectly or contingently (the "Covered Organizations") covering the four-year period beginning with such fiscal year. The New York City Transit Authority and the Manhattan and Bronx Surface Transit Operating Authority (collectively, "New York City Transit" or "NYCT" or "Transit Authority"), NYCHH and NYCHA are examples of Covered Organizations. The Act requires that the City's four-year financial plans conform to a number of standards. Subject to certain conditions, the Financial Emergency Act and the City Charter require the City to prepare and balance its budget covering all expenditures
other than capital items so that the results of such budget will not show a deficit when reported in accordance with GAAP. Provision must be made, among other things, for the payment in full of the debt service on all City securities. The budget and operations of the City and the Covered Organizations must be in conformance with the financial plan then in effect.

From 1975 to June 30, 1986, the City was subject to a Control Period, as defined in the Act, which was terminated upon the satisfaction of the statutory conditions for termination, including the termination of all federal guarantees of obligations of the City, a determination by the Control Board that the City had maintained a balanced budget in accordance with GAAP for each of the three immediately preceding fiscal years and a certification by the State and City Comptrollers that sales of securities by or for the benefit of the City satisfied its capital and seasonal financing requirements in the public credit markets and were expected to satisfy such requirements in the 1987 fiscal year. With the termination of the Control Period, certain Control Board powers were suspended including, among others, its power to approve or disapprove certain contracts (including collective bargaining agreements), long-term and short-term borrowings, and the four-year financial plan and modifications thereto of the City and the Covered Organizations. Pursuant to the Act and the City Charter, the City is required to develop a four-year financial plan each year and to modify the plan as changing circumstances require. Under current law, prior to July 1, 2008, the Control Board was required to reimpose a Control Period upon the occurrence or substantial likelihood and imminence of the occurrence of any one of certain events specified in the Act. These events were (i) failure by the City to pay principal of or interest on any of its notes or bonds when due or payable, (ii) the existence of a City operating deficit of more than $\$ 100$ million, (iii) issuance by the City of notes in violation of certain restrictions on short-term borrowing imposed by the Act, (iv) any violation by the City of any provision of the Act which substantially impaired the ability of the City to pay principal of or interest on its bonds or notes when due and payable or its ability to adopt or adhere to an operating budget balanced in accordance with the Act, or (v) joint certification by the State and City Comptrollers that they could not at that time make a joint certification that sales of securities in the public credit market by or for the benefit of the City during the immediately preceding fiscal year and the current fiscal year satisfied its capital and seasonal financing requirements during such period and that there was a substantial likelihood that such securities could be sold in the general public market from the date of the joint certification through the end of the next succeeding fiscal year in amounts that would satisfy substantially all of the capital and seasonal financing requirements of the City during such period in accordance with the financial plan then in effect.

In 2003, the State Legislature amended the Act to change its termination date from the earlier of July 1, 2008 or the date on which certain bonds are discharged to the later of July 1, 2008 or the date on which such bonds are discharged. The bonds referred to in the amended section of the Act are all bonds containing the State pledge and agreement authorized under section 5415 of the Act (the "State Covenant").

The State Covenant is authorized to be included in bonds of the City. Since enactment of this amendment to the Act, the City has not issued bonds containing the State Covenant. However, many City bonds issued prior to the amendment do contain the State Covenant. Because the City has issued such bonds with maturities as long as 30 years, the effect of the amendment was to postpone termination of the Act from July 1, 2008 to 2033 (or earlier if all City bonds containing the State Covenant are discharged). The State Legislature could, without violation of the State Covenant contained in the City's outstanding bonds, enact legislation that would terminate the Control Board and the Act because, at the time of issuance of those bonds, the termination date of the Act was July 1, 2008 (or the date of the earlier discharge of such bonds).

While the State Legislature amended the Act to extend the termination date of the Control Board, the power to impose or continue a Control Period terminated July 1, 2008. The power to impose or continue a Control Period is covered by a section of the Act that provides that no Control Period shall continue beyond the earlier of July 1, 2008 or the date on which all bonds containing the State Covenant are discharged. The State Legislature did not amend this provision. Therefore, under current law, although the Act continues in effect beyond July 1, 2008, no Control Period may be imposed after July 1, 2008.

## Financial Review and Oversight

The Control Board, with the OSDC, reviews and monitors revenues and expenditures of the City and the Covered Organizations. In addition, the IBO has been established pursuant to the City Charter to provide analysis to elected officials and the public on relevant fiscal and budgetary issues affecting the City.

The Control Board is required to: (i) review the four-year financial plan of the City and of the Covered Organizations and modifications thereto; (ii) review the operations of the City and the Covered Organizations, including their compliance with the financial plan; and (iii) review certain contracts, including collective bargaining agreements, of the City and the Covered Organizations. The requirement to submit four-year financial plans and budgets for review was in response to the severe financial difficulties and loss of access to the credit markets encountered by the City in 1975. The Control Board must reexamine the financial plan on at least a quarterly basis to determine its conformance to statutory standards.

The ex officio members of the Control Board are the Governor of the State of New York (Chairman); the Comptroller of the State of New York; the Mayor of The City of New York; and the Comptroller of The City of New York. In addition, there are three private members appointed by the Governor. The Executive Director of the Control Board is appointed jointly by the Governor and the Mayor. The Control Board is assisted in the exercise of its responsibilities and powers under the Financial Emergency Act by the State Deputy Comptroller.

## SECTION IV: SOURCES OF CITY REVENUES

The City derives its revenues from a variety of local taxes, user charges and miscellaneous revenues, as well as from federal and State unrestricted and categorical grants. State aid as a percentage of the City's revenues has remained relatively constant over the period from 1980 to 2017, while federal aid has been sharply reduced. The City projects that local revenues will provide approximately $73.4 \%$ of total revenues in the 2018 fiscal year, while federal aid, including categorical grants, will provide $10.0 \%$, and State aid, including unrestricted aid and categorical grants, will provide $16.6 \%$. Adjusting the data for comparability, local revenues provided approximately $60 \%$ of total revenues in 1980, while federal and State aid each provided approximately $20 \%$. A discussion of the City's principal revenue sources follows. For additional information regarding assumptions on which the City's revenue projections are based, see "Section VII: Financial Plan-Assumptions." For information regarding the City's tax base, see "Appendix A-ECONOMIC and DEMOGRAPHIC Information."

## Real Estate Tax

The real estate tax, the single largest source of the City's revenues, is the primary source of funds for the City's General Debt Service Fund. The City expects to derive approximately $44.4 \%$ of its total tax revenues and $29.3 \%$ of its total revenues for the 2018 fiscal year from the real estate tax. For information concerning tax revenues and total revenues of the City for prior fiscal years, see "Section VI: Financial Operations-2013-2017 Summary of Operations."

The State Constitution authorizes the City to levy a real estate tax without limit as to rate or amount (the "debt service levy") to cover scheduled payments of the principal of and interest on indebtedness of the City. However, the State Constitution limits the amount of revenue which the City can raise from the real estate tax for operating purposes (the "operating limit") to $2.5 \%$ of the average full value of taxable real estate in the City for the current and the last four fiscal years, which amount may be further limited by the State Constitution or laws. On June 24, 2011 the Governor signed into law the State's tax levy limitation law which restricts, among other things, the amount of real property taxes that may be levied by or on behalf of a municipality in a particular year. Such law does not apply to the City. Although legislation applying such law to the City has been proposed in each year since it was enacted, it has never passed. Were it to be enacted into law, it would have a material adverse impact on projected City revenues. The table below sets forth the percentage the debt service levy represents of the total levy. The City Council has adopted a distinct tax rate for each of the four categories of real property established by State legislation.

On April 24, 2017, a lawsuit was filed challenging the City's real property tax system and valuation methodology. See "Section X: Other Information-Litigation-Taxes."

## Comparison of Real Estate Tax Levies, Tax Limits and Tax Rates

| Fiscal Year | Total Levy(1) | Levy Within Operating Limit | Debt Service Levy(2) | Debt Service Levy as a Percentage of Total Levy | Operating Limit | Levy Within Operating Limit as a Percentage of Operating Limit | Rate Per \$100 of Full Valuation(3) | Average Tax Rate Per \$100 of Assessed Valuation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Dollars in Millions, except for Tax Rates) |  |  |  |  |  |  |  |
| 2014 | \$21,285.5 | \$18,779.8 | \$1,435.8 | 6.7\% | \$19,601.7 | 95.8\% | \$2.36 | \$12.28 |
| 2015 | 22,591.5 | 17,923.1 | 3,623.5 | 16.0 | 20,164.1 | 88.9 | 2.43 | 12.28 |
| 2016 | 24,145.0 | 20,761.2 | 2,310.6 | 9.6 | 21,130.6 | 98.3 | 2.45 | 12.28 |
| 2017 | 25,794.1 | 22,303.5 | 2,353.6 | 9.1 | 22,377.8 | 99.7 | 2.45 | 12.28 |
| 2018 | 27,726.2 | 24,005.2 | 2,599.9 | 9.4 | 24,448.7 | 98.2 | 2.38 | 12.28 |
| 2019 | 29,574.7 | 26,274.6 | 2,095.6 | 7.1 | 26,437.7 | 99.4 | 2.36 | 12.28 |
| (1) As approved by the City Council. |  |  |  |  |  |  |  |  |
| (2) The debt service levy includes a portion of the total reserve for uncollected real estate taxes. |  |  |  |  |  |  |  |  |
| (3) Full val and full | ased on the spec are revised per | cial equalizat iodically as | ion ratios result of | discussed below) urveys by the S | ) and the bil tate Office of | lable assessed v Real Property | valuation. Speci Tax Services. | ial equalization ratios |

## Assessment

The City has traditionally assessed real property at less than market value. The State Office of Real Property Tax Services (the "State Office") is required by law to determine annually the relationship between taxable assessed value and market value which is expressed as the "special equalization ratio." The special equalization ratio is used to compute full value for the purpose of measuring the City's compliance with the operating limit and general debt limit. For a discussion of the City's debt limit, see "Section VIII: Indebtedness-Indebtedness of the City and Certain Other Entities-Limitations on the City's Authority to Contract Indebtedness." The ratios are calculated by using the most recent market value surveys available and a projection of market value based on recent survey trends, in accordance with methodologies established by the State Office from time to time. Ratios, and therefore full values, may be revised when new surveys are completed. The ratios and full values shown in the table below, which were used to compute the 2019 fiscal year operating limit and general debt limit, have been established by the State Office and include the results of the fiscal year 2017 market value survey.

## Billable Assessed and Full Value of Taxable Real Estate(1)

| Fiscal Year | Billable Assessed Valuation of Taxable <br> Real Estate(2) | $\div$ | Special Equalization Ratio | = | Full Valuation(2) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 | \$184,059,201,523 |  | 0.2065 |  | \$ 891,327,852,412 |
| 2016 | 196,710,908,548 |  | 0.2005 |  | 981,101,788,269 |
| 2017 | 210,130,499,481 |  | 0.1982 |  | 1,060,194,245,616 |
| 2018 | 225,863,036,909 |  | 0.2008 |  | 1,124,815,920,862 |
| 2019 | 240,777,862,121 |  | 0.1919 |  | 1,254,704,857,327 |
|  |  |  |  | Average: | \$1,062,428,932,897 |

[^2]State law provides for the classification of all real property in the City into one of four statutory classes. Class one primarily includes one-, two- and three-family homes; class two includes certain other residential property not included in class one; class three includes most utility real property; and class four includes all other real property. The total tax levy consists of four tax levies, one for each class. Once the tax levy is set for each class, the tax rate for each class is then fixed annually by the City Council by dividing the levy for such class by the billable assessed value for such class.

Assessment procedures differ for each class of property. For fiscal year 2018, class one was assessed at approximately $6 \%$ of market value and classes two, three and four were each assessed at $45.0 \%$ of market value. In addition, individual assessments on class one parcels cannot increase by more than $6 \%$ per year or $20 \%$ over a five-year period. Market value increases and decreases for most of class two and all of class four are phased in over a period of five years. Increases in class one market value in excess of applicable limitations are not phased in over subsequent years. There is also no phase in for class three property.

Class two and class four real property have three assessed values: actual, transitional and billable. Actual assessed value is established for all tax classes without regard to the five-year phase-in requirement applicable to most class two and all class four properties. The transitional assessed value reflects this phase-in. Billable assessed value is the basis for tax liability and is the lower of the actual or transitional assessment.

The share of the total levy that can be borne by each class is regulated by the provisions of the State Real Property Tax Law. Each class share of the total tax levy is updated annually to reflect new construction, demolition, alterations or changes in taxable status and is subject to limited adjustment to reflect market value changes among the four classes. Class share adjustments are limited to a $5 \%$ maximum increase per year. Maximum class increases below $5 \%$ must be, and typically are, approved by the State legislature. Fiscal year 2019 tax rates were set on June 14, 2018 and reflect a $5 \%$ limitation on the market value adjustment for 2018. The average tax rate for fiscal year 2019 was maintained at $\$ 12.28$ per $\$ 100$ of assessed value. For fiscal year 2019, at the request of the City, the State approved an adjustment of the maximum rate of increase to $0.5 \%$. The tax rates will be amended and a revised property tax bill with the new tax rates for fiscal year 2019 will be sent to taxpayers in November 2018.

City real estate tax revenues may be reduced in future fiscal years as a result of tax refund claims asserting overvaluation, inequality of assessment and illegality. The State Office annually certifies various class ratios and class equalization rates relating to the four classes of real property in the City. "Class ratios" are determined for each class by the State Office by calculating the ratio of assessed value to market value. Various proceedings challenging assessments of real property for real estate tax purposes, and one action challenging the constitutionality of the real property tax system, are pending. For further information regarding the City's potential exposure in certain of these proceedings, see "Section X: Other Information-Litigation-Taxes" and "Appendix B-Financial Statements-Notes to Financial Statements-Note D.5."

## Trend in Taxable Assessed Value

State law provides for increases in assessed values of most properties to be phased into property tax bills over five-year periods. The billable assessed valuation, as determined by the City Department of Finance and as reported in the CAFR, rose to $\$ 171.7$ billion, $\$ 182.5$ billion, $\$ 195.2$ billion, $\$ 208.6$ billion and $\$ 224.5$ billion for fiscal years 2014 through 2018, respectively. The Department of Finance released the final roll for fiscal year 2019 on May 25, 2018, reflecting a billable assessed value of $\$ 239.7$ billion. With moderate growth forecast in the class two and class four market values combined with a deflated level of existing pipeline of deferred assessment increases yet to be phased in, the billable assessed valuations are forecast to grow by $5.7 \%, 4.7 \%$ and $3.6 \%$ in fiscal years 2020 through 2022, respectively.

## Collection of the Real Estate Tax

Real estate tax payments are due each July 1 and January 1. Owners of all properties assessed at $\$ 250,000$ or less are eligible to make tax payments in quarterly installments on July 1, October 1, January 1 and April 1. An annual interest rate of $9 \%$ compounded daily is imposed upon late payments on properties with an assessed value of $\$ 250,000$ or less except in the case of (i) any parcel with respect to which the real estate taxes are held in escrow and paid by a mortgage escrow agent and (ii) parcels consisting of vacant or unimproved land. An interest rate of $18 \%$ compounded daily is imposed upon late payments on all other properties. These interest rates are set annually.

The City primarily uses two methods to enforce the collection of real estate taxes. The City has been authorized to sell real estate tax liens on class one properties which are delinquent for at least three years and class two, three and four properties which are delinquent for at least one year. The authorization to sell real estate tax liens was extended through December 31, 2020. In addition, the City is entitled to foreclose delinquent tax liens by in rem proceedings after one year of delinquency with respect to properties other than one- and two-family dwellings and condominium apartments for which the annual tax bills do not exceed $\$ 2,750$, as to which a threeyear delinquency rule is in effect.

The real estate tax is accounted for on a modified accrual basis in the General Fund. Revenue accrued is limited to prior year payments received, offset by refunds made, within the first two months of the following fiscal year. In deriving the real estate tax revenue forecast, a reserve is provided for cancellations or abatements of taxes and for nonpayment of current year taxes owed and outstanding as of the end of the fiscal year.

The following table sets forth the amount of delinquent real estate taxes (owed and outstanding as of the end of the fiscal year of levy) for each of the fiscal years indicated. Delinquent real estate taxes do not include real estate taxes subject to cancellation or abatement under various exemption or abatement programs. Delinquent real estate taxes generally increase during a recession and when the real estate market deteriorates. Delinquent real estate taxes generally decrease as the City's economy and real estate market recover.

From time to time, the City sells tax liens to separate statutory trusts. In fiscal years 2013 through 2017, the City's tax lien program resulted in net proceeds of approximately $\$ 86.7$ million, $\$ 81.2$ million, $\$ 96.0$ million, $\$ 80$ million and $\$ 95.5$ million, respectively. The Financial Plan reflects receipt of $\$ 95$ million in fiscal year 2018 from the tax lien program.

## Real Estate Tax Collections and DelinQuencies

| Fiscal Year | Tax <br> Levy(1) | Tax Collections on Current Year Levy | Tax <br> Collections as a Percentage of Tax Levy | Prior Year (Delinquent Tax) <br> Collections | Refunds | Cancellations, Net Credits, Abatements, Exempt Property Restored and Shelter Rent | Delinquent as of End of Fiscal Year | Delinquency as a Percentage of Tax Levy | Lien Sale Program |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Dollars In Millions) |  |  |  |  |  |  |  |  |
| 2013 | \$20,133.2 | \$18,710.4 | 92.9\% | \$305.9 | \$(352.5) | \$(1,119.0) | \$(303.7) | 1.51\% | \$86.7 |
| 2014 | 21,285.5 | 19,909.2 | 93.5 | 280.5 | (293.5) | $(1,070.6)$ | (305.5) | 1.44 | 81.2 |
| 2015 | 22,591.5 | 21,107.2 | 93.4 | 318.5 | (204.5) | $(1,129.7)$ | (354.6) | 1.57 | 96.0 |
| 2016 | 24,145.0 | 22,835.8 | 94.6 | 281.0 | (222.9) | (975.4) | (333.8) | 1.38 | 80.0 |
| 2017 | 25,794.1 | 24,283.6 | 94.1 | 317.1 | (220.7) | $(1,185.9)$ | (324.6) | 1.26 | 95.5 |
| 2018(2) | 27,726.2 | 26,182.1 | 94.4 | 320.0 | (383.0) | $(1,189.5)$ | (354.6) | 1.28 | 95.0 |
| 2019(2) | 29,574.7 | 27,799.2 | 94.0 | 310.0 | (400.0) | $(1,313.6)$ | (461.9) | 1.56 | 80.0 |

[^3]
## Other Taxes

The City expects to derive $55.6 \%$ of its total tax revenues for the 2018 fiscal year from a variety of taxes other than the real estate tax, such as: (i) the $4.5 \%$ sales and compensating use tax, which commenced August 1, 2009, in addition to the $4 \%$ sales and use tax imposed by the State upon receipts from retail sales of tangible personal property and certain services in the City; (ii) the personal income tax on City residents; (iii) a general corporation tax levied on the income of corporations doing business in the City; and (iv) a banking corporation tax imposed on the income of banking corporations doing business in the City.

For local taxes other than the real estate tax, the City may adopt and amend local laws for the levy of local taxes to the extent authorized by the State. This authority can be withdrawn, amended or expanded by State legislation.

Revenues from taxes other than the real estate tax in the 2017 fiscal year decreased by $\$ 457$ million from the 2016 fiscal year. The following table sets forth, by category, revenues from taxes, other than the real estate tax, for each of the City's 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| Personal Income(1) | \$ 9,778 | \$10,152 | \$11,264 | \$11,340 | \$11,230 |
| General Corporation | 2,692 | 2,766 | 2,873 | 3,354 | 3,527 |
| Banking Corporation(2) | 1,357 | 1,227 | 1,214 | 268 | (82) |
| Unincorporated Business Income . | 1,808 | 1,882 | 1,962 | 2,040 | 2,005 |
| Sales(3) | 6,132 | 6,494 | 6,742 | 6,911 | 7,017 |
| Commercial Rent | 664 | 710 | 735 | 779 | 816 |
| Real Property Transfer | 1,086 | 1,527 | 1,765 | 1,775 | 1,415 |
| Mortgage Recording | 742 | 961 | 1,155 | 1,234 | 1,118 |
| Utility | 385 | 405 | 384 | 354 | 371 |
| Cigarette | 61 | 54 | 50 | 45 | 37 |
| Hotel | 505 | 536 | 556 | 565 | 579 |
| All Other(4) | 533 | 548 | 591 | 614 | 654 |
| Audits | 1,009 | 911 | 1,132 | 1,161 | 1,296 |
| Total | \$26,752 | \$28,173 | \$30,423 | \$30,440 | \$29,983 |

[^4]
## Miscellaneous Revenues

Miscellaneous revenues include revenue sources such as charges collected by the City for the issuance of licenses, permits and franchises, interest earned by the City on the investment of City cash balances, tuition and fees at the Community Colleges, reimbursement to the City from the proceeds of water and sewer rates charged by the New York City Water Board (the "Water Board") for costs of delivery of water and sewer services and paid to the City by the Water Board for its lease interest in the water and sewer system, rents collected from
tenants in City-owned property and from The Port Authority of New York and New Jersey (the "Port Authority") with respect to airports and the collection of fines. The following table sets forth amounts of miscellaneous revenues for each of the City's 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (In Millions) |  |  |  |  |
| Licenses, Permits and Franchises | \$ 593 | \$ 648 | \$ 703 | \$ 728 | \$ 770 |
| Interest Income | 16 | 16 | 30 | 79 | 73 |
| Charges for Services | 872 | 951 | 974 | 1,001 | 1,033 |
| Water and Sewer Payments | 1,361 | 1,491 | 1,439 | 1,297 | 1,385 |
| Rental Income | 297 | 311 | 284 | 279 | 253 |
| Fines and Forfeitures | 815 | 892 | 959 | 995 | 985 |
| Other | 703 | 1,313 | 1,828 | 725 | 565 |
| Total | \$4,657 | \$5,622 | \$6,217 | \$5,104 | \$5,064 |

Note: Totals may not add due to rounding.
Rental income in fiscal years 2013 through 2017 includes approximately $\$ 128.5$ million, $\$ 128.5$ million, $\$ 128.5$ million, $\$ 128.5$ million and $\$ 144.5$ million, respectively, in Port Authority lease payments for the City airports.

Fees and charges collected from the users of the water and sewer system of the City are revenues of the Water Board, a body corporate and politic, constituting a public benefit corporation, all of the members of which are appointed by the Mayor. The Water Board currently holds a long-term leasehold interest in the water and sewer system pursuant to a lease between the Water Board and the City.

Other miscellaneous revenues for fiscal years 2013 through 2017 include $\$ 117.1$ million, $\$ 132.5$ million, $\$ 113.4$ million, $\$ 229$ million and $\$ 100.3$ million, respectively, of tobacco settlement revenues ("TSRs") from the settlement of litigation with certain cigarette manufacturers that were not retained by TSASC. Other miscellaneous revenues for fiscal years 2013 through 2017 do not include TSRs retained by TSASC for debt service and operating expenses totaling $\$ 70$ million, $\$ 79$ million, $\$ 68$ million, $\$ 137$ million and $\$ 60$ million, respectively. Pursuant to the TSASC indenture, less than $40 \%$ of the TSRs are pledged to the TSASC bondholders and the remainder flow to the City. For further information see "Section VII: Financial Plan-Assumptions-Revenue Assumptions-4. Miscellaneous Revenues" and "Section VIII: IndebtednessIndebtedness of the City and Certain Other Entities."

Other miscellaneous revenues for fiscal year 2014 include $\$ 338$ million from the sale of taxi medallions, a payment of $\$ 50$ million from Verizon to settle cost overruns caused by delays on the Emergency Communications Transformation Program, $\$ 214$ million from the sale of two City office buildings and $\$ 103$ million from the reconciliation of prior years health insurance premiums. Other miscellaneous revenues for fiscal year 2015 include $\$ 174$ million from the sale of a former City Department of Sanitation site and $\$ 82$ million from a deferred prosecution agreement under the Manhattan District Attorney's Office and the US Department of Justice related to sanctions violations against Commerzbank. Other miscellaneous revenues for fiscal year 2016 include $\$ 74$ million from a deferred prosecution agreement under the Manhattan District Attorney's Office and the US Department of Justice related to sanctions violations against Credit Agricole and Investment Bank. Other miscellaneous revenues for fiscal year 2017 include $\$ 78$ million from the Department of Education and $\$ 30$ million from the sale of the Brooklyn Heights library development rights.

## Unrestricted Intergovernmental Aid

Unrestricted federal and State aid are not subject to any substantial restriction as to their use and are used by the City as general support for its Expense Budget. For a further discussion of federal and State aid, see "Section VII: Financial Plan-Assumptions—Revenue Assumptions-5. Federal and State Categorical Grants."

The following table sets forth amounts of unrestricted federal and State aid received by the City in each of its 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Million |  |  |
| Unrestricted Intergovernmental Aid | - | \$1 | \$1 | \$6 | \$59 |

## Federal and State Categorical Grants

The City makes certain expenditures for services required by federal and State mandates which are then wholly or partially reimbursed through federal and State categorical grants. State categorical grants are received by the City primarily in connection with City welfare, education, higher education, health and mental health expenditures. The City also receives substantial federal categorical grants in connection with the federal Community Development Block Grant Program ("Community Development"). The federal government also provides the City with substantial public assistance, social service and education grants as well as reimbursement for all or a portion of certain costs incurred by the City in maintaining programs in a number of areas, including housing, criminal justice and health. All City claims for federal and State grants are subject to subsequent audit by federal and State authorities. Certain claims submitted to the State Medicaid program by the City are the subject of investigation by the Office of the Inspector General of the United States Department of Health and Human Services ("OIG"). For a discussion of claims for which a final audit report has been issued by OIG, see "Section X: Other Information-Litigation-Miscellaneous." The City provides a reserve for disallowances resulting from these audits which could be asserted in subsequent years. Federal grants are also subject to audit under the Single Audit Act Amendments of 1996. For a further discussion of federal and State categorical grants, see "Section VII: Financial Plan-Assumptions-Revenue Assumptions-5. Federal and State Categorical Grants." For information regarding certain recent developments, see "Section II: Recent Financial Developments."

On January 25, 2017, President Trump signed an executive order, among other things, directing the United States Attorney General and the Secretary of Homeland Security to ensure that state and local jurisdictions that willfully refuse to comply with federal law concerning the provision of information on individuals' immigration status will not be eligible to receive federal grants except as deemed necessary for law enforcement purposes. On November 20, 2017, the United States District Court for the Northern District of California issued a nationwide permanent injunction enjoining enforcement of this provision of the executive order, finding it unconstitutional. The court's injunction is consistent with the City's position that controlling legal authority limits the executive branch's authority to condition federal funding. The federal government is appealing the ruling to the Court of Appeals for the Ninth Circuit.

The United States Attorney General has also sought to condition grants under the Department of Justice's Edward Byrne Justice Assistance Grant program on compliance with the same federal law concerning the provision of information on individuals' immigration status and on two other conditions. The City has provided the Justice Department with documents demonstrating its compliance with that federal law and demonstrating that it cooperates with immigration officials to the extent required under federal law. In June 2018, the Justice Department announced that it was distributing a portion of the program funds, although reviews of some applications remain ongoing. The City has not yet received funding or a final determination from the Justice Department. For fiscal year 2018, the Justice Department has added a requirement for compliance with additional statutes. In order to vigorously defend its policies, its compliance with federal law, and its right to the approximately $\$ 4$ million it annually receives through the Edward Byrne Justice Assistance Grant program, the City filed suit against the Justice Department on July 18, 2018.

The following table sets forth amounts of federal and State categorical grants received by the City for each of the City's 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| Federal(1) |  |  |  |  |  |
| Community Development(2) | \$ 566 | \$ 337 | \$ 537 | \$ 780 | \$ 1,108 |
| Social Services | 3,315 | 3,206 | 3,076 | 3,225 | 3,454 |
| Education | 1,873 | 1,672 | 1,677 | 1,698 | 1,709 |
| Other(3) | 2,866 | 1,747 | 1,692 | 1,691 | 1,656 |
| Total | \$ 8,620 | \$ 6,962 | \$ 6,982 | \$ 7,394 | \$ 7,927 |
| State |  |  |  |  |  |
| Social Services | \$ 1,509 | \$ 1,415 | \$ 1,410 | \$ 1,490 | \$ 1,709 |
| Education | 7,933 | 7,907 | 9,131 | 9,612 | 10,250 |
| Higher Education | 200 | 221 | 227 | 239 | 248 |
| Health and Mental Health | 495 | 454 | 364 | 535 | 573 |
| Other | 890 | 919 | 965 | 1,126 | 1,210 |
| Total | \$11,027 | \$10,916 | \$12,097 | \$13,002 | \$13,990 |

(1) Federal funding includes amounts received under the American Recovery and Reinvestment Act of $\$ 377.6$ million, $\$ 296$ million, $\$ 230$ million, $\$ 203$ million and $\$ 874.8$ million in fiscal years 2013 through 2017, respectively.
(2) Amounts represent actual funds received and may be lower or higher than the appropriation of funds actually provided by the federal government for the particular fiscal year due either to underspending or the spending of funds carried forward from prior fiscal years. Community Development includes $\$ 367.2$ million, $\$ 145.5$ million, $\$ 338.7$ million and $\$ 669.4$ million in fiscal years 2013 through 2016, respectively, in disaster recovery funding for storm damage remediation as a result of Superstorm Sandy.
(3) Other includes $\$ 1.228$ billion, $\$ 154.4$ million, $\$ 48.0$ million, $\$ 74.5$ million and $\$ 51.7$ million in fiscal years 2013 through 2017, respectively, of FEMA funding for expenditures for storm damage remediation as a result of Superstorm Sandy.

## SECTION V: CITY SERVICES AND EXPENDITURES

## Expenditures for City Services

Three types of governmental agencies provide public services within the City's borders and receive financial support from the City. One category is the mayoral agencies established by the City Charter which include, among others, the Police, Fire and Sanitation Departments. Another is the independent agencies which are funded in whole or in part through the City Budget by the City but which have greater independence in the use of appropriated funds than the mayoral agencies. Included in this category are certain Covered Organizations such as NYCHH and the Transit Authority. A third category consists of certain public benefit corporations ("PBCs") which were created to finance the construction of housing, hospitals, dormitories and other facilities and to provide other governmental services in the City. The legislation establishing this type of agency contemplates that annual payments from the City, appropriated through its Expense Budget, may or will constitute a substantial part of the revenues of the agency. Included in this category is, among others, the City University Construction Fund ("CUCF"). For information regarding expenditures for City services, see "Section VI: Financial Operations-2013-2017 Summary of Operations."

Federal and State laws require the City to provide certain social services for needy individuals and families who qualify for such assistance. The City receives federal Temporary Assistance for Needy Families ("TANF") block grant funds through the State for the Family Assistance Program. The Family Assistance Program provides benefits for households with minor children subject, in most cases, to a five-year time limit. The Safety Net Assistance Program provides benefits for adults without minor children, families who have reached the Family Assistance Program time limit, and others, including certain immigrants, who are ineligible for the Family Assistance Program but are eligible for public assistance. Historically, the cost of the Safety Net Assistance Program was borne equally by the City and the State. In the 2011-2012 State Budget the State implemented new funding formulas, increasing the City share of the Safety Net Assistance Program to $71 \%$ and eliminating the City Share of $25 \%$ for the Family Assistance Program by fully funding it with TANF block grant funds.

The City also provides funding for many other social services, such as day care, foster care, family planning, services for the elderly and special employment services for welfare recipients, some of which are mandated, and may be wholly or partially subsidized, by either the federal or State government. See "Section VII: Financial Plan-Assumptions-Revenue Assumptions-5. Federal and State Categorical Grants."

In July 2002, the Board of Education was replaced by the City's Department of Education (the "DOE") which is overseen by a Chancellor, appointed by the Mayor, and the 13-member Panel for Educational Policy where the Mayor appoints eight members including the Chancellor, and the Borough Presidents each appoint one member. The number of pupils in the school system is estimated to be approximately 1.1 million in each of the 2018 through 2022 fiscal years. Actual enrollment in fiscal years 2013 through 2017 has been 1,051,653, $1,062,275,1,073,445,1,081,324$ and $1,086,672$, respectively. See "Section VII: Financial Plan-Assumptions-Expenditure Assumptions-2. Other Than Personal Services Costs—Department of Education." The City's system of higher education, consisting of its Senior Colleges and Community Colleges, is operated under the supervision of the City University of New York ("CUNY"). The City is projected to provide approximately $41 \%$ of the costs of the Community Colleges in the 2018 fiscal year. The State has full responsibility for the costs of operating the Senior Colleges, although the City is required initially to fund these costs which are then reimbursed by the State.

The City administers health services programs for the care of the physically and mentally ill and the aged. NYCHH maintains and operates the City's 11 municipal acute care hospitals, five long-term care facilities, six free standing diagnostic and treatment centers, a certified home health-care program, many hospital-based and neighborhood clinics and a health maintenance organization. NYCHH is funded primarily by third party reimbursement collections from Medicare and Medicaid and by payments from bad debt/charity care pools, with significant contributions from the City. See "Section VII: Financial Plan-Assumptions—New York City Health and Hospitals."

Medicaid provides basic medical assistance to needy persons. The City is required by State law to furnish medical assistance through Medicaid to all City residents meeting eligibility requirements established by the State. Prior to State legislation in fiscal year 2006 capping City Medicaid payments, the State had assumed $81.2 \%$ of the non-federal share of long-term care costs, all of the costs of providing medical assistance to the mentally disabled, and $50 \%$ of the non-federal share of Medicaid costs for all other clients. As a result of State legislation in fiscal years 2006 and 2012 capping City Medicaid payments, the State percentage of the non-federal share may vary. The federal government pays $50 \%$ of Medicaid costs for federally eligible recipients and a higher share for federally eligible childless adults.

The City's Expense Budget increased during the five-year period ended June 30, 2017, due to, among other factors, the increasing costs of pensions and Medicaid, the costs of labor settlements and the impact of inflation on various other than personal services costs.

## Employees and Labor Relations

## Employees

The following table presents the number of full-time and full-time equivalent employees of the City, including the mayoral agencies, the DOE and CUNY, at the end of each of the City's 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Education | 132,469 | 134,426 | 137,078 | 141,311 | 144,740 |
| Police | 50,549 | 50,565 | 50,851 | 51,929 | 52,976 |
| Social Services, Homeless and Children' Services | 21,738 | 21,341 | 21,639 | 21,805 | 22,047 |
| City University Community Colleges and Hunter Campus Schools | 8,399 | 8,633 | 8,749 | 8,979 | 9,184 |
| Environmental Protection and Sanitation | 14,824 | 14,890 | 15,258 | 15,710 | 16,000 |
| Fire | 15,512 | 15,565 | 16,301 | 16,845 | 17,463 |
| All Other | 52,403 | 51,929 | 53,527 | 56,513 | 59,997 |
| Total | 295,894 | 297,349 | 303,403 | 313,092 | 322,407 |

The following table presents the number of full-time employees of certain Covered Organizations, as reported by such Organizations, at the end of each of the City's 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Transit Authority | 45,300 | 46,271 | 46,862 | 47,354 | 48,495 |
| Housing Authority | 11,398 | 11,311 | 11,251 | 10,796 | 10,737 |
| NYCHH | 35,455 | 35,554 | 36,691 | 37,650 | 36,213 |
| Total(1) | 92,153 | 93,136 | 94,804 | 95,800 | 95,445 |

(1) The definition of "full-time employees" varies among the Covered Organizations and the City.

The foregoing tables include persons whose salaries or wages are paid by certain public employment programs, including programs funded under the Workforce Investment Act, which support employees in non-profit and State agencies as well as in the mayoral agencies and the Covered Organizations.

## Labor Relations

Substantially all of the City's employees are members of labor unions. For those employees, wages, hours or working conditions may be changed only as provided for under collective bargaining agreements. Although State law prohibits strikes by municipal employees, strikes and work stoppages by employees of the City and the Covered Organizations have occurred.

Collective bargaining for City employees is under the jurisdiction of either the New York City Office of Collective Bargaining, which was created under the New York City Collective Bargaining Law, or the New York State Public Employment Relations Board ("PERB"), which was created under the State Employees Fair Employment Act. Collective bargaining matters relating to police, firefighters and pedagogical employees are under the jurisdiction of PERB. Under applicable law, the terms of future wage settlements could be determined through an impasse procedure which, except in the case of pedagogical employees, can result in the imposition of a binding decision. Pedagogical employees do not have access to binding arbitration but are covered by a factfinding impasse procedure under which a binding decision may not be imposed. Although the impasse procedure may not impose a binding settlement, it may influence ongoing collective bargaining.

For information regarding the City's assumptions with respect to the current status of the City's agreements with its labor unions, the cost of future labor settlements and related effects on the Financial Plan, see "Section VII: Financial Plan-Assumptions-Expenditure Assumptions-1. Personal Services Costs."

## Pensions

The City maintains a number of pension systems providing benefits for its employees and employees of various independent agencies (including certain Covered Organizations). For further information regarding the City's pension systems and the City's obligations thereto, see "Section IX: Pension Systems and OPEB."

## Capital Expenditures

The City makes substantial capital expenditures to reconstruct, rehabilitate and expand the City's infrastructure and physical assets, including City mass transit facilities, water and sewer facilities, streets, bridges and tunnels, and to make capital investments that will improve productivity in City operations. For additional information regarding the City's infrastructure, physical assets and capital program, see "SECTION VII: Financial Plan-Long-Term Capital Program" and "-Financing Program."

The City utilizes a three-tiered capital planning process consisting of the Ten-Year Capital Strategy (previously, the Ten-Year Capital Plan), the four-year capital plan and the current-year Capital Budget. The Ten-Year Capital Strategy, which is published once every two years in conjunction with the Executive Budget as required by the City Charter, is a long-term planning tool designed to reflect fundamental allocation choices and basic policy objectives. The four-year capital plan, which is updated three times a year, as required by the City Charter, translates mid-range policy goals into specific projects. The Capital Budget defines for each fiscal year specific projects and the timing of their initiation, design, construction and completion.

On April 26, 2017, the City published the Ten-Year Capital Strategy for fiscal years 2018 through 2027. The Ten-Year Capital Strategy totals $\$ 95.8$ billion, of which approximately $93 \%$ would be financed with City funds. See "Section VIII: Indebtedness-Indebtedness of the City and Certain Other Entities-Limitations on the City's Authority to Contract Indebtedness."

The Ten-Year Capital Strategy includes, among other items: (i) $\$ 20.9$ billion to construct new schools and improve existing educational facilities; (ii) $\$ 18.1$ billion for improvements to the water and sewer system; (iii) $\$ 10.9$ billion for expanding and upgrading the City's housing stock; (iv) $\$ 5.9$ billion for reconstruction or resurfacing of City streets; (v) $\$ 655.0$ million for continued City-funded investment in mass transit; (vi) $\$ 8.2$ billion for the continued reconstruction and rehabilitation of all four East River bridges and 108 other bridge structures; (vii) $\$ 2.0$ billion to expand current jail capacity; and (viii) $\$ 1.8$ billion for construction and improvement of court facilities.

Those programs in the Ten-Year Capital Strategy financed with City funds are currently expected to be funded primarily from the issuance of bonds by the City, the Water Authority and the TFA. From time to time, during recessionary periods when operating revenues have come under increasing pressure, capital funding levels
have been reduced from those previously contemplated in order to reduce debt service costs. For information concerning the City's long-term financing program for capital expenditures, see "Section VII: Financial Plan-Financing Program."

The City's capital expenditures, including expenditures funded by State and federal grants, totaled $\$ 41.0$ billion during the 2013 through 2017 fiscal years. City-funded expenditures, which totaled $\$ 34.4$ billion during the 2013 through 2017 fiscal years, have been financed through the issuance of bonds by the City, the TFA and the Water Authority. The following table summarizes the major categories of capital expenditures in the City's 2013 through 2017 fiscal years.

|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (In Millions) |  |  |  |  |  |
| Education | \$1,803 | \$2,107 | \$2,631 | \$2,475 | \$2,706 | \$11,723 |
| Environmental Protection | 1,844 | 1,578 | 1,373 | 1,378 | 1,454 | 7,627 |
| Transportation | 1,031 | 902 | 758 | 1,032 | 1,139 | 4,862 |
| Transit Authority(1) | 123 | 36 | 115 | 231 | 91 | 596 |
| Housing | 414 | 428 | 561 | 753 | 950 | 3,106 |
| Hospitals | 286 | 197 | 136 | 104 | 130 | 853 |
| Sanitation | 353 | 264 | 246 | 324 | 324 | 1,510 |
| All Other(2) | 2,531 | 2,391 | 2,016 | 1,784 | 2,032 | 10,753 |
| Total Expenditures(3) | \$8,385 | \$7,903 | \$7,836 | \$8,080 | \$8,826 | \$41,030 |
| City-funded Expenditures(4) | \$6,888 | \$7,468 | \$5,949 | \$6,676 | \$7,444 | \$34,425 |

(1) Excludes the Transit Authority's non-City portion of the Metropolitan Transportation Authority ("MTA") capital program.
(2) All Other includes, among other things, parks, correction facilities, public structures and equipment.
(3) Total Expenditures for the 2013 through 2017 fiscal years include City, State and federal funding and represent amounts which include an accrual for work-in-progress. These figures are derived from the CAFR.
(4) City-funded Expenditures do not include accruals, but represent actual cash disbursements occurring during the fiscal year.

The City annually issues a condition assessment and a proposed maintenance schedule for the major portion of its assets and asset systems which have a replacement cost of $\$ 10$ million or more and a useful life of at least ten years, as required by the City Charter. For information concerning a report which sets forth the recommended capital investment to bring certain identified assets of the City to a state of good repair, see "Section VII: Financial Plan-Long-Term Capital Program."

## SECTION VI: FINANCIAL OPERATIONS

The City's Basic Financial Statements and the independent auditors' opinion thereon are presented in "Appendix B-Financial Statements." Further details are set forth in the CAFR for the fiscal year ended June 30, 2017, which is available for inspection at the Office of the Comptroller and at www.comptroller.nyc.gov. For a summary of the City's significant accounting policies, see "APPENDIX BFinancial Statements-Notes to Financial Statements-Note A." For a summary of the City's operating results for the previous five fiscal years, see "2013-2017 Summary of Operations" below.

Except as otherwise indicated, all of the financial data relating to the City's operations contained herein, although derived from the City's books and records, are unaudited. In addition, neither the City's independent auditors, nor any other independent accountants, have compiled, examined or performed any procedures with respect to the Financial Plan or other estimates or projections contained elsewhere herein, nor have they expressed any opinion or any other form of assurance on such prospective financial information or its achievability, and assume no responsibility for, and disclaim any association with, all such prospective financial information.

The Financial Plan is prepared in accordance with standards set forth in the Financial Emergency Act and the City Charter. The Financial Plan contains projections and estimates that are based on expectations and assumptions which existed at the time such projections and estimates were prepared. The estimates and projections contained in this Section and elsewhere herein are based on, among other factors, evaluations of historical revenue and expenditure data, analyses of economic trends and current and anticipated federal and State legislation affecting the City's finances. The City's financial projections are based upon numerous assumptions and are subject to certain contingencies and periodic revisions which may involve substantial change. This prospective information is not fact and should not be relied upon as being necessarily indicative of future results. The City makes no representation or warranty that these estimates and projections will be realized. The estimates and projections contained in this Section and elsewhere herein were not prepared with a view towards compliance with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information.

## 2013-2017 Summary of Operations

The following table sets forth the City's results of operations for its 2013 through 2017 fiscal years in accordance with GAAP.

The information regarding the 2013 through 2017 fiscal years has been derived from the City's audited financial statements and should be read in conjunction with the notes accompanying this table and the City's 2016 and 2017 financial statements included in "Appendix B-Financial Statements." The 2013 through 2015 financial statements are not separately presented herein. For further information regarding the City's revenues and expenditures, see "Section IV: Sources of City Revenues" and "Section V: City Services and Expenditures."

|  | Fiscal Year(1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual |  |  |  |  |
|  | 2013 | 2014 | 2015 | 2016 | 2017 |
|  | (In Millions) |  |  |  |  |
| Revenues and Transfers |  |  |  |  |  |
| Real Estate Tax(2) | \$18,970 | \$20,202 | \$21,518 | \$23,181 | \$24,679 |
| Other Taxes(3)(4) | 26,752 | 28,173 | 30,423 | 30,440 | 29,983 |
| Miscellaneous Revenues(3) | 4,657 | 5,622 | 6,216 | 5,104 | 5,064 |
| Other Categorical Grants | 1,062 | 1,023 | 908 | 861 | 1,208 |
| Unrestricted Federal and State Aid | - | 1 | 1 | 6 | 59 |
| Federal Categorical Grants | 8,620 | 6,962 | 6,982 | 7,394 | 7,927 |
| State Categorical Grants | 11,027 | 10,916 | 12,097 | 13,002 | 13,990 |
| Disallowances Against Categorical Grants | (59) | (18) | (110) | (1) | 558 |
| Total Revenues and Transfers(5) | \$71,029 | $\underline{\$ 72,881}$ | \$78,035 | \$79,987 | \$83,468 |
| Expenditures and Transfers |  |  |  |  |  |
| Social Services | \$13,433 | \$13,473 | \$13,844 | \$13,801 | \$14,485 |
| Board of Education | 19,129 | 18,672 | 20,458 | 21,974 | 23,318 |
| City University | 802 | 853 | 904 | 956 | 1,067 |
| Public Safety and Judicial | 8,385 | 8,472 | 8,827 | 9,326 | 9,694 |
| Health Services | 1,856 | 1,622 | 1,708 | 2,667 | 2,233 |
| Pensions(6) | 8,054 | 8,141 | 8,490 | 9,171 | 9,281 |
| Debt Service(3)(7) | 6,333 | 4,798 | 7,421 | 5,874 | 5,890 |
| All Other(8) | 13,032 | 16,845 | 16,378 | 16,213 | 17,495 |
| Total Expenditures and Transfers(5) | \$71,024 | \$72,876 | \$78,030 | 79,982 | \$83,463 |
| Surplus(9) | \$ 5 | \$ 5 | \$ 5 | \$ 5 | \$ 5 |

[^5]
## Forecast of 2018 Results

The following table compares the forecast for the 2018 fiscal year contained in the financial plan, submitted to the Control Board in June 2017 (the "June 2017 Forecast"), with the forecast contained in the Financial Plan, which was submitted to the Control Board on June 14, 2018 (the "June 2018 Forecast"). Each forecast was prepared on a basis consistent with GAAP except for the application of GASB 49. For information regarding recent developments, see "Section II: Recent Financial Developments."

|  | $\begin{gathered} \text { June } \\ 2017 \\ \text { Forecast } \end{gathered}$ | $\begin{gathered} \text { June } \\ 2018 \\ \text { Forecast } \end{gathered}$ | Increase/(Decrease) from June 2017 Forecast |
| :---: | :---: | :---: | :---: |
|  |  | (In Milli | ons) |
| Revenues |  |  |  |
| Taxes |  |  |  |
| General Property Tax | \$25,812 | \$26,214 | \$ 402 ${ }^{(1)}$ |
| Other Taxes | 30,138 | 31,504 | 1,366 ${ }^{(2)}$ |
| Tax Audit Revenue | 850 | 1,299 | $449{ }^{(3)}$ |
| Subtotal - Taxes | \$56,800 | \$59,017 | \$ 2,217 |
| Miscellaneous Revenues | 6,488 | 7,206 | $718{ }^{(4)}$ |
| Less: Intra-City Revenues | $(1,815)$ | $(2,238)$ | (423) |
| Disallowances Against Categorical Grants | (15) | 85 | 100 |
| Subtotal - City Funds | \$61,458 | \$64,070 | \$ 2,612 |
| Other Categorical Grants | 880 | 1,072 | $192{ }^{(5)}$ |
| Inter-Fund Revenues | 671 | 637 | (34) |
| Federal Categorical Grants | 7,811 | 8,964 | 1,153(6) |
| State Categorical Grants | 14,419 | 14,854 | $435{ }^{(7)}$ |
| Total Revenues | \$85,239 | \$89,597 | \$ 4,358 |
| Expenditures |  |  |  |
| Personal Services |  |  |  |
| Salaries and Wages | \$27,250 | \$27,151 | \$ (99) |
| Pensions | 9,572 | 9,632 | 60 |
| Fringe Benefits | 10,111 | 10,008 | $(103){ }^{(8)}$ |
| Retiree Health Benefits Trust | - | 100 | $100^{(9)}$ |
| Total - Personal Services | \$46,933 | \$46,891 | \$ (42) |
| Other Than Personal Services |  |  |  |
| Medical Assistance | 5,915 | 5,915 | - |
| Public Assistance | 1,594 | 1,583 | (11) |
| All Other | 28,803 | 30,925 | $2,122^{(10)}$ |
| Total - Other Than Personal Services | \$36,312 | \$38,423 | \$ 2,111 |
| General Obligation, Lease and TFA Debt Service | 6,528 | 6,105 | $(423){ }^{(11)}$ |
| FY 2017 Budget Stabilization | $(4,169)$ | $(4,180)$ | (11) |
| FY 2018 Budget Stabilization | - | 4,576 | 4,576 ${ }^{(12)}$ |
| Capital Stabilization Reserve | 250 | - | $(250)^{(13)}$ |
| General Reserve | 1,200 | 20 | $(1,180)$ |
| Total Expenditures | \$87,054 | \$91,835 | \$ 4,781 |
| Less: Intra-City Expenses | $(1,815)$ | $(2,238)$ | (423) |
| Net Total Expenditures | \$85,239 | \$89,597 | \$ 4,358 |

(1) The increase in General Property Tax is from a reduction in the reserve for uncollectible taxes of $\$ 355$ million, a reduction in refunds of $\$ 17$ million, an increase in collections from the lien sale of $\$ 15$ million and an increase in collections from prior year delinquencies of $\$ 15$ million.
(2) The increase in Other Taxes is due to an increase of $\$ 1.519$ billion in personal income tax, $\$ 140$ million in mortgage recording tax, $\$ 128$ million in unincorporated business tax, $\$ 92$ million in sales tax, $\$ 38$ million in real property transfer tax, $\$ 14$ million in hotel tax, and $\$ 3$ million in all other taxes, offset by a decrease of $\$ 542$ million in general corporation tax, $\$ 13$ million in STAR program aid, $\$ 7$ million in utility tax and $\$ 6$ million in cigarette tax.
(3) The increase in Tax Audit Revenue is primarily from increases in banking corporation tax audit revenues of $\$ 400$ million and general corporation tax audit revenues of $\$ 49$ million.
(4) The increase in Miscellaneous Revenues is due to increases of $\$ 85$ million in fines and forfeitures, $\$ 53$ million in miscellaneous other revenues, $\$ 38$ million in permit revenues, $\$ 38$ million in charges for services, $\$ 26$ million in licenses, $\$ 19$ million in water and sewer charges, $\$ 14$ million in franchises, $\$ 12$ million in rental charges, $\$ 10$ million in interest income and $\$ 423$ million in intra-city revenues.
(5) The increase in Other Categorical Grants is due to increases of $\$ 71$ million in health and mental hygiene funding, $\$ 58$ million in miscellaneous agency funding, $\$ 32$ million in housing preservation and development funding, $\$ 19$ million in police department funding, $\$ 18$ million in parks department funding, $\$ 10$ million in information technology and telecommunications department funding, and $\$ 36$ million in other agencies funding offset by decreases of $\$ 15$ million in fire department funding and $\$ 37$ million in debt service funding.
(6) The increase in Federal Categorical Grants is due to increases of $\$ 323$ million in Community Development funding, primarily disaster recovery funding, $\$ 206$ million in police funding, $\$ 201$ million in homeless services funding, $\$ 59$ million in fire department funding, $\$ 49$ million in social services funding, $\$ 45$ million in transportation funding, $\$ 42$ million in housing preservation and development funding, $\$ 36$ million in education funding, $\$ 34$ million in youth and Community Development funding, $\$ 33$ million in health and mental hygiene funding, $\$ 25$ million in mayoral agency funding, $\$ 25$ million in small business services funding, $\$ 15$ million in children services funding, and $\$ 60$ million in other agencies funding.
(7) The increase in State Categorical Grants is due to increases of $\$ 83$ million in health and mental hygiene funding, $\$ 79$ million in miscellaneous agency funding, $\$ 70$ million in police funding, $\$ 66$ million in education funding, $\$ 44$ million in children services funding, $\$ 29$ million in homeless services funding, $\$ 16$ million in social services funding, $\$ 15$ million in district attorney funding, and $\$ 33$ million in other agencies funding.
(8) The reduction in Fringe Benefits is mainly due to baseline reductions in active and retiree health insurance expenses to reflect a lower estimate of the number of eligible actives and retirees.
(9) The increase in fiscal year 2018 Retiree Health Benefits Trust reflects a contribution of an additional $\$ 100$ million into its Retiree Health Benefits Trust in fiscal year 2018.
(10) The increase in Other Than Personal Services - All Other is primarily due to an increase of $\$ 1.312$ billion in budget modifications reflecting increases in federal and categorical expenditures which are offset by federal and categorical grants, and by a decrease of $\$ 3$ million in net agency spending.
(11) The decrease in General Obligation, Lease and TFA Debt Service is primarily due to lower actual interest rates on floating rate obligations.
(12) FY 2018 Budget Stabilization reflects the discretionary transfer of $\$ 1.902$ billion into the General Debt Service Fund, $\$ 300$ million into the Retiree Health Benefits Trust, payment of $\$ 200$ million of subsidies to NYCHH in fiscal year 2018 otherwise due in fiscal year 2019 and a grant of $\$ 2.174$ billion to the TFA in fiscal year 2018 for debt service due in fiscal year 2019.
(13) The decrease in the Capital Stabilization Reserve reflects the reallocation of such funds from fiscal year 2018 to fiscal year 2019.

## SECTION VII: FINANCIAL PLAN

The following table sets forth the City's projected operations on a basis consistent with GAAP, except for the application of GASB 49, for the 2018 through 2022 fiscal years as contained in the Financial Plan. This table should be read in conjunction with the accompanying notes, "Actions to Close the Remaining Gaps" and "Assumptions" below. For information regarding recent developments, see "Section II: Recent Financial Developments."

|  | Fiscal Years(1)(2) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2018 \text { (In } \frac{2019}{\text { Millions }}$ |  | $\underline{2020}$ | 2021 | 2022 |
|  |  |  |  |  |  |
| Revenues |  |  |  |  |  |
| Taxes |  |  |  |  |  |
| General Property Tax(3) | \$26,214 | \$27,789 | \$29,295 | \$30,711 | \$ 31,702 |
| Other Taxes(4) | 31,504 | 31,231 | 32,333 | 33,330 | 34,072 |
| Tax Audit Revenue | 1,299 | 1,056 | 721 | 721 | 721 |
| Subtotal - Taxes | \$59,017 | \$60,076 | \$62,349 | \$64,762 | \$ 66,495 |
| Miscellaneous Revenues(5) | 7,206 | 6,792 | 6,731 | 6,737 | 6,716 |
| Less: Intra-City Revenues | $(2,238)$ | $(1,825)$ | $(1,771)$ | $(1,776)$ | $(1,776)$ |
| Disallowances Against Categorical Grants | 85 | (15) | (15) | (15) | (15) |
| Subtotal - City Funds | \$64,070 | \$65,028 | \$67,294 | \$69,708 | \$ 71,420 |
| Other Categorical Grants | 1,072 | 880 | 872 | 867 | 861 |
| Inter-Fund Revenues(6) | 637 | 682 | 641 | 638 | 638 |
| Federal Categorical Grants | 8,964 | 7,592 | 7,129 | 7,108 | 7,092 |
| State Categorical Grants | 14,854 | 14,976 | 15,302 | 15,763 | 16,246 |
| Total Revenues | \$89,597 | \$89,158 | \$91,238 | \$94,084 | \$ 96,257 |
| Expenditures |  |  |  |  |  |
| Personal Services |  |  |  |  |  |
| Salaries and Wages | \$27,151 | \$28,746 | \$29,620 | \$30,368 | \$ 30,069 |
| Pension | 9,632 | 9,852 | 9,903 | 10,162 | 10,367 |
| Fringe Benefits | 10,008 | 10,737 | 11,643 | 12,414 | 13,094 |
| Retiree Health Benefits Trust | 100 | - | - | - | - |
| Subtotal - Personal Services | \$46,891 | \$49,335 | \$51,166 | \$52,944 | \$ 53,530 |
| Other Than Personal Services |  |  |  |  |  |
| Medical Assistance | 5,915 | 5,915 | 5,915 | 5,915 | 5,915 |
| Public Assistance | 1,583 | 1,605 | 1,617 | 1,617 | 1,617 |
| All Other(7) | 30,925 | 30,342 | 28,848 | 29,167 | 29,446 |
| Subtotal - Other Than Personal Services | \$38,423 | \$37,862 | \$36,380 | \$36,699 | \$ 36,978 |
| General Obligation, Lease and TFA Debt Service(8) | 6,105 | 6,987 | 7,473 | 7,856 | 8,560 |
| FY 2017 Budget Stabilization(9) . . . . . . . . . . . . . . | $(4,180)$ | - | - | - | - |
| FY 2018 Budget Stabilization(10) | 4,576 | $(4,576)$ | - | - | - |
| Capital Stabilization Reserve(11) | - | 250 | 250 | 250 | 250 |
| General Reserve . . . . . . . . . | 20 | 1,125 | 1,000 | 1,000 | 1,000 |
| Subtotal | \$91,835 | \$90,983 | \$96,269 | \$98,749 | \$100,318 |
| Less: Intra-City Expenses | $(2,238)$ | $\underline{(1,825)}$ | $(1,771)$ | $(1,776)$ | $(1,776)$ |
| Total Expenditures | \$89,597 | \$89,158 | \$94,498 | \$96,973 | \$ 98,542 |
| Gap to be Closed | \$ - | \$ - | \$(3,260) | \$ (2,889) | \$ (2,285) |

(1) The four year financial plan for the 2018 through 2021 fiscal years, as submitted to the Control Board on June 7, 2017, contained the following projections for the 2018-2021 fiscal years: (i) for 2018, total revenues of $\$ 85.239$ billion and total expenditures of $\$ 85.239$ billion; (ii) for 2019 , total revenues of $\$ 87.820$ billion and total expenditures of $\$ 91.293$ billion, with a gap to be closed of $\$ 3.473$ billion; (iii) for 2020 , total revenues of $\$ 90.941$ billion and total expenditures of $\$ 93.748$ billion, with a gap to be closed of $\$ 2.807$ billion; and (iv) for 2021 , total revenues of $\$ 93.614$ billion and total expenditures of $\$ 95.944$ billion, with a gap to be closed of $\$ 2.330$ billion.

The four year financial plan for the 2017 through 2020 fiscal years, as submitted to the Control Board on June 14, 2016, contained the following projections for the 2017-2020 fiscal years: (i) for 2017, total revenues of $\$ 82.116$ billion and total expenditures of $\$ 82.116$ billion; (ii) for 2018, total revenues of $\$ 84.456$ billion and total expenditures of $\$ 87.272$ billion, with a gap to be closed of $\$ 2.816$ billion; (iii) for 2019 , total revenues of $\$ 87.479$ billion and total expenditures of $\$ 90.454$ billion, with a gap to be closed of $\$ 2.945$ billion; and (iv) for 2020 , total revenues of $\$ 90.363$ billion and total expenditures of $\$ 92.689$ billion, with a gap to be closed of $\$ 2.326$ billion.

The four year financial plan for the 2016 through 2019 fiscal years, as submitted to the Control Board on June 26, 2015, contained the following projections for the 2016-2019 fiscal years: (i) for 2016, total revenues of $\$ 78.528$ billion and total expenditures of $\$ 78.528$ billion; (ii) for 2017, total revenues of $\$ 80.729$ billion and total expenditures of $\$ 82.194$ billion, with a gap to be closed of $\$ 1.465$ billion; (iii) for 2018 , total revenues of $\$ 82.699$ billion and total expenditures of $\$ 84.606$ billion, with a gap to be closed of $\$ 1.907$ billion; and (iv) for 2019 , total revenues of $\$ 85.015$ billion and total expenditures of $\$ 87.868$ billion, with a gap to be closed of $\$ 2.853$ billion.

The four year financial plan for the 2015 through 2018 fiscal years, as submitted to the Control Board on June 26, 2014, contained the following projections for the 2015-2018 fiscal years: (i) for 2015, total revenues of $\$ 75.027$ billion and total expenditures of $\$ 75.027$ billion; (ii) for 2016 , total revenues of $\$ 76.595$ billion and total expenditures of $\$ 79.220$ billion, with a gap to be closed of $\$ 2.625$ billion; (iii) for 2017, total revenues of $\$ 78.937$ billion and total expenditures of $\$ 80.808$ billion, with a gap to be closed of $\$ 1.871$ billion; and (iv) for 2018 , total revenues of $\$ 80.933$ billion and total expenditures of $\$ 84.026$ billion, with a gap to be closed of $\$ 3.093$ billion.
(2) The Financial Plan combines the operating revenues and expenditures of the City, the DOE and CUNY. The Financial Plan does not include the total operations of NYCHH, but does include the City's subsidy to NYCHH and the City's share of NYCHH revenues and expenditures related to NYCHH's role as a Medicaid provider. Certain Covered Organizations and PBCs which provide governmental services to the City, such as the Transit Authority, are separately constituted and their revenues, are not included in the Financial Plan; however, City subsidies and certain other payments to these organizations are included. Revenues and expenditures are presented net of intra-City items, which are revenues and expenditures arising from transactions between City agencies.
(3) For a description of the STAR Program, and other real estate tax assumptions, see "Section VII: Financial Plan-AssumptionsRevenue Assumptions-2. Real Estate Tax."
(4) Personal income taxes flow directly from the State to the TFA, and from the TFA to the City only to the extent not required by the TFA for debt service, reserves, operating expenses and contractual and other obligations incurred pursuant to the TFA indenture. Sales taxes will flow directly from the State to the TFA to the extent necessary to provide statutory coverage. Other Taxes includes amounts that are expected to be retained by the TFA for its funding requirements associated with TFA Future Tax Secured Bonds.
(5) Miscellaneous Revenues reflects the receipt by the City of TSRs not used by TSASC for debt service and other expenses. For information on TSASC, see "Section IV: Sources of City Revenues-Miscellaneous Revenues."
(6) Inter-Fund Revenues represents General Fund expenditures, properly includable in the Capital Budget, made on behalf of the Capital Projects Fund pursuant to inter-fund agreements.
(7) For a discussion of the categories of expenditures in Other Than Personal Services—All Other, see "Section VII: Financial Plan-Assumptions-Expenditure Assumptions-2. Other Than Personal Services Costs."
(8) For a discussion of the debt service in General Obligation, Lease and TFA Debt Service, see "Section VII: Financial Plan-Assumptions-Expenditure Assumptions-3. General Obligation, Lease and TFA Debt Service."
(9) FY 2017 Budget Stabilization reflects the discretionary transfer of $\$ 1.560$ billion into the General Debt Service Fund, $\$ 400$ million into the Retiree Health Benefits Trust, payments of $\$ 300$ million of subsidies to NYCHH in fiscal year 2017 otherwise due in fiscal year 2018, a grant of $\$ 1.909$ billion to the TFA in fiscal year 2017 for debt service due in fiscal year 2018 and a net equity contribution in bond refundings of $\$ 11$ million.
(10) FY 2018 Budget Stabilization reflects the discretionary transfer of $\$ 1.902$ billion into the General Debt Service Fund, $\$ 300$ million into the Retiree Health Benefits Trust, payment of $\$ 200$ million of subsidies to NYCHH in fiscal year 2018 otherwise due in fiscal year 2019 and a grant of $\$ 2.174$ billion to the TFA in fiscal year 2018 for debt service due in fiscal year 2019.
(11) The Capital Stabilization Reserve reflects a capital reserve which will be available to make capital projects more efficient or for debt retirement in an economic downturn.

Implementation of various measures in the Financial Plan may be uncertain. If these measures cannot be implemented, the City will be required to take actions to decrease expenditures or increase revenues to maintain a balanced financial plan. See "Assumptions" and "Certain Reports" below.

## Actions to Close the Remaining Gaps

Although the City has maintained balanced budgets in each of its last 37 fiscal years, except for the application of GASB 49 with respect to fiscal years 2010 through 2017, and is projected to achieve balanced operating results for the 2018 fiscal year, except for the application of GASB 49, there can be no assurance that the Financial Plan or future actions to close projected outyear gaps can be successfully implemented or that the City will maintain a balanced budget in future years without additional State aid, revenue increases or expenditure reductions. Additional tax increases and reductions in essential City services could adversely affect the City's economic base.

## Assumptions

The Financial Plan is based on numerous assumptions, including the condition of the City's and the region's economies and the concomitant receipt of economically sensitive tax revenues in the amounts projected. The Financial Plan is subject to various other uncertainties and contingencies relating to, among other factors, the extent, if any, to which wage increases for City employees exceed the annual wage costs assumed; realization of projected earnings for pension fund assets and current assumptions with respect to wages for City employees affecting the City's required pension fund contributions; the willingness and ability of the State to provide the aid contemplated by the Financial Plan and to take various other actions to assist the City; the ability of NYCHH and other such entities to maintain balanced budgets; the willingness of the federal government to provide the amount of federal aid contemplated in the Financial Plan; the impact on City revenues and expenditures of federal and State legislation affecting Medicare or other entitlement programs; adoption of the City's budgets by the City Council in substantially the forms submitted by the Mayor; the ability of the City to implement cost reduction initiatives, and the success with which the City controls expenditures; the impact of conditions in the real estate market on real estate tax revenues; and the ability of the City and other financing entities to market their securities successfully in the public credit markets. See "Section II: Recent Financial Developments." Certain of these assumptions are reviewed in reports issued by the City Comptroller and other public officials. See "Section VII: Financial Plan-Certain Reports."

The projections and assumptions contained in the Financial Plan are subject to revision, which may be substantial. No assurance can be given that these estimates and projections, which include actions the City expects will be taken but are not within the City's control, will be realized. For information regarding certain recent developments, see "Section II: Recent Financial Developments."

## Revenue Assumptions

## 1. General Economic Conditions

The Financial Plan assumes faster growth in economic activity in calendar year 2018 compared to calendar year 2017. The following table presents a forecast of the key economic indicators for the calendar years 2017 through 2022. This forecast is based upon information available in April 2018.

## Forecast of Key Economic Indicators

|  | Calendar Years |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| U.S. ECONOMY |  |  |  |  |  |  |
| Economic Activity and Income |  |  |  |  |  |  |
| Real GDP (billions of 2009 dollars) | 17,096 | 17,558 | 18,065 | 18,482 | 18,825 | 19,146 |
| Percent Change | 2.3 | 2.7 | 2.9 | 2.3 | 1.9 | 1.7 |
| Non-Agricultural Employment (millions) | 146.6 | 149.0 | 151.7 | 153.7 | 155.0 | 155.8 |
| Percent Change | 1.6 | 1.6 | 1.8 | 1.3 | 0.8 | 0.5 |
| CPI-All Urban (1982-84=100) | 245 | 251 | 255 | 262 | 268 | 275 |
| Percent Change | 2.1 | 2.2 | 1.7 | 2.7 | 2.5 | 2.4 |
| Wage Rate (\$ per year) | 56,955 | 58,539 | 60,472 | 62,828 | 65,529 | 68,337 |
| Percent Change | 1.7 | 2.8 | 3.3 | 3.9 | 4.3 | 4.3 |
| Personal Income (\$ billions) | 16,427 | 17,109 | 18,043 | 19,020 | 19,990 | 20,922 |
| Percent Change | 3.1 | 4.1 | 5.5 | 5.4 | 5.1 | 4.7 |
| Pre-Tax Corp Profits (\$ billions) | 2,248 | 2,275 | 2,378 | 2,479 | 2,538 | 2,622 |
| Percent Change | 4.1 | 1.2 | 4.6 | 4.2 | 2.4 | 3.3 |
| Unemployment Rate (Percent) | 4.4 | 3.9 | 3.5 | 3.5 | 3.5 | 3.6 |
| 10-Year Treasury Bond Rate | 2.3 | 3.1 | 3.8 | 3.9 | 4.0 | 3.9 |
| Federal Funds Rate | 1.0 | 1.8 | 2.8 | 3.3 | 3.4 | 3.5 |
| New York City Economy |  |  |  |  |  |  |
| Real Gross City Product (billions of 2009 dollars) | 784 | 806 | 819 | 830 | 836 | 839 |
| Percent Change | 4.5 | 2.8 | 1.7 | 1.3 | 0.7 | 0.4 |
| Non-Agricultural Employment (thousands) | 4,427 | 4,487 | 4,540 | 4,592 | 4,642 | 4,678 |
| Percent Change | 1.9 | 1.3 | 1.2 | 1.1 | 1.1 | 0.8 |
| CPI-All Urban NY-NJ Area (1982-84=100) | 269 | 274 | 279 | 287 | 294 | 301 |
| Percent Change | 2.0 | 1.9 | 2.0 | 2.7 | 2.5 | 2.4 |
| Wage Rate (\$ per year) | 89,190 | 92,023 | 94,753 | 97,406 | 100,230 | 103,058 |
| Percent Change | 3.7 | 3.2 | 3.0 | 2.8 | 2.9 | 2.8 |
| Personal Income (\$ billions) | 568 | 591 | 617 | 644 | 670 | 695 |
| Percent Change | 3.7 | 4.1 | 4.5 | 4.3 | 4.1 | 3.7 |
| New York Real Estate Market |  |  |  |  |  |  |
| Manhattan Primary Office Market |  |  |  |  |  |  |
| Asking Rental Rate (\$ per square foot) | 79.05 | 77.71 | 81.03 | 83.21 | 84.92 | 86.53 |
| Percent Change | 0.8 | -1.7 | 4.3 | 2.7 | 2.1 | 1.9 |
| Vacancy Rate - Percent | 9.1 | 10.1 | 11.9 | 11.9 | 12.1 | 13.3 |

Source: OMB.

## 2. Real Estate Tax

Projections of real estate tax revenues are based on a number of assumptions, including, among others, assumptions relating to the tax rate, the assessed valuation of the City's taxable real estate, the delinquency rate, debt service needs, a reserve for uncollectible taxes and the operating limit. See "Section IV: Sources of City Revenues-Real Estate Tax."

Projections of real estate tax revenues include net revenues from the sale of real property tax liens of $\$ 95$ million in fiscal year 2018 and $\$ 80$ million in each of fiscal years 2019 through 2022. Projections of real estate tax revenues include the effects of the STAR Program which will reduce the real estate tax revenues by an estimated $\$ 189$ million in fiscal year 2018. Projections of real estate tax revenues reflect the estimated cost of extending the current tax reduction for owners of cooperative and condominium apartments amounting to $\$ 528$ million, $\$ 546$ million, $\$ 577$ million, $\$ 606$ million and $\$ 631$ million in fiscal years 2018 through 2022, respectively.

The delinquency rate was $1.5 \%$ in fiscal year 2013, $1.4 \%$ in fiscal year 2014, $1.6 \%$ in fiscal year 2015, $1.4 \%$ in fiscal year 2016 and $1.3 \%$ in fiscal year 2017. The Financial Plan projects delinquency rates of $1.3 \%$ in fiscal year 2018, $1.6 \%$ in fiscal year 2019 and $1.8 \%$ in each of fiscal year 2020 and 2021, respectively, and $1.9 \%$ in fiscal year 2022. For information concerning the delinquency rates for prior years, see "Section IV: Sources of City Revenues—Real Estate Tax—Collection of the Real Estate Tax." For a description of proceedings seeking real estate tax refunds from the City, see "Section X: Other Information—Litigation—Taxes."

On April 24, 2017, a lawsuit was filed challenging the City's real property tax system and valuation methodology. See "Section X: Other Information-Litigation-Taxes."

## 3. Other Taxes

The following table sets forth amounts of revenues (net of refunds) from taxes other than the real estate tax projected to be received by the City in the Financial Plan. The amounts set forth below exclude the Criminal Justice Fund and audit revenues.

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| Personal Income(1) | \$13,360 | \$12,378 | \$12,969 | \$13,390 | \$13,722 |
| General Corporation | 3,348 | 3,593 | 3,606 | 3,640 | 3,604 |
| Unincorporated Business Income | 2,265 | 2,271 | 2,372 | 2,468 | 2,490 |
| Sales(2) | 7,411 | 7,762 | 8,167 | 8,491 | 8,779 |
| Commercial Rent | 848 | 867 | 893 | 916 | 949 |
| Real Property Transfer | 1,402 | 1,459 | 1,435 | 1,485 | 1,532 |
| Mortgage Recording | 1,074 | 938 | 924 | 952 | 979 |
| Utility | 375 | 387 | 396 | 410 | 421 |
| Cigarette | 36 | 35 | 34 | 33 | 32 |
| Hotel(3) | 584 | 606 | 605 | 615 | 630 |
| All Other(4) | 801 | 935 | 932 | 930 | 934 |
| Total | \$31,504 | \$31,231 | \$32,333 | \$33,330 | \$34,072 |

[^6]The Financial Plan reflects the following assumptions regarding projected baseline revenues from Other Taxes: (i) with respect to the personal income tax, high growth in fiscal year 2018 reflecting the impact of changes in State law, stronger than expected bonus growth, and continued employment and wage gains, revenue declines in fiscal year 2019 reflecting a return to more typical levels, and growth in fiscal years 2020 through 2022 reflecting steady economic growth; (ii) with respect to the business corporation tax, a decline in growth in fiscal year 2018 resulting from lower than expected collections through April, rebounding growth in fiscal year 2019 supported by increasing corporate profits and high levels of Wall Street profitability, and weak and/or
nearly flat growth for fiscal years 2020 through 2022 reflecting a slowdown in corporate profits; (iii) with respect to the unincorporated business tax, strong growth in fiscal year 2018 reflecting the continued high levels of hedge funds assets under management and a positive business environment, nearly flat growth in fiscal year 2019 reflecting the continued healthy levels of tax payments in both the finance and non-finance sectors, and trend growth for fiscal year 2020 through fiscal year 2022 reflecting steady economic growth; (iv) with respect to the sales tax, moderate growth in fiscal year 2018 reflecting employment and wage growth reduced by the payment to the State of $\$ 200$ million in sales tax otherwise payable to the City in order to provide the State with the benefit of savings from the refinancing of debt by STAR Corp., moderate growth in fiscal year 2019 reflecting employment gains and wage growth reduced by the payment to the State of $\$ 150$ million in sales tax otherwise payable to the City in order to provide the State with the benefit of savings from the refinancing of debt by STAR Corp., and moderate growth in fiscal years 2020 through 2022 reflecting employment gains and wage growth as well as continued healthy levels of tourist consumption; (v) with respect to the real property transfer tax, a slight decline in fiscal year 2018, as the volume of large commercial transactions drops from the high levels seen in the prior years and returning growth in fiscal years 2019 through 2022 reflecting steady economic growth; (vi) with respect to the mortgage recording tax, declines in fiscal years 2018 through 2020 as the volume of large commercial transactions drops from the high levels seen in the prior years and the commercial loan refinancing activity wanes, and growth in fiscal years 2021 through 2022 reflecting steady economic growth; and (vii) with respect to the commercial rent tax, growth in fiscal year 2018 reflecting employment gains and slower growth in fiscal year 2019 reflecting a recently enacted tax program that increased the base rent subject to tax providing relief for taxpayers and growth in fiscal years 2020 through 2022, as the local office market improves with employment gains.

## 4. Miscellaneous Revenues

The following table sets forth amounts of miscellaneous revenues projected to be received by the City in the Financial Plan.

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (In Millions) |  |  |  |  |
| Licenses, Permits and Franchises | \$ 752 | \$ 689 | \$ 719 | \$ 716 | \$ 725 |
| Interest Income | 120 | 190 | 252 | 282 | 284 |
| Charges for Services | 1,027 | 1,005 | 1,007 | 1,006 | 1,006 |
| Water and Sewer Payments (1) | 1,421 | 1,452 | 1,449 | 1,436 | 1,416 |
| Rental Income | 263 | 254 | 251 | 250 | 250 |
| Fines and Forfeitures | 999 | 943 | 938 | 928 | 917 |
| Other | 386 | 434 | 344 | 343 | 342 |
| Intra-City Revenues | 2,238 | 1,825 | 1,771 | 1,776 | 1,776 |
|  | \$7,206 | \$6,792 | \$6,731 | \$6,737 | \$6,716 |

[^7]Rental Income reflects approximately $\$ 153.6$ million in each of fiscal years 2018 through 2022 for lease payments for the City's airports.

Other reflects $\$ 108.6$ million, $\$ 112.0$ million, $\$ 128.3$ million, $\$ 127.8$ million and $\$ 127.5$ million of projected resources in fiscal years 2018 through 2022, respectively, from the receipt by the City of TSRs. For more information, see "Section IV: Sources of City Revenues-Miscellaneous Revenues." Economic and legal uncertainties relating to the tobacco industry and the settlement may significantly affect the receipt of TSRs by TSASC and the City.

## 5. Federal and State Categorical Grants

The following table sets forth amounts of federal and State categorical grants projected to be received by the City in the Financial Plan.

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| Federal |  |  |  |  |  |
| Community Development | \$ 1,333 | \$ 591 | \$ 304 | \$ 280 | \$ 274 |
| Social Services | 3,818 | 3,605 | 3,473 | 3,481 | 3,481 |
| Education | 1,825 | 1,944 | 2,042 | 2,044 | 2,044 |
| Other | 1,988 | 1,452 | 1,310 | 1,303 | 1,293 |
| Total | \$ 8,964 | \$ 7,592 | \$ 7,129 | \$ 7,108 | \$ 7,092 |
| State |  |  |  |  |  |
| Social Services | \$ 1,822 | \$ 1,781 | \$ 1,796 | \$ 1,803 | \$ 1,795 |
| Education | 10,749 | 11,108 | 11,419 | 11,851 | 12,291 |
| Higher Education | 297 | 297 | 297 | 297 | 297 |
| Health and Mental Hygiene | 631 | 549 | 545 | 529 | 529 |
| Other | 1,355 | 1,241 | 1,245 | 1,283 | 1,334 |
| Total | \$14,854 | \$14,976 | \$15,302 | \$15,763 | \$16,246 |

The Financial Plan assumes that all existing federal and State categorical grant programs will continue, unless specific legislation provides for their termination or adjustment, and assumes increases in aid where increased costs are projected for existing grant programs. For information concerning federal and State aid and the possible impacts on the Financial Plan, see "Introductory Statement" and "Section II: Recent Financial Developments."

As of August 31, 2018, approximately $15.4 \%$ of the City's full-time and full-time equivalent employees (consisting of employees of the mayoral agencies and the DOE) were paid by Community Development funds, water and sewer funds and from other sources not funded by unrestricted revenues of the City.

A major component of federal categorical aid to the City is the Community Development program. Pursuant to federal legislation, Community Development grants are provided to cities primarily to aid low and moderate income persons by improving housing facilities, parks and other improvements, by providing certain social programs and by promoting economic development. These grants are based on a formula that takes into consideration such factors as population, age of housing and poverty.

The City's receipt of categorical aid is contingent upon the satisfaction of certain statutory conditions and is subject to subsequent audits, possible disallowances and possible prior claims by the State or federal governments. The general practice of the State and federal governments has been to deduct the amount of any disallowances against the current year's payment, although in some cases the City remits payment for disallowed amounts to the grantor. Substantial disallowances of aid claims may be asserted during the course of the Financial Plan. The City estimates probable amounts of disallowances of recognized grant revenues and makes the appropriate adjustments to recognized grant revenue for each fiscal year. The amounts of such downward adjustments to revenue for disallowances attributable to prior years increased from $\$ 124$ million in the 1977 fiscal year to $\$ 542$ million in the 2006 fiscal year. The amounts of such disallowances were $\$ 103$ million and $\$ 114$ million in fiscal years 2007 and 2008, respectively. There were no adjustments for estimated disallowances in fiscal years 2009 and 2010. In fiscal year 2011 the downward adjustment for disallowances was $\$ 113$ million and in fiscal year 2012 an upward adjustment of $\$ 166$ million was made, reflecting a reduced estimate of disallowances attributable to prior years as of June 30, 2012. In fiscal years 2013, 2014, 2015, 2016 and 2017 downward adjustments of $\$ 59$ million, $\$ 18$ million, $\$ 110$ million, $\$ 1$ million and $\$ 558$ million, respectively, were made. As of June 30, 2017, the City had an accumulated reserve of $\$ 553$ billion for all disallowances of categorical aid.

## Expenditure Assumptions

## 1. Personal Services Costs

The following table sets forth projected expenditures for personal services costs contained in the Financial Plan.

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| Wages and Salaries | \$27,089 | \$27,302 | \$27,835 | \$28,110 | \$28,371 |
| Pensions | 9,632 | 9,852 | 9,903 | 10,162 | 10,367 |
| Other Fringe Benefits | 10,008 | 10,737 | 11,643 | 12,414 | 13,094 |
| Retiree Health Benefits Trust | 100 | - | - | - | - |
| Reserve for Collective Bargaining | 62 | 1,444 | 1,785 | 2,258 | 1,698 |
| Total | \$46,891 | \$49,335 | \$51,166 | \$52,944 | \$53,530 |

The Financial Plan projects that the authorized number of City-funded full-time and full-time equivalent employees will increase from an estimated level of 278,440 as of June 30, 2018 to an estimated level of 281,449 by June 30, 2022.

Other Fringe Benefits includes $\$ 2.405$ billion, $\$ 2.503$ billion, $\$ 2.661$ billion, $\$ 2.832$ billion and $\$ 2.975$ billion in fiscal years 2018 through 2022, respectively, for post-employment benefits other than pensions ("OPEB") expenditures for current retirees, which costs are currently paid by the City on a pay-as-you-go basis. For information on deposits to the Retiree Health Benefits Trust to fund a portion of the future cost of OPEB for current and future retirees, see "Section VI: Financial Operations-2013-2017 Summary of Operations."

The City has now reached settlements with all of its uniformed unions and over $99 \%$ of its workforce through the 2010-2017 round of collective bargaining. The Financial Plan reflects funding to cover the cost of settling the remaining unsettled unions through the 2010-2017 round of collective bargaining based on the pattern set by the settled contracts. Certain contracts with unions for the 2010-2017 round of collective bargaining, including with DC 37 and the PBA, representing approximately $50 \%$ of the City's workforce, have expired. Nearly all remaining contracts will have expired by the end of fiscal year 2019. Negotiations with municipal unions concerning the next round of contracts are ongoing. The PBA has already filed for arbitration with the City over new contract terms. The Financial Plan includes a reserve for collective bargaining containing funding for the period beyond the 2010-2017 round of collective bargaining, assumed to be $1 \%$ per year. The Financial Plan does not reflect a contract settlement with DC 37 (representing approximately $25 \%$ of the City's workforce) ratified on August 14, 2018, or a tentative settlement with the UFT, announced on October 11, 2018, which is consistent with the DC 37 Settlement. The DC 37 Settlement covers the period from September 26, 2017 through May 25, 2021. Such settlement provides for a retroactive increase of $2 \%$ effective September 26, 2017, followed by increases of $2.25 \%$ effective September 26, 2018 and 3\% effective October 26, 2019. Such settlements also include health insurance savings as part of a new MLC agreement, in addition to those previously agreed upon, which are contractually enforceable through arbitration. See "Section II: Recent Financial Developments."

The amounts in the Financial Plan reflect the offsets from health insurance savings of $\$ 1.3$ billion in fiscal year 2018 and thereafter. The City achieved \$1 billion of health insurance savings in fiscal year 2017. These savings are pursuant to a collective bargaining agreement between the City and the MLC. The City has the right to enforce the agreement through a binding arbitration process. If total health insurance savings through fiscal year 2018 are greater than $\$ 3.4$ billion, the first $\$ 365$ million of such additional savings is payable to union members as a one-time bonus or may be used for other purposes subject to negotiation. Any additional savings beyond such $\$ 365$ million is to be divided equally between the City and the unions.

For a discussion of the City's pension systems, see "Section IX: Pension Systems and OPEB" and "Appendix B-Financial Statements—Notes to Financial Statements—Note E.5."

## 2. Other Than Personal Services Costs

The following table sets forth projected other than personal services ("OTPS") expenditures contained in the Financial Plan.

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| Administrative OTPS and Energy | \$25,654 | \$24,806 | \$23,596 | \$23,854 | \$24,059 |
| Public Assistance | 1,583 | 1,605 | 1,617 | 1,617 | 1,617 |
| Medical Assistance | 5,915 | 5,915 | 5,915 | 5,915 | 5,915 |
| NYCHH Support | 969 | 918 | 919 | 920 | 920 |
| Other | 4,302 | 4,618 | 4,333 | 4,393 | 4,467 |
| Total | \$38,423 | \$37,862 | \$36,380 | \$36,699 | \$36,978 |

## Administrative OTPS and Energy

The Financial Plan contains estimates of the City's administrative OTPS expenditures for general supplies and materials, equipment and selected contractual services, and the impact of agency gap-closing actions relating to such expenditures in the 2018 fiscal year. Thereafter, to account for inflation, administrative OTPS expenditures are projected to rise by $2.5 \%$ annually in fiscal years 2019 through 2022. Energy costs for each of the 2018 through 2022 fiscal years are assumed to vary annually, with total energy expenditures projected at $\$ 907$ million in fiscal year 2018 and increasing to $\$ 974$ million by fiscal year 2022.

## Public Assistance

Of total cash assistance expenditures in the City, the City-funded portion is projected to be $\$ 699$ million, $\$ 713$ million in fiscal years 2018 and 2019, respectively, and $\$ 719$ million in each of fiscal years 2020 through 2022.

## Medical Assistance

Medical assistance payments projected in the Financial Plan consist of payments to voluntary hospitals, skilled nursing facilities, intermediate care facilities, home care providers, pharmacies, managed care organizations, physicians and other medical practitioners. The City-funded portion of medical assistance payments is estimated at $\$ 5.8$ billion for the 2018 fiscal year.

The City-funded portion of medical assistance payments is expected to be $\$ 5.8$ billion in each of fiscal years 2019 through 2022. Such payments include the City's capped share of local Medicaid expenditures as well as Supplemental Medicaid payments to NYCHH.

## New York City Health and Hospitals

NYCHH, which provides essential services to over 1.1 million New Yorkers annually, faces near- and long-term financial challenges resulting from, among other things, changes in hospital reimbursement under the Affordable Care Act and the statewide transition to managed care. On April 26, 2016, the City released "One New York: Health Care for Our Neighborhoods," a report outlining the City's plan to address NYCHH's financial shortfall.

In May 2018, NYCHH released a cash-based financial plan, which projected City-funded expenditures of $\$ 666$ million, $\$ 917$ million, $\$ 919$ million, $\$ 920$ million and $\$ 920$ million in fiscal years 2018 through 2022, respectively, in addition to the forgiveness of debt service and the City's contribution to supplemental Medicaid payments which is consistent with the City's Financial Plan. NYCHH's financial plan projected, before implementation of a gap closing program, total receipts of $\$ 7.6$ billion, $\$ 7.1$ billion, $\$ 6.8$ billion, $\$ 6.6$ billion and $\$ 6.6$ billion and total disbursements of $\$ 8.5$ billion, $\$ 8.2$ billion, $\$ 8.4$ billion, $\$ 8.3$ billion, and $\$ 8.4$ billion in fiscal years 2018 through 2022, respectively, resulting in projected operating gaps of $\$ 900$ million, $\$ 1.1$ billion, $\$ 1.6$ billion, $\$ 1.7$ billion and $\$ 1.8$ billion in those respective fiscal years. The financial plan also projects gap-
closing initiatives that both generate revenue and reduce expenses. Revenue-generating initiatives total $\$ 617$ million, $\$ 628$ million, $\$ 890$ million, $\$ 1.0$ billion, and $\$ 1.0$ billion and expense-reducing initiatives total $\$ 345$ million, $\$ 430$ million, $\$ 530$ million, $\$ 585$ million and $\$ 585$ million in fiscal years 2018 through 2022, respectively.

NYCHH relies on significant projected revenue from Medicaid, Medicare and other third-party payor programs. Future changes to such programs could have adverse impacts on NYCHH's financial condition.

## Other

The projections set forth in the Financial Plan for OTPS-Other include the City's contributions to NYCT, NYCHA and CUNY and subsidies to libraries and various cultural institutions. They also include projections for the cost of future judgments and claims which are discussed below under "Judgments and Claims." In the past, the City has provided additional assistance to certain Covered Organizations which had exhausted their financial resources prior to the end of the fiscal year. No assurance can be given that similar additional assistance will not be required in the future.

## New York City Transit

NYCT operates under its own section of the Financial Plan as a Covered Organization. The financial plan for NYCT covering its 2018 through 2022 fiscal years was prepared in July 2018. The NYCT fiscal year coincides with the calendar year. The NYCT financial plan projects City assistance to the NYCT operating budget of $\$ 623.4$ million in 2018, decreasing to $\$ 394.3$ million in 2022; 2018 assistance includes $\$ 254.0$ million in City funding for the Subway Action Plan, the MTA's emergency plan to address subway delays, which will be funded through a separate revenue stream starting in 2019. In addition, the financial plan projects, real estate transfer tax revenue dedicated for NYCT use of $\$ 647.5$ million in 2018, increasing to $\$ 651.9$ million in 2022.

The NYCT financial plan includes a reforecast of baseline revenue reflecting ridership trends, recognition of a full commitment in funding for the Subway Action Plan, initial funding for the Bus Plan, the MTA's plan to overhaul and improve bus service across the five boroughs, and operating budget impacts from the Canarsie Tunnel reconstruction. After reflecting such revenues and changes, the NYCT accrual-based financial plan projects $\$ 10.7$ billion in revenues and $\$ 14.1$ billion in expenses for 2018, leaving a budget gap of $\$ 3.4$ billion. After accounting for accrual adjustments and cash carried over from 2017, NYCT projects accrual-based operating budget gaps of $\$ 140.7$ million in 2018, $\$ 518.0$ million in 2019, $\$ 1.2$ billion in 2020, $\$ 2.1$ billion in 2021, and $\$ 3.3$ billion in 2022.

In 2009, a Payroll Mobility Tax ("PMT") was enacted into State law to provide $\$ 0.34$ for every $\$ 100$ of payroll in the MTA's twelve-county service area. The PMT is currently expected to raise revenues for the MTA in the amount of $\$ 728.0$ million in 2018, increasing to $\$ 958.1$ million in 2022.

In September 2014, the MTA proposed the 2015-2019 Capital Program. The proposed plan included $\$ 32.0$ billion for all MTA agencies, including $\$ 17.1$ billion to be invested in the NYCT core system, and $\$ 1.5$ billion for NYCT network expansion. On October 2, 2014, the Capital Program Review Board ("CPRB") vetoed the proposed program without prejudice to permit additional time to resolve issues related to fully funding the program. On October 28, 2015, the MTA Board voted on and approved a revised 2015-2019 Capital Program. The revised plan included $\$ 29.0$ billion for all MTA agencies, including $\$ 15.8$ billion to be invested in the NYCT core system and $\$ 535.0$ million for NYCT network expansion. On April 20, 2016, the MTA Board voted on and approved another revised 2015-2019 Capital Program, which included $\$ 29.5$ billion for all MTA agencies, including $\$ 15.8$ billion to be invested in the NYCT core system and $\$ 1.0$ billion for NYCT network expansion. The additional City capital funding will be provided concurrently with the additional State capital funding. On May 24, 2017, the MTA Board voted on and approved a revised 2015-2019 Capital Program. The revised plan includes $\$ 32.5$ billion for all MTA agencies, including $\$ 16.3$ billion to be invested in the NYCT core system and $\$ 1.7$ billion for NYCT network expansion. This amendment was approved by the CPRB in July 2017. On December 13, 2017 the MTA Board
voted on and approved a further revised 2015-2019 Capital Program. The revised plan includes $\$ 32.8$ billion for all MTA agencies, including $\$ 16.7$ billion to be invested in the NYCT core system and $\$ 1.7$ billion for NYCT network expansion. This amendment was not subject to CPRB approval. The 2015-2019 Capital Program expects $\$ 8.5$ billion from the State. On April 25, 2018 the MTA Board voted on and approved a further revised 2015-2019 Capital Program. The revised plan includes $\$ 33.3$ billion for all MTA agencies, including $\$ 16.7$ billion to be invested in the NYCT core system and $\$ 1.7$ billion for NYCT network expansion. This amendment was approved by the CPRB in May 2018.

The State has agreed to contribute $\$ 8.6$ billion towards the 2015-2019 Capital Program, which has not yet been fully reflected in the State's capital plan. The City has agreed to contribute $\$ 2.7$ billion (which has not yet been fully reflected in the City's capital plan), including $\$ 164.0$ million for the Subway Action Plan. The additional City capital funding will be provided concurrently with the additional State capital funding.

On June 29, 2017 Governor Cuomo announced the State would be increasing its contribution to the 20152019 Capital Program by $\$ 1.0$ billion and signed an Executive Order declaring a State-wide disaster emergency related to the MTA. The Order temporarily suspends provisions of Public Authority, State Finance, and Environmental Conservation Laws if compliance "would prevent, hinder or delay action necessary to cope with the disaster." The Governor has not provided additional details or identified additional funding for the $\$ 1.0$ billion.

Various actions have been taken to increase funding to the MTA for NYCT. The State Enacted Budget, adopted on March 30, 2018, includes a requirement for the City to provide payments totaling an additional $\$ 418.0$ million to the MTA through calendar year 2018 to fund the Subway Action Plan described above, which is reflected in the Financial Plan, including $\$ 164.0$ million in capital funding, as discussed above, and $\$ 254.0$ million in expense funding. The State Enacted Budget also imposes an additional surcharge, starting in January 2019, on forhire vehicles and taxis traveling below $96^{\text {th }}$ Street in Manhattan, to be used to fund the Subway Action Plan and other MTA projects.

## Department of Education

State law requires the City to provide City funds for the DOE each year in an amount not less than the amount appropriated for the preceding fiscal year, excluding amounts for debt service and pensions for the DOE. Such City funding must be maintained, unless total City funds for the fiscal year are estimated to be lower than in the preceding fiscal year, in which case the mandated City funding for the DOE may be reduced by an amount up to the percentage reduction in total City funds.

## Judgments and Claims

In the fiscal year ended on June 30, 2017, the City expended $\$ 750.3$ million for judgments and claims. The Financial Plan includes provisions for judgments and claims of $\$ 711.6$ million, $\$ 697.0$ million, $\$ 711.9$ million, $\$ 727.1$ million and $\$ 742.3$ million for the 2018 through 2022 fiscal years, respectively. These projections incorporate a substantial amount of claims costs attributed to NYCHH, estimated to be $\$ 140$ million in each year of the Financial Plan, for which NYCHH reimburses the City unless otherwise forgiven by the City, which was the case in fiscal years 2013 and 2016. The City is a party to numerous lawsuits and is the subject of numerous claims and investigations. The City has estimated that its potential future liability on account of outstanding claims against it as of June 30, 2017 amounted to approximately $\$ 6.9$ billion. This estimate was made by categorizing the various claims and applying a statistical model, based primarily on actual settlements by type of claim during the preceding ten fiscal years, and by supplementing the estimated liability with information supplied by the City's Corporation Counsel. For further information regarding certain of these claims, see "Section X: Other Information-Litigation."

In addition to the above claims, numerous real estate tax certiorari proceedings involving allegations of inequality of assessment, illegality and overvaluation are currently pending against the City. The City's Financial Statements for the fiscal year ended June 30, 2017 include an estimate that the City's liability in the certiorari proceedings, as of June 30, 2017, could amount to approximately $\$ 1,073$ million. Provision has been made in the Financial Plan for estimated refunds of $\$ 383$ million in fiscal year 2018 and $\$ 400$ million in fiscal years 2019
through 2022, respectively. For further information concerning these claims, certain remedial legislation related thereto and the City's estimates of potential liability, see "Section X: Other Information-LitigationTaxes" and "Appendix B-Financial Statements-Notes to Financial Statements—Note D.5."

## 3. General Obligation, Lease and TFA Debt Service

Debt service estimates for fiscal years 2018 through 2022 include debt service on outstanding general obligation bonds and conduit debt, and the funding requirements associated with outstanding TFA Future Tax Secured Bonds, and estimates of debt service costs of, or funding requirements associated with, future general obligation, conduit and TFA Future Tax Secured debt issuances based on projected future market conditions. Such debt service estimates also include estimated payments pursuant to interest rate exchange agreements but do not reflect receipts pursuant to such agreements.

In July 2009, the State amended the New York City Transitional Finance Authority Act to expand the borrowing capacity of the TFA by providing that it may have outstanding $\$ 13.5$ billion of Future Tax Secured Bonds (excluding Recovery Bonds) and may issue additional Future Tax Secured Bonds provided that the amount of such additional bonds, together with the amount of indebtedness contracted by the City, does not exceed the debt limit of the City. The City currently expects to continue to finance approximately half of its capital program through the TFA, exclusive of Department of Environmental Protection capital budget items financed by the Water Authority.

The Financial Plan reflects general obligation debt service of $\$ 3.80$ billion, $\$ 3.99$ billion, $\$ 4.25$ billion, $\$ 4.39$ billion and $\$ 4.73$ billion in fiscal years 2018 through 2022, respectively, conduit debt service of $\$ 213$ million, $\$ 148$ million, $\$ 150$ million, $\$ 150$ million and $\$ 149$ million in fiscal years 2018 through 2022, respectively, and TFA debt service of $\$ 2.10$ billion, $\$ 2.85$ billion, $\$ 3.07$ billion, $\$ 3.32$ billion and $\$ 3.68$ billion in fiscal years 2018 through 2022 , respectively, in each case prior to giving effect to prepayments, defeasances and redemptions. Such debt service requirements are projected to be below $15 \%$ of projected City tax revenues for each year of the Financial Plan.

## Certain Reports

On July 25, 2018, the City Comptroller released a report entitled "Comments on New York City's Fiscal Year 2019 Adopted Budget." In the report, the City Comptroller projects net additional resources of $\$ 151$ million in fiscal year 2019 and net risks of $\$ 920$ million, $\$ 949$ million and $\$ 1.13$ billion in fiscal years 2020 through 2022, respectively, which, when added to the results projected in the Financial Plan, would result in a surplus of approximately $\$ 151$ million in fiscal year 2019 and gaps of approximately $\$ 4.18$ billion, $\$ 3.84$ billion and $\$ 3.42$ billion in fiscal years 2020 through 2022, respectively.

The differences from the Financial Plan projections result in part from the City Comptroller's net expenditure projections, which are higher than the Financial Plan projections by $\$ 473$ million, $\$ 1.15$ billion, $\$ 1.48$ billion and $\$ 2.04$ billion in fiscal years 2019 through 2022, respectively, as a result of: (i) additional overtime expenditures of $\$ 153$ million in fiscal year 2019 and $\$ 150$ million in each of fiscal years 2020 through 2022; (ii) increased expenditures associated with increases in charter school tuition rates of $\$ 119$ million, $\$ 281$ million and $\$ 478$ million in fiscal years 2020 through 2022, respectively; (iii) uncertainty of federal Medicaid reimbursement for special education services of $\$ 50$ million in each of fiscal years 2019 through 2022; (iv) increased expenditures associated with payments to parents who legally seek reimbursement for placing special needs children in non-public schools of $\$ 60$ million in each of fiscal years 2019 through 2022; (v) increased homeless shelter operation expenditures of $\$ 33$ million in fiscal year 2019 and $\$ 42$ million in each of fiscal years 2020 through 2022; (vi) increased expenditures to support NYCHH of $\$ 165$ million in each of fiscal years 2020 through 2022; and (vii) increased costs as a result of collective bargaining settlements and future pattern settlements of $\$ 227$ million, $\$ 704$ million, $\$ 929$ million and $\$ 1.34$ billion in fiscal years 2019 through 2022, respectively. The report also projects (i) anticipated savings of $\$ 38$ million in each of fiscal years 2020 through 2022 due to expanded participation in the federal Community Eligibility Provision school food program; (ii) anticipated debt service savings from low interest rates on variable rate bonds of $\$ 50$ million in each of fiscal years 2019 through 2022; and (iii) lower estimates for pension contributions of $\$ 54$ million,
\$108 million and $\$ 162$ million in fiscal years 2020 through 2022, respectively, resulting from fiscal year 2018 pension investment earnings above the actuarial interest rate assumption.

The differences from the Financial Plan projections also result from the City Comptroller's net revenue projections, which are higher than the Financial Plan projections by $\$ 624$ million, $\$ 228$ million, $\$ 532$ million and $\$ 909$ million in fiscal years 2019 through 2022, respectively. The report identifies certain risks and offsets to projected revenues: (i) property tax revenues are projected to be higher by $\$ 76$ million, $\$ 303$ million, $\$ 785$ million and $\$ 883$ million in fiscal years 2019 through 2022, respectively; (ii) personal income tax revenues are projected to be higher by $\$ 182$ million in fiscal year 2019; (iii) business tax revenues are projected to be higher by $\$ 169$ million, $\$ 20$ million, $\$ 44$ million and $\$ 53$ million in fiscal years 2019 through 2022, respectively; (iv) sales tax revenues are projected to be higher by $\$ 91$ million, $\$ 179$ million, $\$ 149$ million and $\$ 85$ million in fiscal years 2019 through 2022, respectively; (v) revenues from audit collections are projected to be higher by $\$ 100$ million in fiscal year 2019 and $\$ 200$ million in each of fiscal years 2020 through 2022; (vi) Environmental Control Board fine revenues are projected to be higher by $\$ 20$ million in each of fiscal years 2019 through 2022; (vii) Department of Buildings penalty revenues are projected to be higher by $\$ 4$ million in each of fiscal years 2019 through 2022; and (viii) motor vehicle fine revenues are projected to be higher by $\$ 5$ million in fiscal year 2019 and $\$ 3$ million in each of fiscal years 2020 through 2022. The report also identifies certain risks to projected revenues: (i) personal income tax revenues are projected to be lower by $\$ 117$ million, $\$ 190$ million and $\$ 260$ million in fiscal years 2020 through 2022, respectively; and (ii) real estate-related tax revenues are projected to be lower by $\$ 23$ million, $\$ 384$ million, $\$ 483$ million and $\$ 79$ million in fiscal years 2019 through 2022, respectively.

On July 25, 2018, the OSDC released a report on the Financial Plan. The report states that the Financial Plan projects a surplus of nearly $\$ 4.6$ billion in fiscal year 2018, which resulted mostly from a reallocation of unneeded reserves and higher tax revenues. The report notes that the City's economy is strong and the fiscal year 2019 budget is balanced under current conditions, but the Financial Plan projects budget gaps in fiscal years 2020, 2021 and 2022 which are larger than those projected in June 2017. The report states that there are budget risks that could make closing the budget gaps more difficult. NYCHA has $\$ 32$ billion in capital needs in its fiveyear capital program, but less than $\$ 8$ billion in available capital resources, and the City may be called upon to increase financial support of NYCHA. The City may also be called upon to provide additional financial support to the MTA's 2020-2024 five-year capital program which is expected to be released next year. If the economic terms of the tentative agreement reached with DC 37 were applied to the entire work force as the City assumes, the fiscal year 2020 budget gap would increase by more than $\$ 700$ million. Rising trade tensions could trigger an economic setback, and growing federal deficits will likely increase pressure on Congress to cut federal programs, which would adversely affect the City and the State. The report states that the City has increased its reserves and notes that the City should continue that practice given the budget risks.

The OSDC report quantifies certain risks and offsets to the Financial Plan. The report identifies net offsets of $\$ 40$ million in fiscal year 2019 and net risks of $\$ 760$ million, $\$ 918$ million and $\$ 1.27$ billion in fiscal years 2020 through 2022, respectively. When combined with the results projected in the Financial Plan, the report estimates a budget surplus of $\$ 40$ million in fiscal year 2019 and budget gaps of $\$ 4.02$ billion, $\$ 3.81$ billion and $\$ 3.56$ billion in fiscal years 2020 through 2022, respectively. The risks to the Financial Plan identified in the report include: (i) increased homeless shelter operation expenditures of $\$ 47$ million in each of fiscal years 2019 through 2022; (ii) decreased federal Medicaid reimbursement for special education services of $\$ 63$ million in each of fiscal years 2019 through 2022; (iii) increased uniformed services overtime costs of $\$ 125$ million in each of fiscal years 2019 through 2022; (iv) increased costs as a result of collective bargaining settlements and future pattern settlements of $\$ 227$ million, $\$ 704$ million, $\$ 929$ million and $\$ 1.34$ billion in fiscal years 2019 through 2022, respectively; and (v) increased expenditures to fund the Fair Fares program of $\$ 212$ million in each of fiscal years 2020 through 2022. The report also identifies: (i) increased tax revenues of $\$ 400$ million in fiscal year 2019 and $\$ 250$ million in each of fiscal years 2020 through 2022; (ii) additional miscellaneous revenues (including recurring resources such as fines and fees and nonrecurring resources such as proceeds from the sale of taxi medallions or City property) of $\$ 52$ million, $\$ 61$ million, $\$ 71$ million and $\$ 72$ million in fiscal years 2019 through 2022, respectively; (iii) anticipated debt service savings from low interest rates on variable rate bonds of
$\$ 50$ million in fiscal year 2019 and $\$ 22$ million in each of fiscal years 2020 through 2022; and (iv) lower estimates for pension contributions of $\$ 58$ million, $\$ 115$ million and $\$ 173$ million in fiscal years 2020 through 2022, respectively, resulting from fiscal year 2018 pension investment earnings above the actuarial interest rate assumption.

On July 20, 2018, the staff of the Control Board issued a report reviewing the Financial Plan. The report states that the City generated a surplus of almost $\$ 4.6$ billion in fiscal year 2018, in part because of a surge in personal income tax collections at the end of fiscal year 2018. The report states that the Financial Plan projects budget gaps in fiscal years 2020, 2021 and 2022, and given the size of the outyear gaps, the City will need to continue developing agency savings programs throughout the Financial Plan period to continue producing large surpluses to close the outyear gaps without service reductions or tax increases. The report notes that there are concerns that could create increased pressure on the outyears of the Financial Plan period. The City has experienced volatility in the growth rate of City funds over the last several years, and it is unknown how long the current economic recovery will continue and what, if any, impacts there will be from federal actions and the possibility of trade wars. Federal actions could put pressure on the City to increase subsidies to NYCHH. The MTA has developed a plan for subway improvements, and while the plan is preliminary and unofficial, there have been no agreements on whether it will proceed or how it will be funded. Determination of how to meet NYCHA's capital needs may impact the City's budget. In addition, outyear gaps will be higher due to collective bargaining negotiations that are underway.

The report identifies net risks to the Financial Plan of $\$ 58$ million, $\$ 757$ million, $\$ 975$ million and $\$ 1.39$ billion in fiscal years 2019 through 2022, respectively, resulting in estimated gaps of $\$ 58$ million, $\$ 4.02$ billion, $\$ 3.86$ billion and $\$ 3.67$ billion in fiscal years 2019 through 2022, respectively. Such net risks and offsets result from: (i) increased personal income tax revenues of $\$ 250$ million in each of fiscal years 2019 through 2022; (ii) increased miscellaneous revenues of $\$ 100$ million in each of fiscal years 2019 through 2022; (iii) increased costs as a result of collective bargaining settlements and future pattern settlements of $\$ 227$ million, $\$ 704$ million, $\$ 929$ million and $\$ 1.34$ billion in fiscal years 2019 through 2022, respectively; (iv) increased expenditures to fund the Fair Fares program of $\$ 212$ million in each of fiscal years 2020 through 2022; (v) increased uniformed services overtime costs of $\$ 130$ million, $\$ 152$ million, $\$ 155$ million and $\$ 155$ million in fiscal years 2019 through 2022, respectively; and (vi) decreased speed camera revenues of $\$ 51$ million, $\$ 39$ million, $\$ 29$ million and $\$ 28$ million in fiscal years 2019 through 2022, respectively.

## Long-Term Capital Program

The City makes substantial capital expenditures to reconstruct and rehabilitate the City's infrastructure and physical assets, including City mass transit facilities, water and sewer facilities, streets, bridges and tunnels, and to make capital investments that will improve productivity in City operations.

The City utilizes a three-tiered capital planning process consisting of the Ten-Year Capital Strategy, the four-year capital plan and the current-year Capital Budget. The Ten-Year Capital Strategy is a long-term planning tool designed to reflect fundamental allocation choices and basic policy objectives. The four-year capital plan, which is updated three times a year as required by the City Charter, translates mid-range policy goals into specific projects. The Capital Budget defines specific projects and the timing of their initiation, design, construction and completion. On October 10, 2018, the City released the four-year capital commitment plan for fiscal years 2019 through 2022 which covers the current fiscal year and the three-year capital plan for fiscal years 2020 through 2022 (the "2019-2022 Capital Commitment Plan").

City-funded commitments, which were $\$ 344$ million in fiscal year 1979, are projected to reach $\$ 18.4$ billion in fiscal year 2019. City-funded expenditures are forecast at $\$ 8.6$ billion in fiscal year 2019; total expenditures are forecast at $\$ 10.0$ billion in fiscal year 2019. For additional information concerning the City's capital expenditures and the Ten-Year Capital Strategy covering fiscal years 2018 through 2027, see "Section V: City Services and Expenditures-Capital Expenditures."

The following table sets forth the major areas of capital commitment projected in the 2019-2022 Capital Commitment Plan.

## 2019-2022 Capital Commitment Plan

|  | 2019 |  | 2020 |  | 2021 |  | 2022 |  | TOTALS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City <br> Funds | All Funds | City Funds | All <br> Funds | $\begin{aligned} & \text { (In Mil } \\ & \text { City } \\ & \text { Funds } \end{aligned}$ | illions) All Funds | City <br> Funds | All Funds | City <br> Funds | All Funds |
| Mass Transit(1) | \$ 547 | \$ 566 | \$ 54 | \$ 54 | \$ 54 | \$ 54 | \$ 40 | \$ 40 | \$ 695 | \$ 715 |
| Roadway, Bridges | 1,533 | 1,711 | 2,232 | 2,551 | 2,547 | 2,826 | 3,210 | 3,510 | \$ 9,522 | \$10,598 |
| Environmental Protection(2) | 2,297 | 2,355 | 3,360 | 3,560 | 3,057 | 3,066 | 3,383 | 3,388 | \$12,098 | \$12,369 |
| Education | 4,334 | 5,132 | 2,298 | 2,305 | 1,534 | 2,278 | 2,166 | 2,166 | \$10,331 | \$11,880 |
| Housing | 1,314 | 1,348 | 1,232 | 1,264 | 1,305 | 1,337 | 1,174 | 1,206 | \$ 5,025 | \$ 5,155 |
| Sanitation | 442 | 454 | 664 | 667 | 484 | 484 | 342 | 342 | \$ 1,932 | \$ 1,948 |
| City Operations/Facilities | 7,011 | 7,780 | 7,701 | 8,704 | 5,730 | 6,462 | 3,078 | 3,328 | \$23,521 | \$26,274 |
| Economic Development | 926 | 1,043 | 1,132 | 1,257 | 1,088 | 1,171 | 617 | 639 | \$ 3,764 | \$ 4,110 |
| Subtotal Commitments | 18,403 | 20,389 | 18,673 | 20,360 | 15,801 | 17,679 | 14,011 | 14,620 | \$66,888 | \$73,048 |
| Reserve for Unattained Commitments | $(5,637)$ | $(5,637)$ | $(1,695)$ | $(1,695)$ | (765) | (765) | 359 | 359 | $(7,738)$ | $(7,738)$ |
| Total Commitments(3) | \$12,766 | \$14,752 | \$16,978 | \$18,666 | \$15,036 | \$16,914 | \$14,370 | \$14,979 | \$59,150 | \$65,311 |
| Total Expenditures(4) | \$ 8,570 | \$ 9,957 | \$10,502 | \$11,741 | \$11,925 | \$13,488 | \$13,039 | \$14,322 | \$44,036 | \$49,508 |

Note: Individual items may not add to totals due to rounding.
(1) Excludes NYCT's non-City portion of the MTA capital program.
(2) Includes water supply, water mains, water pollution control, sewer projects and related equipment.
(3) Commitments represent contracts registered with the City Comptroller, except for certain projects which are undertaken jointly by the City and State.
(4) Expenditures represent cash payments and appropriations planned to be expended for capital costs, excluding amounts for original issue discount.

Currently, if all City capital projects were implemented, expenditures would exceed the City's financing projections in the current fiscal year and subsequent years. The City has therefore established capital budgeting priorities to maintain capital expenditures within the available long-term financing. Due to the size and complexity of the City's capital program, it is difficult to forecast precisely the timing of capital project activity so that actual capital expenditures may vary from the planned annual amounts.

On November 15, 2017, the Mayor issued Housing New York 2.0, which updates and revises the Mayor's previously announced affordable housing initiatives. The updated plan, inclusive of prior commitments, proposes to build and preserve 300,000 affordable units by 2026 , reflecting an increase of 100,000 units above what was previously announced. The expected costs associated with these revisions are reflected in the 2019-2022 Capital Commitment Plan, with additional resources as necessary to be reflected in future commitment plans.

On February 4, 2016, the Mayor announced a plan to build the Brooklyn-Queens Connector, a streetcar line which would run along the East River waterfront between Astoria, Queens and Red Hook, Brooklyn. The direct costs of the project, which are estimated to be $\$ 2.7$ billion, are not reflected in the Financial Plan or the Ten-Year Capital Strategy. The City has conducted an in-depth study of this project and is proceeding with the environmental assessment beginning in late 2018.

In December 2017, the City issued an Asset Information Management System Report (the "AIMS Report"), which is its annual assessment of the asset condition and a proposed maintenance schedule for its assets and asset systems which have a replacement cost of $\$ 10$ million or more and a useful life of at least ten years, as required by the City Charter. This report does not reflect any policy considerations which could affect the appropriate
amount of investment, such as whether there is a continuing need for a particular facility or whether there have been changes in the use of a facility. The AIMS Report estimated that $\$ 8.9$ billion in capital investment would be needed for fiscal years 2019 through 2022 to bring the assets to a state of good repair. The report also estimated that $\$ 475$ million, $\$ 222$ million, $\$ 261$ million and $\$ 262$ million should be spent on maintenance in fiscal years 2019 through 2022, respectively.

The recommended capital investment for each inventoried asset is not readily comparable to the capital spending allocated by the City in the 2019-2022 Capital Commitment Plan and the Ten-Year Capital Strategy. Only a portion of the funding set forth in the 2019-2022 Capital Commitment Plan is allocated to specifically identified assets, and funding in the subsequent years of the Ten-Year Capital Strategy is even less identifiable with individual assets. Therefore, there is a substantial difference between the amount of investment recommended in the report for all inventoried City assets and amounts allocated to the specifically identified inventoried assets in the 2019-2022 Capital Commitment Plan. The City also issues an annual report (the "Reconciliation Report") that compares the recommended capital investment with the capital spending allocated by the City in the four-year capital plan to the specifically identified inventoried assets.

The most recent Reconciliation Report, issued in July 2018, concluded that the capital investment in the five-year capital plan for fiscal years 2018 through 2022, released on April 26, 2018, for the specifically identified inventoried assets, funded $70 \%$ of the total investment recommended in the preceding AIMS Report issued in December 2016. Capital investment allocated in the Ten-Year Capital Strategy published in April 2017 funded an additional portion of the recommended investment. In the same Reconciliation Report, OMB estimated that $60 \%$ of the expense maintenance levels recommended were included in the financial plan.

## Financing Program

The following table sets forth the amount of bonds issued and expected to be issued during the 2019 through 2022 fiscal years (as set forth in the Financial Plan) to implement the 2019-2022 Capital Commitment Plan. See "Section VIII: Indebtedness-Indebtedness of the City and Certain Other Entities." From time to time, the City and its related issuers also issue bonds to refinance existing debt for economic savings. Such refunding bonds are not included in the following table.

## 2019-2022 Financing Program

|  | 2019 | 2020 | 2021 | 2022 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (In Millions) |  |  |
| City General Obligation Bonds | \$2,400 | \$ 4,270 | \$ 4,850 | \$ 5,070 | \$16,590 |
| TFA Future Tax Secured Bonds | 3,700 | 4,270 | 4,850 | 5,070 | 17,890 |
| Water Authority Bonds(1) | 1,454 | 1,641 | 1,695 | 1,989 | 6,779 |
| Total | \$7,554 | \$10,181 | \$11,395 | \$12,129 | \$41,259 |

Note: Totals may not add due to rounding.
(1) Water Authority Bonds includes commercial paper but does not include bonds that defease commercial paper.

The City's financing program includes the issuance of water and sewer revenue bonds by the Water Authority which is authorized to issue bonds to finance capital investment in the City's water and sewer system. Pursuant to State law, debt service on Water Authority indebtedness is secured by water and sewer fees paid by users of the water and sewer system. Such fees are revenues of the Water Board, which holds a lease interest in the City's water and sewer system. After providing for debt service on obligations of the Water Authority and certain incidental costs, the revenues of the Water Board are paid to the City to cover the City's costs of operating the water and sewer system and as rental for the system. Beginning in fiscal year 2017, the City has not requested the rental payment due to the City from the Water Board. The City's Ten-Year Capital Strategy applicable to the City's water and sewer system covering fiscal years 2018 through 2027, projects City-funded water and sewer investment (which is expected to be financed with proceeds of Water Authority debt) at
approximately $\$ 19.1$ billion. The 2019-2022 Capital Commitment Plan reflects total anticipated City-funded water and sewer commitments of $\$ 12.1$ billion which are expected to be financed with the proceeds of Water Authority debt.

The TFA is authorized to have outstanding $\$ 13.5$ billion of Future Tax Secured Bonds (excluding Recovery Bonds). The TFA may have outstanding Future Tax Secured Bonds in excess of $\$ 13.5$ billion provided that the amount of the Future Tax Secured Bonds, together with the amount of indebtedness contracted by the City, do not exceed the debt limit of the City. Future Tax Secured Bonds are issued for general City capital purposes and are secured by the City's personal income tax revenues and, to the extent such revenues do not satisfy specified debt ratios, sales tax revenues. In addition, the TFA is authorized to have outstanding $\$ 9.4$ billion of Building Aid Revenue Bonds to pay for a portion of the City's five-year educational facilities capital plan. Building Aid Revenue Bonds are secured by State building aid, which the Mayor has assigned to the TFA. The TFA expects to issue $\$ 500$ million, $\$ 78$ million, $\$ 168$ million and $\$ 104$ million of Building Aid Revenue Bonds in fiscal years 2019 through 2022, respectively.

Implementation of the financing program is dependent upon the ability of the City and other financing entities to market their securities successfully in the public credit markets which will be subject to prevailing market conditions at the times of sale. No assurance can be given that the credit markets will absorb the projected amounts of public bond sales. A significant portion of bond financing is used to reimburse the City's General Fund for capital expenditures already incurred. If the City and such other entities are unable to sell such amounts of bonds, it would have an adverse effect on the City's cash position. In addition, the need of the City to fund future debt service costs from current operations may also limit the City's capital program. The Ten-Year Capital Strategy for fiscal years 2018 through 2027 totals $\$ 95.8$ billion, of which approximately $93 \%$ is to be financed with funds borrowed by the City and such other entities. See "Introductory Statement" and "Section VIII: Indebtedness-Indebtedness of the City and Certain Other EntitiesLimitations on the City's Authority to Contract Indebtedness." Congressional developments affecting federal taxation generally could reduce the market value of tax-favored investments and increase the debt-service costs of carrying out the major portion of the City's capital plan which is currently eligible for tax-exempt financing.

## Interest Rate Exchange Agreements

In an effort to reduce its borrowing costs over the life of its bonds, the City began entering into interest rate exchange agreements commencing in fiscal year 2003. For a description of such agreements, see "ApPENDIX BFinancial Statements-Notes to Financial Statements-Note A.12." As of June 30, 2018, the aggregate notional amount of the City's interest rate exchange agreements was $\$ 1,183,030,000$ and the total marked-to-market value of such agreements was $(\$ 58,689,662)$.

In addition, in connection with its Courts Facilities Lease Revenue Bonds (The City of New York Issue) Series 2005A and B, the Dormitory Authority of the State of New York ("DASNY") entered into interest rate exchange agreements with Goldman Sachs Mitsui Marine Derivative Products, L.P. and JPMorgan Chase Bank, National Association. The City is obligated, subject to appropriation, to make lease payments to DASNY reflecting DASNY's obligations under these interest rate exchange agreements. Under such agreements, with a notional amount of $\$ 125,500,000$, an effective date of June 15, 2005 and a termination date of May 15, 2039, DASNY pays a fixed rate of $3.017 \%$ and receives payments based on a LIBOR-indexed variable rate. As of June 30, 2018, the total marked-to-market value of the DASNY agreements was $(\$ 20,759,297)$.

## Seasonal Financing Requirements

The City since 1981 has fully satisfied its seasonal financing needs, when necessary, in the public credit markets, repaying all short-term obligations within their fiscal year of issuance. The City has not issued shortterm obligations to finance projected cash flow needs since fiscal year 2004. The City regularly reviews its cash position and the need for short-term borrowing. The Financial Plan does not reflect the issuance of short-term obligations.

## SECTION VIII: INDEBTEDNESS

## Indebtedness of the City and Certain Other Entities

## Outstanding City and PBC Indebtedness

The following table sets forth outstanding City and PBC indebtedness as of June 30, 2018. "City indebtedness" refers to general obligation debt of the City, net of reserves. "PBC indebtedness" refers to obligations of the City, net of reserves, to the following PBCs: the New York City Educational Construction Fund ("ECF"), and DASNY (for health facilities, court facilities and CUCF as described below). PBC indebtedness is not debt of the City. However, the City has entered into agreements to make payments, subject to appropriation, to PBCs to be used for debt service on certain obligations constituting PBC indebtedness. Neither City indebtedness nor PBC indebtedness includes outstanding debt of the TFA, TSASC, Fiscal Year 2005 Securitization Corp. or STAR Corp., which are not obligations of, and are not paid by, the City; nor does such indebtedness include obligations of the Hudson Yards Infrastructure Corporation ("HYIC"), for which the City has agreed to pay, as needed and subject to appropriation, interest on but not principal of such obligations.

|  | (In Thousands) |  |
| :---: | :---: | :---: |
| Gross City Long-Term Indebtedness(1) | \$38,626,466 |  |
| Less: Assets Held for Debt Service(2) | $(1,901,695)$ |  |
| Net City Long-Term Indebtedness |  | \$36,724,771 |
| PBC Indebtedness |  |  |
| Bonds Payable | 277,122 |  |
| Capital Lease Obligations | 933,555 |  |
| Gross PBC Indebtedness | 1,210,677 |  |
| Less: Assets Held for Debt Service | $(55,457)$ |  |
| Net PBC Indebtedness |  | 1,155,220 |
| Combined Net City and PBC Indebtedness |  | \$37,879,991 |

[^8]
## Trend in Outstanding Net City and PBC Indebtedness

The following table shows the trend in the outstanding net City and PBC indebtedness as of June 30 of each of the fiscal years 2008 through 2017 and at June 30, 2018.

|  | City Indebtedness |  | PBCIndebtedness(1) | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Long-Term | Short-Term |  |  |
|  | (In Millions) |  |  |  |
| 2008 | \$33,129 | - | \$1,558 | \$34,687 |
| 2009 | 38,648 | - | 1,484 | 40,131 |
| 2010 | 41,490 | - | 1,395 | 42,885 |
| 2011 | 41,737 | - | 1,550 | 43,287 |
| 2012 | 40,913 | - | 1,486 | 42,399 |
| 2013 | 38,844 | - | 1,413 | 40,257 |
| 2014 | 41,033 | - | 1,347 | 42,380 |
| 2015 | 38,497 | - | 1,261 | 39,758 |
| 2016 | 36,147 | - | 1,236 | 37,383 |
| 2017 | 36,324 | - | 1,182 | 37,506 |
| June 30, 2018 | 36,725 | - | 1,155 | 37,880 |

(1) Includes obligations of New York State Urban Development Corporation ("UDC") through June 30, 2016.

## Rapidity of Principal Retirement

The following table details, as of June 30, 2018, the cumulative percentage of total City indebtedness that is scheduled to be retired in accordance with its terms in each prospective five-year period.

| Period | Cumulative Percentage of <br> Debt Scheduled for Retirement |
| :--- | :---: |
| years | $29.09 \%$ |
| 10 years | 56.50 |
| 15 years | 75.71 |
| 20 years | 89.84 |
| 25 years | 97.45 |
| 30 years | 100.00 |

## City and PBC Debt Service Requirements

The following table summarizes future debt service requirements, as of June 30, 2018, on City and PBC indebtedness.

| Fiscal Years | City Long-Term Debt |  | PBC |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principal | Interest | Indebtedness | Interest |  |
|  | (In Thousands) |  |  |  |  |
| 2019 | \$ 2,074,415 | \$ 1,687,737 | \$ 73,647 | \$ 58,578 | \$ 3,894,377 |
| 2020 | 2,262,202 | 1,596,059 | 77,919 | 55,104 | 3,991,284 |
| 2021 | 2,211,806 | 1,492,375 | 81,508 | 51,321 | 3,837,009 |
| 2022 through 2147 | 32,078,043 | 12,174,526 | 977,604 | 369,341 | 45,599,514 |
| Total | \$38,626,466 | \$16,950,697 | \$1,210,677 | \$534,343 | \$57,322,183 |

## Certain Debt Ratios

The following table sets forth the approximate ratio of City net general obligation bonded debt to assessed taxable property value as of June 30 of each of the fiscal years 2008 through 2017.

| Fiscal Year | City General Obligation Bonded Debt(1) | Debt Service Restricted Cash(2) | City General Obligation Bonded Debt Net of Debt Service Restricted Cash | City Net General <br> Obligation Bonded Debt as a Percentage of Assessed Taxable Value of Property(3) | Per Capita |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (in millions) | (in millions) | (in millions) |  |  |
| 2008 | \$36,100 | \$5,117 | \$30,983 | 21.28\% | \$3,840 |
| 2009 | 39,991 | 3,376 | 36,615 | 24.09 | 4,503 |
| 2010 | 41,555 | 2,926 | 38,629 | 24.46 | 4,715 |
| 2011 | 41,785 | 2,818 | 38,967 | 24.40 | 4,704 |
| 2012 | 42,286 | 1,374 | 40,912 | 23.88 | 4,893 |
| 2013 | 41,592 | 2,766 | 38,826 | 21.68 | 4,610 |
| 2014 | 41,665 | 639 | 41,026 | 21.57 | 4,843 |
| 2015 | 40,460 | 1,970 | 38,490 | 18.97 | 4,519 |
| 2016 | 38,073 | 1,775 | 36,298 | 16.68 | 4,252 |
| 2017 | 37,891 | 1,583 | 36,308 | 15.48 | 4,253 |

Source: CAFR for the fiscal year ended June 30, 2017; New York City Comptroller's Office.
(1) General Obligation Bonded Debt is presented at par value and does not reflect GASB 44 reporting methodology netting premium and discount. See "Appendix B—Financial Statements—Notes to Financial Statements—Note D.5—Changes in Long-term liabilities."
(2) Primarily comprised of restricted cash and investments held in the General Debt Service Fund.
(3) Based on full valuations for each fiscal year derived from the application of the special equalization ratio reported by the State Office of Real Property Tax Services for such fiscal year.

## Indebtedness of the City and Related Issuers

The following table sets forth obligations of the City and other issuers as of June 30 of each of the fiscal years 2008 through 2017. General obligation bonds are debt of the City. Although IDA Stock Exchange bonds and PBC indebtedness are not debt of the City, the City has entered into agreements to make payments, subject to appropriation, to the respective issuers to be used for debt service on the indebtedness included in the following table. ECF bonds are also not debt of the City. ECF bonds are expected to be paid from revenues of ECF, provided, however, that if such revenues are insufficient, the City has agreed to make payments, subject to appropriation, to ECF for debt service on its bonds. Indebtedness of the TFA, TSASC and STAR Corp. does not constitute debt of, and is not paid by, the City.

| Fiscal Year | $\begin{aligned} & \text { General } \\ & \text { Obligation } \\ & \text { Bonds } \end{aligned}$ | ECF | TFA | TSASC | STAR | HYIC | $\begin{gathered} \text { PBC } \\ \text { Indebtedness } \\ \text { and } \\ \text { Other }(1) \end{gathered}$ | $\begin{gathered} \text { IDA } \\ \text { Stock } \\ \text { Exchange } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (In Millions) |  |  |  |  |  |  |  |
| 2008 | \$36,100 | \$109 | \$14,828 | \$1,297 | \$2,339 | \$2,067 | \$2,025 | \$101 |
| 2009 | 39,991 | 102 | 16,913 | 1,274 | 2,253 | 2,033 | 1,937 | 99 |
| 2010 | 41,555 | 150 | 20,094 | 1,265 | 2,178 | 2,000 | 1,859 | 99 |
| 2011 | 41,785 | 281 | 23,820 | 1,260 | 2,117 | 2,000 | 1,895 | 98 |
| 2012 | 42,286 | 274 | 26,268 | 1,253 | 2,054 | 3,000 | 1,818 | 95 |
| 2013 | 41,592 | 268 | 29,202 | 1,245 | 1,985 | 3,000 | 1,739 | 93 |
| 2014 | 41,665 | 266 | 31,038 | 1,228 | 1,975 | 3,000 | 1,701 | 90 |
| 2015 | 40,460 | 264 | 33,850 | 1,222 | 2,035 | 3,000 | 1,639 | 87 |
| 2016 | 38,073 | 240 | 37,358 | 1,145 | 1,961 | 3,000 | 1,571 | 84 |
| 2017 | 37,891 | 236 | 40,696 | 1,089 | 1,884 | 2,751 | 1,549 | 80 |

Source: CAFR for the fiscal year ended June 30, 2017; New York City Comptroller's Office.
(1) PBC Indebtedness and Other includes capital lease obligations of the City and excludes Fiscal Year 2005 Securitization Corporation, ECF and Tax Lien Collateralized Bonds.

As of June 30, 2018, approximately $\$ 38.63$ billion of City general obligation bonds were outstanding. For information regarding the City's variable rate bonds, see APPENDIX D hereto.

As of June 30, 2018, $\$ 2.72$ billion aggregate principal amount of HYIC bonds were outstanding. Such bonds were issued to finance the extension of the Number 7 subway line and other public improvements. They are secured by and payable from payments in lieu of taxes and other revenues generated by development in the Hudson Yards area. To the extent such payments in lieu of taxes and other revenues are insufficient to pay interest on the HYIC bonds, the City has agreed to pay the amount of any shortfall in interest on such bonds, subject to appropriation. The Financial Plan provides $\$ 0$ in fiscal years 2018 through 2022 for such interest support payments. The City has no obligation to pay the principal of such bonds.

## Certain Provisions for the Payment of City Indebtedness

The State Constitution requires the City to make an annual appropriation for: (i) payment of interest on all City indebtedness; (ii) redemption or amortization of bonds; and (iii) redemption of short-term indebtedness issued in anticipation of the collection of taxes or other revenues, such as tax anticipation notes ("TANs") and revenue anticipation notes ("RANs") which (with permitted renewals thereof) are not retired within five years of the date of original issue. If this appropriation is not made, a sum sufficient for such purposes must be set apart from the first revenues thereafter received by the City and must be applied for these purposes.

The City's debt service appropriation would provide for the interest on, but not the principal of, short-term indebtedness, if any. If such principal were not provided for from the anticipated sources, it would be, like debt service on City bonds, a general obligation of the City.

Pursuant to the Financial Emergency Act, a general debt service fund (the "General Debt Service Fund" or the "Fund") has been established for the purpose of paying Monthly Debt Service, as defined in the Act. In addition, as required under the Act, accounts have been established by the State Comptroller within the Fund to pay the principal of City TANs and RANs when outstanding. For the expiration date of the Financial Emergency Act, see "Section III: Government and Financial Controls-City Financial Management, Budgeting and Controls-Financial Emergency Act and City Charter."

## Limitations on the City's Authority to Contract Indebtedness

The Financial Emergency Act imposes various limitations on the issuance of City indebtedness. No TANs may be issued by the City which would cause the principal amount of such issue of TANs to exceed $90 \%$ of the "available tax levy," as defined in the Act, with respect to such issue; TANs and renewals thereof must mature not later than the last day of the fiscal year in which they were issued. No RANs may be issued by the City which would cause the principal amount of RANs outstanding to exceed $90 \%$ of the "available revenues," as defined in the Act, for that fiscal year; RANs must mature not later than the last day of the fiscal year in which they were issued; and in no event may renewals of RANs mature later than one year subsequent to the last day of the fiscal year in which such RANs were originally issued. No bond anticipation notes ("BANs") may be issued by the City in any fiscal year which would cause the principal amount of BANs outstanding, together with interest due or to become due thereon, to exceed $50 \%$ of the principal amount of bonds issued by the City in the twelve months immediately preceding the month in which such BANs are to be issued.

The State Constitution provides that, with certain exceptions, the City may not contract indebtedness, including contracts for capital projects to be paid with the proceeds of City bonds ("contracts for capital projects"), in an amount greater than $10 \%$ of the average full value of taxable real estate in the City for the most recent five years (the "general debt limit"). See "Section IV: Sources of City Revenues—Real Estate TaxAssessment." Certain indebtedness ("excluded debt") is excluded in ascertaining the City's authority to contract indebtedness within the constitutional limit. TANs, RANs and BANs, and long-term indebtedness issued for specified purposes are considered excluded debt. The City's authority for variable rate bonds is currently limited, with statutory exceptions, to $25 \%$ of the general debt limit. The State Constitution also provides that, subject to legislative implementation, the City may contract indebtedness for low-rent housing, nursing homes for persons of low income and urban renewal purposes in an amount not to exceed $2 \%$ of the average assessed valuation of the taxable real estate of the City for the most recent five years (the " $2 \%$ debt limit"). Excluded from the $2 \%$ debt limit, after approval by the State Comptroller, is indebtedness for certain self-supporting programs aided by City guarantees or loans.

Water Authority and TSASC indebtedness and the City's commitments with other PBCs or related issuers are not chargeable against the City's constitutional debt limit. The TFA and TSASC were created to provide financing for the City's capital program. Without the TFA and TSASC, or other legislative relief, new contractual commitments for the City's general obligation financed capital program would have been virtually brought to a halt during the financial plan period beginning early in the 1998 fiscal year. TSASC has approximately $\$ 1.1$ billion of bonds outstanding that are payable from TSRs. The TFA is permitted to have outstanding $\$ 13.5$ billion of Future Tax Secured Bonds (excluding Recovery Bonds). The TFA may have outstanding Future Tax Secured Bonds in excess of $\$ 13.5$ billion, provided that the amount of the Future Tax Secured Bonds, together with the amount of indebtedness contracted by the City, do not exceed the debt limit of the City. Future Tax Secured Bonds are secured by the City's personal income tax revenues and sales tax revenues, if personal income tax revenues do not satisfy specified debt ratios. The TFA, as of June 30, 2018, has outstanding approximately $\$ 34.7$ billion of Future Tax Secured Bonds (excluding Recovery Bonds). The TFA is authorized to have outstanding $\$ 9.4$ billion of Building Aid Revenue Bonds, which are secured by State building aid and are not chargeable against the City's constitutional debt limit.

The following table sets forth the calculation of debt-incurring power as of August 31, 2018.

|  | (In Thousands) |  |
| :---: | :---: | :---: |
| Total City Debt-Incurring Power under General Debt Limit |  | \$106,242,893 |
| Gross Debt-Funded ${ }^{(1)}$ | \$36,832,035 |  |
| Less: Excluded Debt | $(43,318)$ |  |
| Less: Appropriations for Payment of Principal | $\begin{array}{r} 36,788,717 \\ (556,985) \end{array}$ |  |
|  | 36,231,731 |  |
| Contracts and Other Liabilities, Net of Prior Financings Thereof | 12,410,666 |  |
| Less: Total City Indebtedness |  | $(48,642,398)$ |
| Less: TFA Debt Outstanding above $\$ 13.5$ billion |  | $(22,327,940)$ |
| Debt-Incurring Power |  | \$ 35,272,554 |

Note: Numbers may not add due to rounding.
(1) Debt issued at an original issue discount is reflected at the discounted amount rather than the par amount

## Federal Bankruptcy Code

Under the Federal Bankruptcy Code, a petition may be filed in the federal bankruptcy court by a municipality which is insolvent or unable to meet its debts as they mature. The filing of such a petition would operate as a stay of any proceeding to enforce a claim against the City. Under such circumstances, the Federal Bankruptcy Code requires the municipality to file a plan for the adjustment of its debts, which may modify or alter the rights of creditors and may provide for the municipality to issue indebtedness, which could have priority over existing creditors and which could be secured. Any plan of adjustment confirmed by the court must be approved by the requisite majority of creditors. If confirmed by the bankruptcy court, the plan would be binding upon all creditors affected by it. Pursuant to authorization by the State, each of the City and the Control Board, acting on behalf of the City pursuant to the Financial Emergency Act, has the legal capacity to file a petition under the Federal Bankruptcy Code. For the expiration date of the Financial Emergency Act, see "Section III: Government and Financial Controls-City Financial Management, Budgeting and Controls-Financial Emergency Act and City Charter."

## Public Benefit Corporation Indebtedness

City Financial Commitments to PBCs
PBCs are corporate governmental agencies created by or under State law to finance and operate projects of a governmental nature or to provide governmental services. Generally, PBCs issue bonds and notes to finance construction of housing, hospitals, dormitories and other facilities and receive revenues from the collection of fees, charges or rentals for the use of their facilities, including subsidies and other payments from the governmental entity whose residents have benefited from the services and facilities provided by the PBC. These bonds and notes do not constitute debt of the City.

The City has undertaken various types of financial commitments with certain PBCs which, although they do not represent City indebtedness, have a similar budgetary effect. The principal forms of the City's financial commitments with respect to PBC debt obligations are as follows:

1. Capital Lease Obligations-These are leases of facilities by the City or a Covered Organization, entered into with PBCs, under which the City has no liability beyond monies legally available for lease payments. State law generally provides, however, that in the event the City fails to make any required lease payment, the amount of such payment will be deducted from State aid otherwise payable to the City and will be paid to the PBC.
2. Executed Leases-These are leases pursuant to which the City is legally obligated to make the required rental payments.
3. Capital Reserve Fund Arrangements-Under these arrangements, State law requires the PBC to maintain a capital reserve fund in a specified minimum amount to be used solely for the payment of the PBC's obligations. State law further provides that in the event the capital reserve fund is depleted, State aid otherwise payable to the City may be paid to the PBC to restore such fund.

Certain PBCs are further described below.

New York City Educational Construction Fund
As of July 31, 2018, $\$ 231.2$ million principal amount of ECF bonds to finance costs related to the school portions of combined occupancy structures was outstanding. Under ECF's leases with the City, debt service on the ECF bonds is payable by the City to the extent third party revenues are not sufficient to pay such debt service.

## Dormitory Authority of the State of New York

As of July 31, 2018, $\$ 395.7$ million principal amount and $\$ 452.3$ million principal amount of DASNY bonds issued to finance the design, construction and renovation of court facilities and health facilities, respectively, in the City were outstanding. The court facilities and health facilities are leased to the City by DASNY, with lease payments made by the City in amounts sufficient to pay debt service on DASNY bonds and certain fees and expenses of DASNY.

## City University Construction Fund

As of July 31, 2018, approximately $\$ 86.9$ million principal amount of DASNY bonds, relating to Community College facilities, subject to capital lease arrangements was outstanding. The City and the State are each responsible for approximately one-half of the CUCF's annual rental payments to DASNY for Community College facilities which are applied to the payment of debt service on the DASNY's bonds issued to finance the leased projects plus related overhead and administrative expenses of DASNY.

For further information regarding the particular PBCs included in the City's financial statements, see "Appendix B-Financial Statements—Notes to Financial Statements—Note A."

## SECTION IX: PENSION SYSTEMS AND OPEB

## Pension Systems

The City maintains five actuarial pension systems, providing benefits for its employees and employees of various independent agencies (including certain Covered Organizations). Such systems consist of the New York City Employees' Retirement System ("NYCERS"), the Teachers' Retirement System of the City of New York ("TRS"), the New York City Board of Education Retirement System ("BERS"), the New York City Police Pension Fund ("PPF") and the New York City Fire Pension Fund ("FPF") (together, the New York City Retirement Systems, "NYCRS"). Members of these actuarial pension systems are categorized into tiers depending on date of membership. The systems combine features of defined benefit pension plans with those of defined contribution pension plans. Three of the five actuarial pension systems (NYCERS, TERS and BERS) are cost-sharing multiple employer systems that include public employees who are not City employees. Each public employer in these multiple employer systems has primary responsibility for funding and reporting in the employer's financial statements on its share of the systems' liabilities. Total membership in the City's five actuarial pension systems on June 30, 2015 consisted of 370,528 active employees, 332,853 retirees and beneficiaries receiving benefits and other vested members terminated but not receiving benefits, and 29,728 other inactives. Of the total membership of 733,109 , City membership was 559,210 . The City also contributes to three other pension systems, maintains a closed non-actuarial retirement program for certain retired individuals not covered by the five actuarial pension systems, provides other supplemental benefits to retirees and makes contributions to certain union annuity funds.

Each of the City's five actuarial pension systems is managed by a board of trustees which includes representatives of the City and the employees covered by such system. The City Comptroller is the custodian of, and has been delegated investment responsibilities for, the actuarial pension systems, subject to the policies established by the boards of trustees of the systems and State law. The City Actuary (the "Actuary"), an independent professional who is also the Chief Actuary of each of the five actuarial pension systems, determines annual employer contributions and prepares other actuarial analyses and reports that are used by the City for Financial Plan and financial reporting purposes, as further described below. The State Constitution provides that pension rights of public employees are contractual and shall not be diminished or impaired. Constitutional protection applies only to the basic pension benefits provided through each pension system's Qualified Pension Plan ("QPP") and does not extend to the Variable Supplements Funds ("VSFs") or Tax-Deferred Annuity Programs ("TDA Programs") that are also administered by some of the pension systems, as discussed below.

## City Pension Contributions

The City has consistently made its full statutorily required pension contributions based on then-current actuarial valuations. For fiscal years 2016 and 2017, the City's pension contributions for the five actuarial pension systems, plus other pension expenditures, were approximately $\$ 9.3$ billion and $\$ 9.4$ billion, respectively, and were in addition to employee contributions. For fiscal years 2016 and 2017, $57 \%$ of the City pension contributions for such years were attributable to the amortizations of Unfunded Actuarial Accrued Liability ("UAAL") described herein, see "-Actuarial Assumptions and Methods" below.

For the 2017 fiscal year, the City's total annual pension contribution expenditures, including pension costs not associated with the five actuarial pension systems, plus Social Security tax payments by the City for the year, were approximately $44 \%$ of total wage and salary costs. In addition, contributions are made by certain component units of the City and other government units directly to the three cost-sharing multiple employer actuarial pension systems on behalf of their participating employees and retirees.

Annual pension contributions for each system are determined by the Actuary using actuarial methods and assumptions that provide for orderly budgeting and planning, and that differ from the assumptions and methodologies used in financial reporting. The annual statutorily required pension contribution has four major cost components: (i) the service or normal cost, which is the cost of the future liability associated with pension
benefits earned that year; (ii) scheduled amortization of the initial UAAL established as of June 30, 2011; (iii) amortization of positive or negative adjustments to UAAL from factors such as net investment returns above or below the assumed rate of return, changes in or deviations from actuarial assumptions and methods, and changes in benefits; and (iv) administrative expenses. Investment earnings reflect the impact of transfers within each pension system between the QPP and other employee benefit funds, including TDA Programs and VSFs, and within each QPP with regard to certain supplemental, voluntary member contribution accounts, as discussed below.

For further information on phasing in of changes in UAAL, see "-Actuarial Assumptions and Methods" below. For further information on potential transfers within the pension systems, see "-Fiduciary Fund Reporting" below.

Each year, the Actuary provides each NYCRS with preliminary and final appropriation amounts equal to the statutorily required pension contribution for its respective QPP. For the NYCRS that are multi-employer plans, the Actuary also provides a schedule of allocations among the participating employers. The Boards of Trustees of each QPP vote to adopt the appropriation amount and the participating employers are billed. Interest is charged on late payments, if any.

The New York City Off-Track Betting Corporation ("OTB") is a participating employer in NYCERS. OTB, which operated off-track betting facilities in the City, functioned under the direction of a board appointed by the Governor with input from leaders of the State legislature at the time it ceased operations in December 2010. The pension obligations of OTB have continued to accrue since it ceased operations, and the cumulative unfunded liability for fiscal year 2019 is approximately $\$ 132$ million. In March 2018 NYCERS identified the State as a successor obligor to OTB. The State's position with respect to the pension obligations of OTB is not known at this time.

The following tables summarize the components of City pension contributions by system for fiscal years 2016, 2017 and 2018.

## New York City Retirement Systems Components of Employer Contribution-City Share

 Fiscal Year 2016 (In Millions)|  | NYCERS ${ }^{(1)}$ | TRS ${ }^{(2)}$ | BERS ${ }^{(3)}$ | POLICE | FIRE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Entry Age Normal Cost | \$ 860.8 | \$1,056.7 | \$123.0 | \$1,266.0 | \$ 421.2 |
| Initial UAAL Contribution | \$ 936.9 | \$1,692.5 | \$110.9 | \$1,117.2 | \$ 600.0 |
| Subsequent UAAL Contribution | \$ 16.6 | \$ 803.1 | \$ 20.4 | \$ (9.3) | \$ 33.3 |
| Administrative Expenses | \$ 29.0 | \$ 42.0 | \$ 11.2 | \$ 20.0 | N/A |
| Interest on Late Employer Contributions | \$ | \$ | \$ | \$ | \$ |
| Total | $\underline{\underline{\$ 1,843.3}}$ | $\underline{\text { \$3,594.3 }}$ | $\underline{\underline{\$ 265.5}}$ | $\underline{\underline{\$ 2,393.9}}$ | $\xlongequal{\$ 1,054.5}$ |

Fiscal Year 2017
(In Millions)

|  | NYCERS ${ }^{(1)}$ | TRS ${ }^{(2)}$ | BERS ${ }^{(3)}$ | POLICE | FIRE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Entry Age Normal Cost | \$ 837.5 | \$1,097.2 | \$125.9 | \$1,236.1 | \$ 409.4 |
| Initial UAAL Contribution | \$ 965.0 | \$1,743.4 | \$114.3 | \$1,150.7 | \$ 618.1 |
| Subsequent UAAL Contribution | \$ (25.7) | \$ 903.5 | \$ 35.4 | \$ (113.5) | \$ 33.7 |
| Administrative Expenses | \$ 31.3 | \$ 51.6 | \$ 12.5 | \$ 20.5 | N/A |
| Interest on Late Employer Contributions | \$ | \$ | \$ | \$ | \$ |
| Total | \$1,808.1 | \$3,795.7 | \$288.1 | \$2,293.8 | \$1,061.2 |

## Fiscal Year 2018

## (In Millions)

|  | NYCERS ${ }^{(1)}$ | TRS ${ }^{(2)}$ | BERS ${ }^{(3)}$ | POLICE | FIRE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Entry age Normal Cost | \$ 837.2 | \$1,138.4 | \$137.9 | \$1,271.5 | \$ 414.1 |
| Initial UAAL Contribution | \$ 994.0 | \$1,795.8 | \$117.7 | \$1,185.2 | \$ 636.6 |
| Subsequent UAAL Contribution | \$ (26.0) | \$ 793.2 | \$ 48.3 | \$ (62.7) | \$ 149.7 |
| Administrative Expenses | \$ 33.4 | \$ 52.8 | \$ 14.7 | \$ 21.2 | N/A |
| Interest on Late Employer Contributions | \$ |  | \$ | \$ |  |
| Total | \$1,838.6 | \$3,780.2 | \$318.6 | \$2,415.2 | \$1,200.4 |

(1) Includes the New York City School Construction Authority, Transit Police and CUNY Community Colleges.
(2) Includes CUNY Community Colleges.
(3) Includes the New York City School Construction Authority and CUNY Community Colleges.

The Financial Plan reflects projected City pension contributions of $\$ 9.632$ billion, $\$ 9.852$ billion, $\$ 9.903$ billion, $\$ 10.162$ billion and $\$ 10.367$ billion for fiscal years 2018 through 2022, respectively. These projections are based on the valuation from the Actuary as of June 30, 2017. The pension contributions projected in the Financial Plan reflect changes to funding assumptions and methods first implemented in 2012 as recommended by the Actuary and adopted by the boards of trustees of each of the City's five actuarial pension systems. The Financial Plan also reflects amortization of subsequent positive or negative adjustments to UAAL as described above, including the phase-in of QPP investment earnings in fiscal years 2011 - 2017, as calculated by the Actuary. Investment earnings varied by system and are calculated differently from the investment performance reported by the Comptroller's office, as described below. The adjustments to UAAL reflected in the Financial Plan also include increased pension contributions resulting, in part, from recommendations of an independent actuarial auditor engaged, pursuant to the City Charter, to review actuarial methods and assumptions every two years, as described below. Such changes to actuarial methods and assumptions resulted in an annual increase of approximately $\$ 600$ million to the City's annual pension contribution starting in fiscal year 2016.

The Comptroller's office reports investment returns using the time-weighted calculation methodology, which facilitates measurement of relative performance across systems. Using this methodology, aggregate returns on investment assets advised by the Comptroller's office for fiscal years 2011 to 2017 were $23.23 \%, 1.37 \%$, $12.12 \%, 17.48 \%, 3.15 \%, 1.46 \%$, and $12.95 \%$, respectively. Returns in fiscal years 2011 through 2014 were gross of public market fees and net of private market fees. Returns for fiscal years 2015 to 2017 were net of all investment fees. The aggregate return on investment assets for fiscal year 2018 is estimated to be approximately $8.67 \%$, net of all investment fees. These returns varied by pension system. These reported returns refer only to those investment assets of the pension systems for which the City Comptroller's office is the investment advisor. These investment assets exclude certain QPP funds advised outside the Comptroller's office, and include pension system assets outside the QPPs. The returns do not reflect the impact of transfers within each pension system between the QPP and other employee benefit funds, such as TDAs and VSFs, or within each QPP with regard to certain supplemental, voluntary member contribution accounts. Such transfers can be material, and, as such, the earnings used by the Actuary in determining required City contributions may differ materially from the earnings implied by the investment-only rates of return above.

## Actuarial Assumptions and Methods

This section describes the actuarial assumptions and methods used for determining the City's pension contributions. As mentioned previously, these actuarial assumptions and methods may differ from those used for financial reporting, or for other pension system administrative purposes.

An actuarial valuation requires an initial set of information and assumptions about future events. Pursuant to the City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarial pension systems
are conducted by an independent actuarial firm every two years. Such studies assess the reasonableness of the Actuary's calculations of the employer contributions and make recommendations about actuarial methods and assumptions. The Actuary may recommend changes to methods and assumptions based on these studies. In addition, every four to seven years, the Actuary conducts a full review of the actuarial assumptions and methods used to fund the NYCRS. These reviews lead to recommendations that are set forth in formal reports. Based on the results of these reviews, from time to time the Actuary makes changes to the actuarial assumptions and methods that are set forth in formal reports. The most recent of these reports are referred to as the "Silver Books" and were published during February 2012. The Silver Books presented the recommendations of the Actuary for determining employer contributions to the NYCRS, and where applicable, Net Pension Liabilities of the NYCRS, beginning in fiscal year 2012.

The implementation of the Actuary's Silver Books recommendations involved adoption of the tabular (i.e., demographic) assumptions by the Boards of Trustees of the NYCRS; enactment of legislation by the New York State Legislature and Governor for the Actuarial Interest Rate, Actuarial Cost Method, and Amortization Period and Method for any UAAL; and establishment of an Actuarial Asset Value ("AAV") by the Actuary. The AAV is calculated as a modified six-year moving average of the market value of assets, starting with the market value reset as of June 30, 2011.

The actuarial methods and assumptions adopted in 2012 included an Actuarial Interest (discount) Rate assumption of $7 \%$ per annum which is based on investment earnings net of investment expenses, updated mortality tables (which were updated again in December 2015, as discussed below) to account for longer life expectancy, and the use of the Entry Age Actuarial Cost Method. The initial UAAL recognized as a result of such changes in assumptions and methods, excluding the December 2015 mortality change, is being amortized, with interest of $7 \%$ through City contributions over a 22 -year period that commenced in fiscal year 2012 with dollar payments increasing at a rate of $3 \%$ per year.

Under the 2012 methods and assumptions, emerging unfunded liabilities are recognized and amortized over closed, fixed periods using level dollar payments. Future UAAL attributable to actuarial gains and losses is amortized over 15 years; future UAAL attributable to changes in actuarial assumptions and methods is amortized over 20 years; and future changes in UAAL attributed to benefit improvements is amortized over periods reasonably consistent with the remaining working lifetimes of those impacted. Investment earnings above or below expectation are reflected in City pension contributions in two stages: first, the annual earnings above or below expectation are phased in to the actuarial value of assets over a six-year period, with $15 \%$ of the total recognized per year in years 1-4 and $20 \%$ per year in years 5 and 6 . Second, the portion recognized in each year is then amortized over a 15-year period for the purpose of calculating the City's annual pension contributions. The Actuary uses investment earnings in this calculation and does not calculate an investment rate of return.

The 2012 methods and assumptions included continued use of the One Year Lag methodology, where census data and asset information as of the June 30 second preceding a fiscal year is used to determine the employer contribution for that fiscal year. For example, for the fiscal year 2017 pension contribution calculation, employee data and the AAV as of June 30, 2015 were used. On March 12, 2018, an independent actuarial auditor released a report analyzing experience for the four-year and ten-year periods ending June 30, 2015. Such report confirmed that the Actuary's calculations of employer contributions for fiscal year 2015 were reasonable, but recommended the consideration of certain changes to the calculations, including a recommendation to prefund the cost of providing a guaranteed return of $8.25 \%$ on the TDA fixed fund accounts for certain members of TRS and BERS. Previously, this cost was treated as an actuarial loss and amortized in future years' contributions. This change increased the final fiscal year 2018 contribution and contributions for future years by approximately $\$ 50$ million per year. For further information on TDAs, see "-Fiduciary Fund Reporting" below. The Financial Plan also includes reserves of $\$ 100$ million beginning in fiscal year 2019 for additional costs that may result from changes to the current lag methodology, also recommended by the auditor. Additionally, the Financial Plan reflects reserves of $\$ 300$ million for each of fiscal years 2021 and 2022 to address the potential costs resulting from other pending recommendations by the auditor. The report also confirmed that changes to the current actuarial assumptions are not required at this time.

In December 2015, the Actuary proposed updated post-retirement mortality assumptions for use in determining employer QPP contributions beginning in fiscal year 2016. The Boards of Trustees of each of the five actuarial pension systems adopted the proposed assumptions. In addition, beginning in fiscal year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be no more than $120 \%$ and no less than $80 \%$ of the market value of assets, known as a $20 \%$ corridor.

The Actuary continues to review the report's other findings and recommendations and continues to monitor the appropriateness of all actuarial assumptions.

The Silver Books are available on the web site of the New York City Office of the Actuary (www.nyc.gov/ actuary). Such website, and the information and links contained therein, are not incorporated into, and are not part of, this section.

## Financial Reporting

## City Pension Fund Financial Reporting

The City accounts for its pensions consistent with the requirements of GASB. In fiscal year 2014, the City implemented GASB 68. The GASB 68 standards apply to actuarial calculations for financial reporting but not to the actuarial calculation of annual City employer pension contributions, which continue to be determined as described above. The City implemented GASB 68 concurrently with the implementation by the five major actuarial pension systems of GASB 67.

GASB 68 changed many but not all aspects of calculating the City's reported pension fund assets and liabilities. In broad terms, GASB 68 separates pension accounting in the City's government-wide financial statements from the phased or smoothed asset and liability figures that the Actuary uses in determining the City's annual pension contributions, as described above. For financial reporting purposes, most changes in assets and liabilities are reflected in the year in which they occur. The City expects that pension fund accounting under GASB 68 could increase year-to-year volatility in reported net pension liability. Under GASB 68, net pension liabilities are reported on employers' Government-Wide Statements of Net Assets when the fair value of pension assets falls short of actuarially calculated liabilities, when both are measured as of the same date (fiscal year end). For the cost-sharing multiple employer pension systems, only the City share of net pension liabilities is reported in the Government-Wide Statement of Net Assets. As reported in the Government-Wide financial statements for fiscal years 2014 through 2017, the City membership (active, inactive and retired) and the City's share of total pension liability, Plan fiduciary net position, net pension liability, and plan fiduciary net position as a percent of total pension liability, aggregated across the five pension systems, were as follows:

## Summary of City Pension Information, Fiscal Years 2014-2017 ${ }^{(1)}$ (Dollars in billions)

|  | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: |
| City Membership (active, inactive, retired) ${ }^{(2)}$ | 546,519 | 545,646 | 551,080 | 559,210 |
| Total Pension Liability (TPL) | \$169.7 | \$177.3 | \$188.2 | \$195.2 |
| Less Plan Fiduciary Net Position (PFNP) | 123.1 | 124.2 | 123.4 | 138.9 |
| Net Pension Liability (NPL) | \$ 46.6 | \$ 53.1 | \$ 64.8 | \$ 56.3 |
| PFNP as percent of TPL | 72.5\% | 70.1\% | 65.6\% | 71.2\% |

[^9]The reported net pension liabilities do not include future payments on fixed return TDA funds, described below, where the statutory rate of interest for members is higher than the assumed 7\% return on QPP assets.

For further information see "Appendix B-FinANCIAL Statements."

## Fiduciary Fund Reporting

The fiscal year 2017 CAFR contains Fiduciary Funds financial statements for each of the five actuarial pension systems. These financial statements report on the entirety of the five systems, not just the City share. Each of the five actuarial pension systems administers programs in addition to its respective QPP, and these programs are also reported as part of each system's financial statements in the Fiduciary Fund financial statements. The City CAFRs for fiscal years 2014 through 2017 report a net position (assets plus deferred outflows, less liabilities and deferred inflows), for the five actuarial pension systems, in aggregate, restricted for QPPs, restricted for TDAs, and restricted for VSFs as shown in the following chart. For further information, see "Appendix B-Financial Statements-Pension and Other Employee Benefit Trust Funds Combining Statement of Fiduciary Net Position."

## New York City Retirement Systems <br> Aggregate Net Position,

## Fiscal Years 2013-2017 <br> (In Millions)

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Net Position: |  |  |  |  |  |
| Restricted for QPPs | \$124,818.9 | \$144,537.9 | \$145,769.3 | \$146,917.9 | \$163,025.5 |
| Restricted for VSFs | 989.4 | 3,540.8 | 3,775.1 | 2,642.2 | 4,911.9 |
| Restricted for TDAs | 24,467.7 | 27,311.0 | 28,844.9 | 30,074.4 | 32,851.8 |
| Total Net Position | \$150,276.0 | \$175,389.7 | \$178,389.3 | \$179,634.5 | \$200,789.2 |

Source: City CAFRs
In addition to the QPPs, TRS and BERS administer TDA Programs. Benefits provided under the TDA programs are derived from members' accumulated contributions. No direct contributions are provided by employers. However certain investment and benefit options, if selected by TDA members, may indirectly affect employer financial obligations, as described below. As of June 30, 2016 and 2017, the total fiduciary net position restricted for TDA benefits was $\$ 30.1$ billion and $\$ 32.9$ billion, respectively. Each of the TDA Programs has at least two investment options, broadly categorized as a fixed return fund and one or more variable return funds.

Deposits from members' TDA Program accounts into the fixed return funds are used by the respective QPP to purchase investments, and such TDA Program accounts are credited with a statutory rate of interest, currently $7 \%$ for United Federation of Teachers members and $8.25 \%$ for all other members. If earnings on the respective QPP are less than the amount credited to the TDA Program members' accounts, the higher cost to the QPP could require additional payments by the City to the pension funds. If the earnings are higher, then lower payments by the City to the pension funds could be required. The City's pension fund contribution methodology described above incorporates these effects.

All investment securities purchased and invested by the QPPs with TDA Programs' fixed return funds' balances are owned and reported by the QPP. A receivable due from the respective QPP equal in amount to the aggregate original principal amounts contributed by TDA Programs' members to the respective fixed return funds, plus accrued interest at the statutory rate, is owned by each of the TDA Programs. The balances of TDA Program fixed return funds held by the TRS QPP as of June 30, 2016 and 2017 were $\$ 20.3$ billion and $\$ 22.0$ billion, respectively, and interest paid on TDA Program fixed return funds by the TRS QPP for the years
then ended were $\$ 1.4$ billion and $\$ 1.5$ billion, respectively. The balances of TDA Program fixed return funds held by the BERS QPP as of June 30, 2016 and 2017 were $\$ 1.3$ billion and $\$ 1.4$ billion, respectively, and interest paid on TDA Program fixed return funds by the BERS QPP for the years then ended were $\$ 94.8$ million and $\$ 106.6$ million, respectively. Deposits from members' TDA Program accounts into the variable return funds are credited with actual returns on the underlying investments of the specific fund selected. Members may reallocate all or a part of their TDA Program contributions between the fixed and variable return funds on a quarterly basis. Retired TDA members may make withdrawals from their TDA accounts or elect to take the balance in the form of an annuity that is calculated based on a statutory rate of interest and mortality assumptions, which are separate and different from the mortality assumptions used in pension liability calculations. Once an annuity has been selected by a member, the payment of those benefits is guaranteed by the QPP.

In addition, certain Tier I and Tier II pension plan members have the right to make supplemental, voluntary member contributions into the QPPs. These contributions are credited with interest at rates set by statute or, for certain employees that may choose variable return investments, the actual return, and may be withdrawn or annuitized at retirement. In general, the assets and liabilities associated with these member contributions are included in the reported assets and actuarially-determined net pension obligations of the respective plans. Ultimately, investment earnings of the fixed rate funds that are less than the amounts credited to the members could result in additional required contributions by the City to the pension funds and investment earnings that are greater than the amounts credited to the members could result in lower required contributions by the City to the pension funds.

Pursuant to State law, certain retirees of NYCERS, PPF and FPF are eligible to receive scheduled supplemental benefits from VSFs. Under some circumstances where assets in the VSFs are insufficient, NYCERS, PPF and FPF are required to transfer assets to their respective VSFs to fund those payments that are statutorily guaranteed. The effects of these transfers are included by the Office of the Actuary in calculating required employer contributions to the pension funds. However under current State law, the VSFs are not pension funds or retirement systems and are subject to change by the State legislature.

For information regarding the amount and investment allocation of investments in the pension systems see "Section III: Governmental and Financial Controls." For further information regarding the City's pension systems see "Appendix B-Financial Statements-Notes to Financial Statements-Note E.5," "-Pension and Other Employee Benefit Trust Funds-Combining Statement of Fiduciary Net Position" and "-Required Supplementary Information."

## Other Post-Employment Benefits

Post-Employment benefits other than pensions provided to eligible retirees of the City and their eligible beneficiaries and dependents include health insurance, Medicare Part B premium reimbursements and welfare fund contributions.

In June 2015, GASB issued Statement No. 74 ("GASB 74") and Statement No. 75 ("GASB 75"), which update financial reporting standards for state and local government OPEB Plans. GASB 74 applies to financial reporting by post-employment benefit plans and GASB 75 covers reporting on post-employment benefit plans by employers. The City implemented GASB 74 and GASB 75 for its financial statements beginning in fiscal year 2017. The fiscal year 2017 CAFR reported the City's net OPEB liabilities as $\$ 94.5$ billion and $\$ 88.4$ billion as of June 30, 2016 and 2017, respectively. See "Appendix B-Financial Statements-Notes to Financial Statements-Note E.4." The City is not required by law or contractual agreement to fund the OPEB obligation other than the pay-as-you-go amounts necessary to provide current benefits to eligible retirees of the City and their eligible beneficiaries and dependents.

## SECTION X: OTHER INFORMATION

## Litigation

The following paragraphs describe certain material legal proceedings and claims involving the City and Covered Organizations other than routine litigation incidental to the performance of their governmental and other functions and certain other litigation arising out of alleged constitutional violations, torts, breaches of contract and other violations of law and condemnation proceedings. While the ultimate outcome and fiscal impact, if any, on the City of the proceedings and claims described below are not currently predictable, adverse determinations in certain of them might have a material adverse effect upon the City's ability to carry out the Financial Plan. The City has estimated that its potential future liability on account of outstanding claims against it as of June 30, 2017 amounted to approximately $\$ 6.9$ billion. See "Section VII: Financial Plan-Assumptions-Expenditure Assumptions-2. Other Than Personal Services Costs-Judgments and Claims."

## Taxes

1. Numerous real estate tax certiorari proceedings alleging overvaluation, inequality and illegality are pending against the City. Based on historical settlement activity, and including an estimated premium for inequality of assessment, the City estimates its potential future liability for outstanding certiorari proceedings to be $\$ 750$ million at June 30, 2017. For a discussion of the City's accounting treatment of its inequality and overvaluation exposure, see "Appendix B—Financial Statements—Notes to Financial Statements-Note D.5."
2. Con Edison has challenged the City's method of valuation for determining assessments of certain of its properties in two separate actions. Con Edison has challenged the City's tax assessments on its Manhattan power plants and equipment for tax years 1994/1995 through 2016/2017 and the special franchise assessments on its electric, gas and steam equipment located in the public right of way for tax years 2009/2010 through 2016/2017. In March 2018, the City's and State's motions to dismiss challenges to the special franchise assessments for tax years 2009/10 through 2012/13 were granted, leaving four tax years before the court. Con Edison filed Notices of Appeal to this decision on April 10, 2018. With respect to the East 74th Street power plant, a monetary settlement was finalized and paid in the approximate amount of $\$ 31,000,000$ from City monies appropriated for such expenditures, and a monetary settlement in the approximate amount of $\$ 20,000,000$ was finalized and paid from City monies appropriated for such expenditures for the West $59^{\text {th }}$ Street power plant. Con Edison and the City are presently negotiating a settlement for the East $60^{\text {th }}$ Street Steam Plant. Disbursements will be made from City monies appropriated for such expenditures. The remaining challenges could result in substantial real property tax refunds in fiscal years 2019 and beyond.
3. Tax Equity Now New York LLC (composed of certain advocacy groups and owners and tenants of properties in the City) commenced an action on April 24, 2017 against the City and the State. The action alleges that the City's real property tax system violates the State and federal constitutions as well as the Fair Housing Act. The action further alleges the valuation methodology as mandated by certain provisions of the State Real Property Tax Law results in a disparity and inequality in the amount of taxes paid by black and hispanic Class 1 property owners and renters. The City and State defendants moved to dismiss the case. Several groups made motions in November 2017 to appear in the case as amici curiae for the plaintiff. In February 2018, the court concluded its review of the amici motions and issued orders both granting and denying this status to the various movants. Oral argument took place on June 13, 2018 to hear the City's and State's respective motions to dismiss the complaint. In a decision dated September 24, 2018, the Court denied the City's motion to dismiss the complaint and partially granted the State's motion to dismiss the complaint. The Court scheduled a preliminary conference for January 9, 2019.

## Miscellaneous

1. Complaints on behalf of approximately 11,900 plaintiffs alleging respiratory or other injuries from alleged exposures to World Trade Center dust and debris at the World Trade Center site or the Fresh Kills landfill were commenced against the City and other entities involved in the post-September 11 rescue and recovery process. Plaintiffs include, among others, Department of Sanitation employees, firefighters, police
officers, construction workers and building clean-up workers. The actions were consolidated in federal District Court pursuant to the Air Transportation and System Stabilization Act, which grants exclusive federal jurisdiction for all claims related to or resulting from the September 11 attack. A not-for-profit "captive" insurance company, WTC Captive Insurance Company, Inc. (the "WTC Insurance Company") was formed to cover claims against the City and its private contractors relating to debris removal work at the World Trade Center site and the Fresh Kills landfill. The WTC Insurance Company was funded by a grant from the Federal Emergency Management Agency in the amount of $\$ 999,900,000$. On June 10, 2010, the WTC Insurance Company announced that a settlement was reached with attorneys for the plaintiffs. On November 19, 2010, District Court Judge Hellerstein announced that more than the required $95 \%$ of plaintiffs agreed to the settlement, thus making it effective. Approximately $\$ 700$ million has been paid under the settlement, leaving residual funds of approximately $\$ 290$ million to insure and defend the City and its contractors against any new claims. Since the applicable statute of limitations runs from the time a person learns of his or her injury or should reasonably be aware of the injury, additional plaintiffs may bring lawsuits in the future for late emerging cancers, which could result in substantial damages. No assurance can be given that the remaining insurance will be sufficient to cover all liability that might arise from such claims.
2. In 1996, a class action was brought against the City Board of Education and the State under Title VII of the Civil Rights Act of 1964 alleging that the use by the Board of Education of two teacher certification examinations mandated by the State had a disparate impact on minority candidates. In 2006, the United States Court of Appeals for the Second Circuit dismissed the claims against the State. In December 2012, the District Court decided a controlling legal question against the City. On February 4, 2013, the Second Circuit affirmed the District Court's decision. The District Court has appointed a Special Master to oversee claimants' individualized hearings both as to damages and eligibility for Board of Education employment. The hearings relate to members of the class that took the Liberal Arts and Science Test ("LAST") from 1996 to 2004. Currently, 3,916 such individuals have submitted claim forms and may be eligible for damages. On June 5, 2015, the Court ruled that a second version of LAST, LAST-2, that was administered from 2004 to 2014, violated Title VII because it did not measure skills necessary to do the job. Currently, up to 700 potential LAST- 2 class members have submitted claim forms and may be eligible for damages. In August 2015, the Court found that the State's new teacher certification test, the Academic Literacy Skills Test (ALST), administered since Spring 2014, was not discriminatory and evaluated skills necessary to do the job. The potential cost to the City is uncertain at this time but could be significant.
3. The Office of Inspector General of the United States Department of Health and Human Services ("OIG") conducted a review of Medicaid Personal Care Services claims made by providers in the City from January 1, 2004 through December 31, 2006, and concluded that 18 out of 100 sampled claims by providers failed to comply with federal and State requirements. The Medicaid Personal Care Services program in the City is administered by the City's Human Resources Administration. In its audit report issued in June 2009, the OIG, extrapolating from the case sample, estimated that the State improperly claimed $\$ 275.3$ million in federal Medicaid reimbursement during the audit period and recommended to the Centers for Medicare and Medicaid Services ("CMS") that it seek to recoup that amount from the State. To the City's knowledge, CMS has not taken any action to recover amounts from the State based on the findings in this audit, but no assurance can be given that it will not do so in the future.

Section 22 of Part B of Chapter 109 of the Laws of 2010 amended an earlier unconsolidated State law to set forth a process under which the State Department of Health may recover from a social services district, including the City, the amount of a federal Medicaid disallowance or recovery that the State Commissioner of Health "determines was caused by a district's failure to properly administer, supervise or operate the Medicaid program." Such a determination would require a finding that the local agency had "violated a statute, regulation or clearly articulated written policy and that such violation was a direct cause of the federal disallowance or recovery." It is not clear whether the recovery process set out in the amendment can be applied to a federal disallowance against the State based upon a pre-existing audit; however, in the event that it does, and results in a final determination by the State Commissioner of Health against the City, such a determination could result in substantial liability for the City as a result of the audit.
4. On October 27, 2014 a lawsuit under the False Claims Act against the City and Computer Sciences Corporation, a contractor that participated in the submission of claims for Medicaid reimbursement, was unsealed in the United States District Court for the Southern District of New York. Plaintiffs, consisting of the federal government and a relator, allege fraud in connection with the use of diagnosis and other codes in seeking Medicaid reimbursement in connection with the Early Intervention Program. Plaintiffs seek treble damages and penalties. A large portion of the claims has been dismissed and is no longer considered material.
5. In July 2014 disability rights advocates organizations and disabled individuals commenced a putative class action against the City in the United States District Court for the Southern District of New York. Plaintiffs allege, among other matters, that the City has not complied with certain requirements of the Americans with Disabilities Act with respect to the installation, configuration and maintenance of curb ramps on sidewalks and requirements for sidewalk walkways in general in Manhattan south of $14^{\text {th }}$ Street. If plaintiffs were to prevail, the City could be subject to a substantial acceleration of compliance costs but not damages.
6. On December 21, 2015, the United States Attorney for the Southern District of New York ("USAO-SDNY") sent a findings letter to the DOE indicating various areas in which he alleged that the City elementary schools were not accessible to students with disabilities in violation of the Americans with Disabilities Act of 1990. The City and USAO-SDNY are currently in discussion as to the matters raised in the letter. While the City has an ongoing program to smaller schools accessible, an acceleration of alterations to City elementary schools to address concerns raised in the findings letter could result in a substantial acceleration of compliance costs to the City.
7. In late 2015, a putative class action was filed against the City and the New York City Taxi and Limousine Commission ("TLC") alleging numerous commercial claims in connection with the November 2013 and February 2014 auctions of wheelchair accessible taxi medallions. Plaintiffs allege that the TLC negligently posted false information about average medallion transfer prices in advance of the auction falsely inducing plaintiffs to bid higher amounts for their medallions as well as failed to inform prospective bidders that the TLC would allow black cars to utilize electronic apps to prearrange rides, which plaintiffs argue violates their street hail exclusivity. In June 2017, the City's motion for summary judgment was granted due to plaintiffs' failure to file notices of claim with the Office of the City Comptroller. Plaintiffs withdrew their appeal of that ruling to pursue related actions subsequently filed. On January 31, 2017 and on March 23, 2017 in State Supreme Court, Queens County, a second and a third putative class action were filed alleging similar claims. In September 2017, the Court dismissed all but the breach of contract rescission and implied covenant of good faith and fair dealing claims in the second filed action, and in November 2017, the Court dismissed the third filed action, which plaintiffs appealed. Motion practice remains ongoing in the second filed action. The Court recently denied plaintiffs' motion for class certification as premature. If a class of plaintiffs who purchased medallions at the auctions were certified and were to prevail in any of the remaining described cases, damages of several hundred million dollars could be sought.
8. In an action filed in December 2015, plaintiffs that include owners of taxi medallions, taxi drivers, groups that finance taxi medallions, and taxi medallion interest groups, raised numerous constitutional claims challenging regulations on taxi medallions that allegedly are not applied to for-hire vehicles ("FHVs") that operate via electronic apps. The plaintiffs also claimed that such FHVs benefit from additional TLC regulations that effected an alleged taking of the plaintiffs' taxi medallions. In March 2017, the City was granted its motion to dismiss. The U.S. Court of Appeals for the Second Circuit upheld the dismissal of all federal claims in May 2018, while indicating that it would not rule on plaintiffs' takings claim because plaintiffs failed to avail themselves of State procedures for seeking remedy. Although plaintiffs may elect to file a takings claim in State court, in a May 2018 decision on a similar case that did not seek monetary relief, the Supreme Court of the State of New York, Appellate Division, Second Judicial Department opined that the TLC's actions permitting FHVs to operate via electronic apps do not constitute a taking under State law. If the plaintiffs were to ultimately prevail on a takings claim, the City could be subject to substantial liability.

## Environmental Matters

## Sandy

On Monday, October 29, 2012, Sandy hit the Mid-Atlantic East Coast. The storm caused widespread damage to the coastal and other low lying areas of the City and power failures in various parts of the City, including most of downtown Manhattan. On January 29, 2013, President Obama signed legislation providing for approximately $\$ 50.5$ billion in storm-related aid for the region affected by the storm. Although it is not possible for the City to quantify the full, long-term impact of the storm on the City and its economy, the current estimate of the direct costs to the City, NYCHH and NYCHA is approximately $\$ 10.5$ billion (comprised of approximately $\$ 1.8$ billion of expense costs and approximately $\$ 8.7$ billion of capital project costs). Such direct costs represent funding for emergency response, debris removal, emergency protective measures, repair of damaged infrastructure and long-term hazard mitigation investments. In addition, the City is delivering Sandy-related disaster recovery assistance services, benefiting impacted communities, businesses, homeowners and renters, which the City anticipates will be fully reimbursed by federal funds.

The Financial Plan assumes that the direct costs described above will largely be paid from non-City sources, primarily the federal government, and that the disaster assistance services costs described above will be fully reimbursed by federal funds. The City expects reimbursements to come from two separate federal sources of funding, FEMA and HUD. The City has secured over $\$ 10.1$ billion in FEMA assistance and other federal emergency response grants. The maximum reimbursement rate from FEMA is $90 \%$ of total costs. Other federal emergency response grants may have larger local share percentages. The City expects to use $\$ 736$ million of Community Development Block Grant Disaster Recovery funding allocated by HUD to meet the local share requirements of the FEMA funding, as well as recovery work not funded by FEMA or other federal sources. This allocation would be available to fill gaps in such FEMA funding. As of June 30, 2018, the City, NYCHH and NYCHA have received $\$ 2.7$ billion in reimbursements from FEMA for the direct costs described above. In addition, HUD has made available over $\$ 4.2$ billion, of which over $\$ 2.7$ billion has been received through June 30, 2018 for the direct costs and disaster recovery assistance services described above. No assurance can be given that the City will be reimbursed for all of its costs or that such reimbursements will be received within the time periods assumed in the Financial Plan.

## Climate Change

In June 2013, the City released a report, updated in April 2015 with the release of One New York: the Plan for a Strong and Just City, which analyzed the City's climate risks and outlined recommendations to address those risks (the "Report"). As stated in the section entitled "Vision 4" in the Report, the City's climate resiliency planning is based on the climate change impact projections from the New York City Panel on Climate Change ("NPCC"), a body of more than a dozen leading independent climate and social scientists. The NPCC has identified that the City is already experiencing the impacts of climate change and projects dramatic impacts from climate change on the City in the future. The NPCC has published three reports, most recently in 2015, and an updated report is expected in December 2018. Progress reports on One New York: the Plan for a Strong and Just City are issued on an annual basis, with the last progress report released on April 20, 2018.

Building on the recommendations contained in the Report, the City is in the process of implementing, over the next ten years, climate resiliency projects costing in excess of $\$ 20$ billion, most of which are dedicated to areas previously affected by Sandy and some of which are directed toward mitigating the risks identified in the NPCC report. Such plans include both stand-alone resiliency projects and the integration of resiliency protection into the City's ongoing investments. These projects are in various stages of feasibility review, design and construction and/or implementation. Funding for these projects is expected to come from City, State and federal sources. Some projects are expected to require additional funding to the extent that they are in the planning stages or current funding does not provide for the costs of construction. In addition to such projects, the City expects that additional resiliency projects will be identified and implemented in the coming years, including additional projects inside and outside of the areas affected by Sandy and addressing risks identified in the NPCC report including coastal storms, sea level rise, extreme heat and intense rainfall.

In 2015, FEMA issued preliminary updated flood insurance rate maps (FIRMs), which would have expanded the 100 -year floodplain beyond the areas designated in the flood maps issued in 2007. The City appealed the 2015 preliminary flood maps challenging the modelling FEMA used to develop them. The 2015 preliminary flood maps were adopted into the building code, but the prior 2007 flood maps remain in effect for flood insurance purposes. In 2016, FEMA agreed with the City's appeal, and the City is currently working with FEMA to update the maps. The new maps are expected to generally expand the 100 -year floodplain from the 2007 flood maps and may cover different areas than the 2015 preliminary flood maps. Such expansion could negatively impact property values in those newly designated areas. In addition, an increase in areas of the City susceptible to flooding resulting from climate change could result in greater recovery costs to the City if flooding were to occur within such larger areas.

On April 12, 2018, the National Association of Manufacturers released a letter (the "NAM Letter") to the SEC dated March 27, 2018, asking the SEC to investigate the possibility that certain California municipalities and the City, which are separately suing certain oil companies for damages resulting from climate change, had misleading statements or omissions in their respective bond official statements with regard to the impact of climate change on such municipalities. The City believes that the allegations set forth in the NAM Letter with respect to the City are without merit.

## Superfund Designations

On March 2, 2010, the United States Environmental Protection Agency ("EPA") listed the Gowanus Canal (the "Canal"), a waterway located in the City, as a federal Superfund site under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). EPA considers the City a potentially responsible party ("PRP") under CERCLA, based on contaminants from currently and formerly City-owned and operated properties, as well as from the City's combined sewer overflows ("CSOs"). On September 30, 2013 EPA issued the Record of Decision ("ROD") for the Canal, setting forth requirements for dredging contaminated sediment in the Canal and covering it with a cap as well as source control requirements. The ROD requires that two CSO retention tanks be constructed as part of the source control component of the remedy. EPA estimates that the costs of the tanks will be approximately $\$ 85$ million. The City estimates that the tanks will actually cost in excess of $\$ 735$ million, which is included in the City's capital plan. EPA also estimates the overall cleanup costs (to be allocated among potentially responsible parties) will be $\$ 506$ million. The City anticipates that the actual cleanup costs could substantially exceed EPA's cost estimate. On May 28, 2014, EPA issued a unilateral administrative order requiring the City to design major components of the remedy for the Canal, including the CSO retention tanks and other storm water control measures, and remediate the First Street basin (a currently filled-in portion of the Canal). As required under the Unilateral Order, the City submitted its siting recommendations for the CSO tanks to EPA on June 30, 2015. As set forth in a consent order which was fully executed on June 9, 2016, EPA agrees with the City's preferred location for one of the tanks and, with respect to the other tank, EPA has directed the City to site the tank at the City's preferred location subject to certain milestones. In addition, the City is participating in an ongoing arbitration process with approximately 20 other parties to determine each party's share of liability for the design of the in-canal (dredging and capping) portion of the remedy.

On September 27, 2010, EPA listed Newtown Creek, the waterway on the border between Brooklyn and Queens, New York, as a Superfund site. On April 6, 2010, EPA notified the City that EPA considers the City a PRP under CERCLA for hazardous substances in Newtown Creek. In its Newtown Creek PRP notice letter, EPA identified historical City activities that filled former wetlands and low lying areas in and around Newtown Creek and releases from formerly City-owned and operated facilities, including municipal incinerators, as well as discharges from sewers and CSO outfalls, as potential sources of hazardous substances in Newtown Creek. In July, 2011, the City entered into an Administrative Settlement Agreement and Order on Consent with EPA and five other PRPs to conduct an investigation of conditions in Newtown Creek and evaluate feasible remedies. The investigation and feasibility study is expected to take approximately eleven years. The City's share will be determined in a future allocation proceeding. The settlement does not cover any remedy that may ultimately be chosen by EPA to address the contamination identified as a result of the investigation and evaluation.

On May 12, 2014, EPA listed the former Wolff-Alport Chemical Company site ("Wolff-Alport Site") in Ridgewood, Queens, as a Superfund site. The designation is based on radioactive contamination resulting from the operations of the Wolff-Alport Chemical Company during the 1920s to 1950s, which, among other things, disposed of radioactive material on-site, on the adjacent right-of-way, and via the sewer system. In 2013, EPA, in cooperation with City and State agencies, completed a response action to implement certain interim remedial measures at the Wolff-Alport Site to address the site's short-term public health risks. In 2015 to 2017, EPA undertook a remedial investigation and feasibility study that assessed, among other things, impacts to the sewer system and City right-of-way from operations at the Wolff-Alport Site, and evaluated a range of remedial alternatives. In September 2017, EPA issued its ROD identifying its selected remedy. The ROD requires jet washing and replacement of sewers, and excavation of contaminated portions of the right-of-way. EPA estimated work for the entire Wolff-Alport Site to cost $\$ 39$ million. The City anticipates that the costs for work in the sewers and the right-of-way could significantly exceed that estimate. In December 2017, EPA notified the City of its status as a PRP for the work on City property, and the City and EPA will negotiate an agreement to address that work.

The National Park Service ("NPS") is undertaking a CERCLA removal action at Great Kills Park on Staten Island to address radioactive contamination that has been detected at the site. Great Kills Park was owned by the City until roughly 1972, when it was transferred to NPS for inclusion in the Gateway National Recreation Area. While owned by the City, the site was used as a sanitary landfill, and the park was also expanded using urban fill. NPS believes that the radioactive contamination is the result of City activities and that the City is therefore liable for the investigation and remediation under CERCLA. The City has negotiated a settlement with NPS to address a remedial investigation and feasibility study. No other PRPs have been identified at this time.

Under CERCLA, a responsible party may be held responsible for monies expended for response actions at a Superfund site, including investigative, planning, removal, remedial and EPA enforcement actions. A responsible party may also be ordered by EPA to take response actions itself. Responsible parties include, among others, past or current owners or operators of a facility from which there is a release of a hazardous substance that causes the incurrence of response costs. The nature, extent, and cost of response actions at either the Canal, Newtown Creek, the Wolff-Alport site or Great Kills Park, the contribution, if any, of discharges from the City's sewer system or other municipal operations, and the extent of the City's liability, if any, for monies expended for such response actions, will likely not be determined for several years and could be material.

## Cybersecurity

To protect its assets from cyber-attack, the City works with a range of City, State, and federal law enforcement agencies, including the City's Department of Information Technology and Telecommunication, the New York City Cyber Command and the Federal Bureau of Investigation's Joint Terrorism Task Force. The New York City Cyber Command was created pursuant to executive order of the Mayor in July 2017 and is charged with setting information security policies and standards for the City for directing the City's citywide cyber defense and incident response, deploying defensive technical and administrative controls and providing guidance to the Mayor and City agencies on cyber defense.

## Financial Statements

The City's financial statements for the fiscal years ended June 30, 2017 and 2016 are included herein as Appendix B. Grant Thornton LLP, the City's independent auditor, has not reviewed, commented on or approved, and is not associated with, this Appendix. The report of Grant Thornton LLP relating to the City's financial statements for the fiscal years ended June 30, 2017 and 2016, which is a matter of public record, is included in this Appendix. However, Grant Thornton LLP has not performed any procedures on any financial statements or other financial information of the City, including without limitation any of the information contained in this Appendix, since the date of such report and has not been asked to consent to the inclusion of its report in this Appendix.

## Further Information

Orrick, Herrington \& Sutcliffe LLP, New York, New York, Special Disclosure Counsel to the City, will pass upon certain legal matters in connection with the preparation of this Appendix. A description of those matters and the nature of the review conducted by that firm is set forth in its opinion and accompanying memorandum which are on file at the office of the Corporation Counsel.

The references herein to, and summaries of, provisions of federal, State and local laws, including but not limited to the State Constitution, the Financial Emergency Act and the City Charter, and documents, agreements and court decisions, including but not limited to the Financial Plan, are summaries of certain provisions thereof. Such summaries do not purport to be complete and are qualified in their entirety by reference to such acts, laws, documents, agreements or decisions, copies of which are available for inspection during business hours at the office of the Corporation Counsel.

Copies of the most recent financial plan submitted to the Control Board are at www.nyc.gov/omb. Copies of the published Comprehensive Annual Financial Reports of the Comptroller are available at www.comptroller.nyc.gov or upon written request to the Office of the Comptroller, Deputy Comptroller for Public Finance, Municipal Building, One Centre Street, New York, New York 10007. Financial plans are prepared quarterly, and the Comprehensive Annual Financial Report of the Comptroller is typically published at the end of October of each year.

## APPENDIX A

## ECONOMIC AND DEMOGRAPHIC INFORMATION

This section presents certain economic and demographic information about the City. All information is presented on a calendar year basis unless otherwise indicated. The data set forth are the latest available. Sources of information are indicated in the text or immediately following the tables. Although the City considers the sources to be reliable, the City has made no independent verification of the information provided by non-City sources and does not warrant its accuracy.

## New York City Economy

The City has a diversified economic base, with a substantial volume of business activity in the financial, professional service, education, health care, hospitality, wholesale and retail trade, technology, information services, and manufacturing industries, and is the location of many securities, banking, law, accounting, new media, and advertising firms.

The City is a major seaport and focal point for international business. Many of the major corporations headquartered in the City are multinational in scope and have extensive foreign operations. Numerous foreignowned companies in the United States are also headquartered in the City. These firms, which have increased substantially in number over the past decade, are found in all sectors of the City's economy, but are concentrated in trade, professional and business services, tourism, and finance. The City is the location of the headquarters of the United Nations and several affiliated organizations maintain their principal offices in the City. A large diplomatic community exists in the City to staff the missions to the United Nations and the foreign consulates. No single assessed property in the City accounts for more than $.5 \%$ of the City's real property tax revenue.

Economic activity in the City has experienced periods of growth and recession and can be expected to experience periods of growth and recession in the future. The City experienced a recession in the early 1970s through the middle of that decade, followed by a period of expansion in the late 1970s through the late 1980s. The City fell into recession again in the early 1990s which was followed by an expansion that lasted until 2001. The economic slowdown that began in 2001 as a result of the September 11 attack, a national economic recession, and a downturn in the securities industry came to an end in 2003. Subsequently, Wall Street activity, tourism, and the real estate market drove a broad-based economic recovery until the second half of 2007. A decrease in economic activity began in the second half of 2007 and continued through the first half of 2010. The Financial Plan assumes that the gradual increase in economic activity that began in the second half of 2010 will continue through the Financial Plan period.

The United States Department of Commerce Bureau of Economic Analysis produces measures of Gross Domestic Product ("GDP") by metropolitan area. The New York metropolitan area - defined geographically as New York City; Long Island; the Lower Hudson Valley, New York; parts of Northern and Central New Jersey; and Pike County Pennsylvania - is the largest metropolitan economy in the United States.

|  | Top Ten GDP by Metropolitan Area |  |  |  |  | $\frac{\text { GDP PER CAPIT }}{\substack{\text { (2009 Dollars) } \\ \text { 2016* }}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  | 2016* |  |
| United States (metropolitan areas) | \$14,481,568 | \$14,963,370 | \$15,621,759 | \$16,280,446 | \$16,802,781 | \$53,645 |
| New York-Newark-Jersey City, |  |  |  |  |  |  |
| NY-NJ-PA | 1,439,234 | 1,477,046 | 1,542,759 | 1,608,345 | 1,657,457 | 70,758 |
| Los Angeles-Long Beach-Anaheim, CA. | 821,769 | 852,509 | 903,100 | 963,448 | 1,001,677 | 66,477 |
| Chicago-Naperville-Elgin, IL-IN-WI. | 578,016 | 585,948 | 608,723 | 635,054 | 651,222 | 59,810 |
| Dallas-Fort Worth-Arlington, TX. | 417,065 | 448,179 | 477,177 | 493,048 | 511,606 | 65,154 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 454,229 | 459,273 | 471,272 | 493,651 | 509,224 | 73,270 |
| Houston-The Woodlands-Sugar Land, TX | 462,300 | 488,430 | 505,758 | 496,708 | 478,618 | 65,332 |
| San Francisco-Oakland-Hayward, CA. | 366,459 | 385,843 | 412,423 | 440,246 | 470,529 | 86,830 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 370,052 | 389,787 | 400,520 | 417,698 | 431,038 | 62,817 |
| Boston-Cambridge-Newton, MA-NH. | 355,585 | 365,048 | 381,049 | 406,002 | 422,660 | 77,502 |
| Atlanta-Sandy Springs-Roswell, GA | 291,483 | 307,873 | 326,556 | 344,590 | 363,768 | 55,300 |

Source: U.S. Bureau of Economic Analysis

* Advance statistics.


## Personal Income

Total personal income for City residents, unadjusted for the effects of inflation and the differential in living costs, increased from 2006 to 2016 (the most recent year for which City personal income data are available). For the period from 2006 through 2008, personal income averaged $4.5 \%$ and $4.8 \%$ annual growth in the City and the nation, respectively. Total personal income in the City decreased by $3.4 \%$ in 2009 and increased by an average of 4.8\% from 2010 through 2016. Total personal income in the nation decreased by $3.3 \%$ in 2009 and increased by an average of $4.2 \%$ from 2010 through 2016.

The following table sets forth information regarding personal income in the City from 2006 to 2016.

## Personal Income(1)

| Year | Total NYC Personal Income (\$ billions) | Per Capita Personal Income NYC | Per Capita Personal Income U.S. | NYC as a Percent of U.S. U.S. |
| :---: | :---: | :---: | :---: | :---: |
| 2006 | \$378.0 | \$47,289 | \$38,144 | 124\% |
| 2007 | 409.5 | 51,099 | 39,821 | 128 |
| 2008 | 412.9 | 51,176 | 41,082 | 125 |
| 2009 | 398.8 | 49,042 | 39,376 | 125 |
| 2010 | 412.6 | 50,370 | 40,277 | 125 |
| 2011 | 446.8 | 53,939 | 42,461 | 127 |
| 2012 | 476.2 | 56,952 | 44,282 | 129 |
| 2013 | 492.6 | 58,481 | 44,493 | 131 |
| 2014 | 513.7 | 60,631 | 46,494 | 130 |
| 2015 | 536.9 | 63,039 | 48,451 | 130 |
| 2016 | 547.7 | 64,146 | 49,246 | 130 |

[^10]
## Employment

The City is a leading center for the banking and securities industry, life insurance, communications, fashion design, health care, education, technology, information services, hospitality and retail fields. Over the past two decades the City has experienced a number of business cycles. From 1992 to 2000, the City added 456,700 private sector jobs (growth of $17 \%$ ). From 2000 to 2003 , the City lost 173,100 private sector jobs (decline of $5 \%$ ). From 2003 to 2008, the City added 257,400 private sector jobs (growth of $9 \%$ ). From 2008 to 2009, the City lost 103,000 private sector jobs (decline of $3 \%$ ). From 2009 to 2016, the City added 648,700 private sector jobs (growth of $21 \%$ ). All such changes are based on average annual employment levels through and including the years referenced.

As of August 2018, total employment in the City was $4,475,800$ compared to 4,403,500 in August 2017, an increase of $1.6 \%$ based on data provided by the New York State Department of Labor, which is not seasonally adjusted.

The table below shows the distribution of employment from 2008 to 2017.

## Employment Distribution

|  | Average Annual Employment (in thousands) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Goods Producing Sectors |  |  |  |  |  |  |  |  |  |  |
| Construction | 132.7 | 120.8 | 112.5 | 112.3 | 116.1 | 122.2 | 129.2 | 139.3 | 147.2 | 151.1 |
| Manufacturing | 95.6 | 81.6 | 76.3 | 75.7 | 76.3 | 76.4 | 76.6 | 77.8 | 76.1 | 73.1 |
| Service Producing Sectors |  |  |  |  |  |  |  |  |  |  |
| Trade, Transportation \& Utilities | 574.6 | 552.7 | 559.7 | 575.6 | 590.5 | 605.0 | 620.6 | 630.2 | 630.4 | 634.3 |
| Information | 169.5 | 165.2 | 165.9 | 170.8 | 175.7 | 179.2 | 185.0 | 189.0 | 192.6 | 197.1 |
| Financial Activities | 464.6 | 433.9 | 428.3 | 439.1 | 438.8 | 437.5 | 449.2 | 459.3 | 465.9 | 469.8 |
| Professional \& Business Services | 603.4 | 569.2 | 575.3 | 597.5 | 619.3 | 642.9 | 669.0 | 700.0 | 722.3 | 742.3 |
| Education \& Health Services | 736.3 | 752.6 | 771.6 | 789.2 | 805.6 | 831.1 | 866.4 | 896.9 | 928.7 | 963.4 |
| Leisure \& Hospitality | 310.2 | 308.5 | 322.2 | 342.2 | 365.7 | 385.4 | 408.5 | 427.8 | 440.2 | 452.1 |
| Other Services | 160.8 | 160.3 | 160.6 | 165.2 | 170.4 | 174.9 | 180.2 | 185.7 | 190.1 | 191.5 |
| Total Private | 3,247.7 | 3,144.7 | 3,172.5 | 3,267.5 | 3,358.5 | 3,454.5 | 3,584.7 | 3,705.9 | 3,793.5 | 3,874.7 |
| Total Government | 564.1 | 567.0 | 558.0 | 550.6 | 546.1 | 544.4 | 545.4 | 549.9 | 552.3 | 552.1 |
| Total | 3,811.8 | 3,711.7 | 3,730.5 | 3,818.1 | 3,904.6 | 3,998.9 | 4,130.1 | 4,255.8 | 4,345.7 | 4,426.7 |

Note: Totals may not add due to rounding.
Source: New York State Department of Labor. Data are presented using the North American Industry Classification System ("NAICS").

## Sectoral Distribution of Employment and Earnings

In 2016, the City's service producing sectors provided approximately 3.6 million jobs and accounted for approximately $82 \%$ of total employment. Figures on the sectoral distribution of employment in the City from 1980 to 2000 reflect a significant shift to the service producing sectors and a shrinking manufacturing base relative to the nation.

The structural shift to the service producing sectors affects the total earnings as well as the average wage per employee because employee compensation in certain of those sectors, such as financial activities and professional and business services, tends to be considerably higher than in most other sectors. Moreover, average wage rates in these sectors are significantly higher in the City than in the nation. In the City in 2016, the employment share for the financial activities and professional and business services sectors was approximately $27 \%$ while the earnings share for those same sectors was approximately $45 \%$. In the nation, those same service producing sectors accounted for only approximately $20 \%$ of employment and $26 \%$ of earnings in 2016 . Due to the earnings distribution in the City, sudden or large shocks in the financial markets may have a disproportionately adverse effect on the City relative to the nation.
B-A-3

The City's and the nation's employment and earnings by sector for 2016 are set forth in the following table.

## Sectoral Distribution of Employment and Earnings in 2016(1)

|  | Employment |  | Earnings(2) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NYC | U.S. | NYC | U.S. |
| Goods Producing Sectors |  |  |  |  |
| Mining | 0.0\% | 0.5\% | 0.0\% | 1.5\% |
| Construction | 3.4\% | 4.7\% | 3.6\% | 6.1\% |
| Manufacturing | 1.8\% | 8.6\% | 1.1\% | 9.4\% |
| Total Goods Producing | 5.1\% | 13.7\% | 4.7\% | 16.9\% |
| Service Producing Sectors |  |  |  |  |
| Trade, Transportation and Utilities | 14.5\% | 18.9\% | 9.4\% | 15.4\% |
| Information | 4.4\% | 1.9\% | 7.7\% | 3.4\% |
| Financial Activities | 10.7\% | 5.7\% | 24.1\% | 9.1\% |
| Professional and Business Services | 16.6\% | 13.9\% | 21.2\% | 17.0\% |
| Education and Health Services | 21.4\% | 15.7\% | 12.0\% | 13.0\% |
| Leisure \& Hospitality | 10.1\% | 10.8\% | 5.1\% | 4.6\% |
| Other Services | 4.4\% | 3.9\% | 3.2\% | 3.7\% |
| Total Service Producing | 82.2\% | 70.9\% | 82.6\% | 66.3\% |
| Total Private Sector | 87.3\% | 84.6\% | 88.3\% | 83.2\% |
| Government(3) | 12.7\% | 15.4\% | 11.7\% | 16.8\% |

Note: Data may not add due to rounding or disclosure limitations. Data are presented using NAICS.
Sources: The primary sources are the New York State Department of Labor, U.S. Department of Labor, Bureau of Labor Statistics, and the U.S. Department of Commerce, Bureau of Economic Analysis.
(1) The sectoral distributions are obtained by dividing each industry's employment or earnings by total non-agricultural employment or earnings.
(2) Includes the sum of wage and salary disbursements, other labor income and proprietor's income. The latest information available is 2016 data.
(3) Excludes military establishments.

The comparison of employment and earnings in 1980 and 2000 set forth below is presented using the industry classification system which was in use until the adoption of NAICS in the late 1990's. Though NAICS has been implemented for most government industry statistical reporting, most historical earnings data have not been converted. Furthermore, it is not possible to compare data from the two classification systems except in the general categorization of government, private and total employment. The table below reflects the overall increase in the service producing sectors and the declining manufacturing base in the City from 1980 to 2000.

The City's and the nation's employment and earnings by industry are set forth in the following table.

## Sectoral Distribution of Employment and Earnings(1)

| Employment |  |  |  | Earnings(2) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1980 |  | 2000 |  | 1980 |  | 2000 |  |
| NYC | U.S. | NYC | U.S. | NYC | U.S. | NYC | U.S. |


| Private Sector: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Manufacturing: |  |  |  |  |  |  |  |  |
| Services | 27.0\% | 19.8\% | 39.1\% | 30.7\% | 26.0\% | 18.4\% | 30.2\% | 28.7\% |
| Wholesale and Retail Trade | 18.6 | 22.5 | 16.8 | 23.0 | 15.1 | 16.6 | 9.3 | 14.9 |
| Finance, Insurance and Real Estate | 13.6 | 5.7 | 13.2 | 5.7 | 17.6 | 5.9 | 35.5 | 10.0 |
| Transportation and Public Utilities | 7.8 | 5.7 | 5.7 | 5.3 | 10.1 | 7.6 | 5.2 | 6.8 |
| Contract Construction | 2.3 | 4.8 | 3.3 | 5.1 | 2.6 | 6.3 | 2.9 | 5.9 |
| Mining | 0.0 | 1.1 | 0.0 | 0.4 | 0.4 | 2.1 | 0.1 | 1.0 |
| Total Non-Manufacturing | 69.3 | 59.6 | 78.1 | 70.3 | 71.8 | 56.9 | 83.2 | 67.3 |
| Manufacturing: |  |  |  |  |  |  |  |  |
| Durable | 4.4 | 13.4 | 1.6 | 8.4 | 3.7 | 15.9 | 1.3 | 10.5 |
| Non-Durable | 10.6 | 9.0 | 4.9 | 5.6 | 9.5 | 8.9 | 4.8 | 6.1 |
| Total Manufacturing | 15.0 | $\underline{22.4}$ | 6.5 | 14.0 | 13.2 | $\underline{24.8}$ | 6.1 | 16.6 |
| Total Private Sector | 84.3 | 82.0 | 84.7 | 84.3 | 85.2 | 82.1 | 89.8 | 84.6 |
| Government(3) | 15.7 | 18.0 | 15.3 | 15.7 | 14.8 | 17.9 | 10.3 | 15.4 |
| Note: Totals may not add due to rounding. Data are presented using the Standard Industrial Classification System ("SICS"). <br> Sources: The two primary sources of employment and earnings information are U.S. Department of Labor, Bureau of Labor Statistics and U.S. Department of Commerce, Bureau of Economic Analysis. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| (1) The sectoral distributions are obtained by dividing each industry's employment or earnings by total non-agricultural employment or earnings. |  |  |  |  |  |  |  |  |
| (2) Includes the sum of wage and salary disbursements, other labor income, and proprietors' income. The latest information available for the City is 2000 data. |  |  |  |  |  |  |  |  |
| (3) Excludes military establishments. |  |  |  |  |  |  |  |  |

## Unemployment

As of August 2018, the total unemployment rate in the City was $4.3 \%$, compared to $5.1 \%$ in August 2017, based on data provided by the New York State Department of Labor, which is not seasonally adjusted. The annual unemployment rate of the City's resident labor force is shown in the following table.

## Annual Unemployment Rate(1)

(Average Annual)

|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New York City | 5.6\% | 9.3\% | 9.5\% | 9.1\% | 9.3\% | 8.8\% | 7.2\% | 5.7\% | 5.2\% | 4.5\% |
| United States | 5.8\% | 9.3\% | 9.6\% | 8.9\% | 8.1\% | 7.4\% | 6.2\% | 5.3\% | 4.9\% | 4.4\% |

Source: New York State Department of Labor and U.S. Department of Labor, Bureau of Labor Statistics.
(1) Percentage of civilian labor force unemployed: excludes those persons unable to work and discouraged workers (i.e., persons not actively seeking work because they believe no suitable work is available).

## Public Assistance

As of December 2017, the number of persons receiving cash assistance in the City was 367,997 compared to 374,316 in December 2016. The following table sets forth the number of persons receiving public assistance in the City.

## Public Assistance

| (Annual Averages in Thousands) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | 2006 | 2007 | 2008 | $\underline{2009}$ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 416.9 | 393.1 | 360.8 | 341.8 | 346.9 | 350.5 | 351.7 | 353.9 | 356.0 | 342.3 | 361.9 | 370.5 | 366.3 |

## Taxable Sales

The City is a major retail trade market with the greatest volume of retail sales of any city in the nation. The sales tax is levied on a variety of economic activities including retail sales, utility and communication sales, services and manufacturing. Taxable sales and purchases reflects data from the State Department of Taxation and Finance publication "Taxable Sales and Purchases, County and Industry Data." The yearly data presented in this paragraph and the table below covers the period from March 1 of the year prior to the listed year through the last day of February of the listed year. Between 2003 and 2008, total taxable sales volume growth rate averaged $6.0 \%$. From 2009 to 2010, total taxable sales volume decreased by $6.3 \%$, reflecting a decline in consumption, as a result of local employment losses and the local and national recessions. Between 2010 to 2017, total taxable sales volume growth rate averaged $5.4 \%$ primarily as a result of an increase in consumption as a result of local employment gains and the local and national recoveries, as well as two sales tax base expansions enacted by the City, effective August 1, 2009.

The following table illustrates the volume of sales and purchases subject to the sales tax from 2007 to 2017 .

## Taxable Sales and Purchases Subject to Sales tax (In Billions)

| Year(1) | Retail(2) | Communication Sales(3) | Services(4) | Manufacturing | Other(5) | $\begin{gathered} \text { All } \\ \text { Total } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | 33.4 | 19.1 | 28.1 | 2.4 | 23.7 | 106.7 |
| 2008 | 33.3 | 20.6 | 31.5 | 2.8 | 26.7 | 115.0 |
| 2009 | 31.3 | 22.0 | 31.8 | 2.7 | 25.9 | 113.6 |
| 2010 | 31.0 | 20.6 | 30.1 | 2.2 | 22.5 | 106.4 |
| 2011 | 36.6 | 21.4 | 33.7 | 4.6 | 20.1 | 116.4 |
| 2012 | 41.3 | 20.9 | 37.2 | 4.9 | 22.0 | 126.3 |
| 2013 | 41.2 | 20.6 | 39.2 | 5.2 | 23.3 | 129.5 |
| 2014 | 46.1 | 22.8 | 43.9 | 5.6 | 20.7 | 139.1 |
| 2015 | 47.3 | 23.1 | 47.3 | 5.8 | 22.2 | 145.7 |
| 2016 | 47.6 | 21.8 | 50.9 | 5.9 | 23.4 | 149.6 |
| 2017 | 48.4 | 22.6 | 53.0 | 6.0 | 23.4 | 153.4 |

[^11]
## Population

The City has been the most populous city in the United States since 1790. The City's population is larger than the combined population of Los Angeles and Chicago, the next most populous cities in the nation.

## Population

| Year | Total Population |
| :---: | :---: |
| 1970 | 7,895,563 |
| 1980 | 7,071,639 |
| 1990 | 7,322,564 |
| 2000 | 8,008,278 |
| 2010 | 8,175,133 |

[^12]The United States Census Bureau estimates that the City's population increased to $8,622,698$ as of July 2017.

The following table sets forth the distribution of the City's population by age between 2000 and 2010.

## Distribution of Population by Age

|  | 2000 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
| Age |  | \% of Total |  | \% of Total |
| Under 5 | 540,878 | 6.8 | 517,724 | 6.3 |
| 5 to 14 | 1,091,931 | 13.6 | 941,313 | 11.5 |
| 15 to 19 | 520,641 | 6.5 | 535,833 | 6.6 |
| 20 to 24 | 589,831 | 7.4 | 642,585 | 7.9 |
| 25 to 34 | 1,368,021 | 17.1 | 1,392,445 | 17.0 |
| 35 to 44 | 1,263,280 | 15.8 | 1,154,687 | 14.1 |
| 45 to 54 | 1,012,385 | 12.6 | 1,107,376 | 13.5 |
| 55 to 64 | 683,454 | 8.5 | 890,012 | 10.9 |
| 65 and Over | 937,857 | 11.7 | 993,158 | 12.1 |

Source: U.S. Department of Commerce, Bureau of the Census.

## Housing

In 2017, the housing stock in the City consisted of approximately $3,469,240$ housing units, excluding certain special types of units primarily in institutions such as hospitals and universities ("Housing Units") according to the 2017 Housing and Vacancy Survey released February 9, 2018. The 2017 housing inventory represented an increase of approximately 69,000 units, or $2.0 \%$, since 2014. The 2017 Housing and Vacancy Survey indicates that rental housing units continue to predominate in the City. Of all occupied housing units in 2017, approximately $32.4 \%$ were conventional home-ownership units, cooperatives or condominiums and approximately $67.6 \%$ were rental units. Due to changes in the inventory basis beginning in 2002, it is not possible to accurately compare Housing and Vacancy Survey results beginning in 2002 to the results of earlier Surveys until such time as the data is reweighted. The following table presents trends in the housing inventory in the City.

## Housing Inventory

## (In Thousands)

| Ownership/Occupancy Status | 1993 | 1996 | 1999 | 2002 | 2005 | 2008 | 2011 | 2014 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Housing Units | 2,977 | 2,995 | 3,039 | 3,209 | 3,261 | 3,328 | 3,352 | 3,400 | 3,469 |
| Owner Units | 825 | 858 | 932 | 997 | 1,032 | 1,046 | 1,015 | 1,033 | 1,038 |
| Owner-Occupied | 805 | 834 | 915 | 982 | 1,010 | 1,019 | 984 | 1,015 | 1,006 |
| Vacant for Sale | 20 | 24 | 17 | 15 | 21 | 26 | 31 | 18 | 32 |
| Rental Units | 2,040 | 2,027 | 2,018 | 2,085 | 2,092 | 2,144 | 2,173 | 2,184 | 2,183 |
| Renter-Occupied | 1,970 | 1,946 | 1,953 | 2,024 | 2,027 | 2,082 | 2,105 | 2,109 | 2,104 |
| Vacant for Rent | 70 | 81 | 64 | 61 | 65 | 62 | 68 | 75 | 79 |
| Vacant Not Available <br> Rent(1) | 111 | 110 | 89 | 127 | 137 | 138 | 164 | 183 | 248 |

Note: Details may not add up to totals due to rounding.
Sources: U.S. Bureau of the Census, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014 and 2017 New York City Housing and Vacancy Surveys.
(1) Vacant units that are dilapidated, intended for seasonal use, held for occasional use, held for maintenance purposes or other reasons.

APPENDIX B TO
APPENDIX B

## FINANCIAL STATEMENTS

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## Basic Financial Statements of the City of New York June 30, 2017 and 2016


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## Grant Thornton

## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

The People of<br>The City of New York:

## Report on the financial statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of The City of New York ("The City") as of and for the years ended June 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise The City's basic financial statements as listed in the table of contents.

## Management's responsibility for the financial statements

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

## Auditor's responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We did not audit the financial statements of those entities disclosed in Note E. 1 which represent 7 percent, (2) percent, and 5 percent, respectively, of the assets, net position (deficit) and revenues of the governmental activities, 100 percent of the assets, net position and revenues of the business-type activities, 100 percent of the assets, net position and revenues of the aggregate discretely presented component units, and 100 percent of the assets, fund balance/net position and revenues of the aggregate remaining funds of The City. Those financial statements were audited by other auditors whose reports have been furnished to us, and our opinions, insofar as they relate to the amounts included for those entities disclosed in Note E.1, are based solely on the reports of the other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States
of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

## Opinions

In our opinion, based on our audit and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of The City of New York as of June 30, 2017 and 2016, and the respective changes in financial position, where applicable, cash flows thereof, and the respective budgetary comparison for the General Fund for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## Emphasis of matter

As further described in Note A. 2 to the financial statements, The City adopted new standards in fiscal 2017 related to the accounting for Other Postemployment Benefits and Blended Component Units. Our opinion is not modified with respect to this matter.

## Other matters

## Required supplementary information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages B-9 through B-35, Schedule of Changes in the City's Net Pension Liability and Related Ratios for Single-Employer Pension Plans at June 30th on page B-145, Schedule of the City's Proportionate Share of the Net Pension Liabilities of Cost-Sharing Multiple-Employer Pension Plans at June 30th on page B-146, Schedule of City Contributions for all Pension Plans for Fiscal Years Ended June 30th on page B-147 and Schedule of the Net OPEB Liability on page B-151 be presented to supplement the basic financial statements. Such information, although not a required part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. This required supplementary information is the responsibility of management. We and other auditors
have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America. These limited procedures consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Grant Thornton Ll

New York, New York

October 30, 2017
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B-B-6

## FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited)

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B-B-8

## MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited)

## Overview of the Financial Statements

## Government-Wide Financial Statements

## Governmental Funds

The following is a narrative overview and analysis of the financial activities of The City of New York (City or primary government) for the Fiscal Years ended June 30, 2017 and 2016 This discussion and analysis is intended to serve as an introduction to the City's basic financial statements, which have the following components: (1) government-wide financial statements, (2) fund financial statements, and (3) notes to financial statements.

The government-wide financial statements are designed to provide readers with a broad overview of the City's finances in a manner similar to a private-sector business.

The Statement of Net Position presents information on all of the City's assets, liabilities, and deferred outflows and inflows of resources. Net position (deficit) is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The Statement of Activities presents information showing how the City's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements, including the New York State Financial Emergency Act for The City of New York (Act). The Act requires the City to operate under a "rolling" Four-Year Financial Plan (Plan). Revenues and expenditures, including transfers, of each year of the Plan are required to be balanced on a basis consistent with Generally Accepted Accounting Principles (GAAP). The Plan is broader in scope than the expense budget; it comprises General Fund revenues and expenditures, Capital Projects Fund revenues and expenditures, and all short and long-term financing.

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. The principal role of funds in the financial reporting model is to demonstrate fiscal accountability. Governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of a fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the City's near-term financing decisions. Both the governmental funds balance sheet and the governmental funds Statement of Revenues, Expenditures, and Changes in Fund Balances provide a reconciliation to facilitate the comparison between governmental funds and governmental activities.

The City adopts an annual appropriated budget for its General Fund. A budgetary comparison statement has been provided for the General Fund to demonstrate compliance with this budget.

Proprietary funds are utilized when a state or local government charges customers to recover its costs of providing services. Proprietary funds report on business-type activities, which include enterprise type funds, and internal service type funds. The City has no internal service type funds. The City's enterprise funds are the same as the business-type activities reported in the government-wide statements. Proprietary funds statements are prepared using the economic resources measurement focus and accrual basis of accounting. In addition to a Statement of Net Position and a Statement of Revenues, Expenses and Changes in Fund Net Position, proprietary funds are also required to report a Statement of Cash Flows.

The fiduciary funds are used to account for assets and activities when a governmental unit is functioning either as a trustee or an agent for another party. The City's fiduciary funds are divided into two separate fund types: Pension and Other Employee Benefit Trust Funds and Agency Funds.

The Pension and Other Employee Benefit Trust Funds account for the operations of:

- Pension Trusts
- New York City Employees' Retirement System (NYCERS)
- Teachers' Retirement System of The City of New York (TRS)
- New York City Board of Education Retirement System (BERS)
- New York City Police Pension Funds (POLICE)
- New York City Fire Pension Funds (FIRE)
- Deferred Compensation Plans (DCP)
- The New York City Other Postemployment Benefits Plan (the OPEB Plan)

Each of the pension trusts report all jointly administered plans including primary pension (QPPs), and variable supplements funds (VSFs) and/or tax deferred annuity plans (TDAs), as appropriate. While the VSFs are included with QPPs for financial reporting purposes, in accordance with the Administrative Code of The City of New York (ACNY), VSFs are not pension funds or retirement systems. Instead, they provide scheduled supplemental payments, in accordance with applicable statutory provisions. Although a portion of these payments are guaranteed by the City, the State has the right and power to amend, modify, or repeal VSFs and the payments they provide. However, any assets transferred to the VSFs are held in trust solely for the benefit of its members. More information is available in Note E.5.

The Deferred Compensation Plans report the various jointly administered Deferred Compensation Plans of The City of New York and related agencies and Instrumentalities and the New York City Employee Individual Retirement Account (NYCEIRA).

Note: These fiduciary funds publish separate annual financial statements, which are available at: Office of the Comptroller, Bureau of Accountancy-Room 200 South, 1 Centre Street, New York, New York 10007, or at www.comptroller.nyc.gov.
These funds use the accrual basis of accounting and a measurement focus on the periodic determination of additions, deductions, and net position restricted for benefits.

The New York City Other Postemployment Benefits Plan (the OPEB Plan) is composed of The New York City Retiree Health Benefits Trust (the Trust) and postemployment benefits other than pensions (OPEB) paid for directly by the City out of its general resources rather than through the Trust. The Trust is used to accumulate assets to pay for some of the OPEB provided by the City to its retired employees. The OPEB Plan is reported in the City's financial statements as an Other Employee Benefit Trust Fund. The OPEB Plan was established for the exclusive benefit of the City's retired employees and their dependents in providing the following current postemployment benefits: a health insurance program, Medicare Part B premium reimbursements, and welfare fund contributions. The City is not required to provide funding for the OPEB Plan other than the "pay-as-you-go" amounts necessary to provide current benefits to eligible retirees and their dependents. During Fiscal Year 2017, the City contributed approximately $\$ 3.0$ billion to the OPEB Plan.

The Agency Funds account for miscellaneous assets held by the City for other funds, governmental units, and individuals. School fundraiser monies for scholarships, federal asset forfeiture for investigative purposes, and cash bail for use by the surety/assignee, are the major miscellaneous assets accounted for in these funds. The Agency Funds are custodial in nature and do not involve measurement of results of operations.

## Notes to Financial Statements

## Financial Reporting Entity

The notes to financial statements provide additional information that is essential for a more complete understanding of the information provided in the government-wide and fund financial statements.

The financial reporting entity consists of the City government and its component units, which are legally separate organizations for which the City is financially accountable.
The City is financially accountable for the organizations that make up its legal entity. The City is also financially accountable for a legally separate organization (component units) if City officials appoint a voting majority of that organization's governing body and the City is able to either impose its will on that organization or there is a potential for the organization to provide specific financial benefits to, or to impose specific financial burdens on the City.

Blended Component Units

Discretely Presented
Component Units

Business-Type Activities

The City may also be financially accountable for organizations that are fiscally dependent on the City if there is a potential for the organizations to provide specific financial benefits to the City, or impose specific financial burdens on the City, regardless of whether the organizations have separate elected governing boards, governing boards appointed by higher levels of government, or jointly appointed boards.
Certain component units, despite being legally separate from the City, are reported as if they were part of the City because, in addition to the City being financially accountable for them, they provide services exclusively to the City. The blended component units, which are all reported as Nonmajor Governmental Funds, comprise the following:

- New York City School Construction Authority (SCA)
- New York City Transitional Finance Authority (TFA)
- TSASC, Inc. (TSASC)
- New York City Educational Construction Fund (ECF)
- Fiscal Year 2005 Securitization Corporation (FSC)
- Sales Tax Asset Receivable Corporation (STAR)
- Hudson Yards Development Corporation (HYDC)
- Hudson Yards Infrastructure Corporation (HYIC)
- New York City Technology Development Corporation (TDC)
- New York City School Support Services (NYCSSS)

Certain component units are discretely presented because, while the City is financially accountable for them, they do not provide services exclusively to the government itself.

The following entities are presented discretely in the City's financial statements as major component units:

- Water and Sewer System (the System):
- New York City Water Board (Water Board)
- New York City Municipal Water Finance Authority (Water Authority)
- New York City Housing Authority (HA)
- New York City Housing Development Corporation (HDC)
- New York City Health and Hospitals Corporation (HHC)
- New York City Economic Development Corporation (EDC)

The following entities are presented discretely in the City's financial statements as nonmajor component units:

- Brooklyn Navy Yard Development Corporation (BNYDC)
- New York City Industrial Development Agency (IDA)
- New York City Business Assistance Corporation (NYBAC)
- Build NYC Resource Corporation (Build NYC)
- New York City Land Development Corporation (LDC)
- New York City Neighborhood Capital Corporation (NYCNCC)
- Brooklyn Public Library (BPL)
- The Queens Borough Public Library \& Affiliate (QBPL)

Additionally, other component units are classified as business-type activities.
Although legally separate from the City, the City has financial accountability for entities under this classification and as such they are reported as if they are a part of the City. These entities were established to provide services to third parties, and intended to operate with limited or no public subsidy.
The following entities are presented as business-type activities in the City's financial statements:

- Brooklyn Bridge Park Corporation (BBPC)
- The Trust for Governors Island (TGI)
- WTC Captive Insurance Company, Inc. (WTC Captive)
- New York City Tax Lien Trusts (NYCTLT's):
- NYCTLT 1998-2
- NYCTLT 2014-A
- NYCTLT 2015-A
- NYCTLT 2016-A
- NYCTLT 2017-A


## Financial Analysis of the Government-Wide Financial Statements

In the government-wide financial statements, all of the activities of the City, aside from its discretely presented component units, are reported as governmental activities.

As mentioned previously, the basic financial statements include a reconciliation between the Fiscal Year 2017 governmental funds Statement of Revenues, Expenditures, and Changes in Fund Balances, which reports an increase of $\$ 526$ million for all governmental funds balances. A similar reconciliation is provided for Fiscal Year 2016 amounts.

For the City's business-type activities, the results for Fiscal Year 2017 were positive; total net position increased to reach an ending balance of $\$ 868.3$ million, a $4 \%$ increase from the prior year. The total Fiscal Year 2017 increase in net position for business-type activities was $\$ 33.5$ million. This increase was predominately driven by the creation and introduction of a new entity, the NYCTLT2017-A, which resulted in an additional revenue stream of $\$ 48.9$ million. Compared to the prior year change in net position, Fiscal Year 2017 showed an increase of $\$ 1.07$ million, a 3\% increase.
For the City's business-type activities, the results for Fiscal Year 2016 were positive; total net position increased to reach an ending balance of $\$ 834.8$ million, a $4 \%$ increase from the prior year. The total Fiscal Year 2016 increase in net position for business-type activities was $\$ 32.4$ million. This increase was predominately driven by the creation and introduction of a new entity, the NYCTLT2016-A, which resulted in an additional revenue stream of $\$ 46.8$ million.

Key elements of these changes are as follows:

|  | Governmental Activities |  |  |
| :---: | :---: | :---: | :---: |
|  | 2017 | $\begin{gathered} 2016 \\ \text { (restated) } \end{gathered}$ | 2015 |
| Revenues: |  |  |  |
| Program revenues: |  |  |  |
| Charges for services | \$ 4,919,609 | \$ 4,786,001 | \$ 6,078,264 |
| Operating grants and contributions | 23,344,455 | 20,897,593 | 19,437,743 |
| Capital grants and contributions | 479,210 | 723,038 | 973,430 |
| General revenues: |  |  |  |
| Taxes | 55,337,797 | 53,564,673 | 52,523,182 |
| Investment income | 110,145 | 94,718 | 161,351 |
| Other Federal and State aid | 311,125 | 258,215 | 252,194 |
| Other | 428,702 | 625,870 | 1,403,787 |
| Total revenues | 84,931,043 | 80,950,108 | 80,829,951 |
| Expenses: |  |  |  |
| General government | 5,360,092 | 5,259,894 | 5,479,762 |
| Public safety and judicial | 18,961,329 | 19,681,206 | 13,840,502 |
| Education | 28,839,477 | 29,295,515 | 22,915,670 |
| City University | 1,252,444 | 1,342,333 | 1,094,172 |
| Social Services | 15,402,193 | 14,969,178 | 14,514,037 |
| Environmental protection | 3,570,278 | 3,709,540 | 3,188,665 |
| Transportation services | 2,542,300 | 2,784,695 | 2,460,777 |
| Parks, recreation and cultural activities. | 1,265,383 | 1,149,928 | 1,249,560 |
| Housing . . . . . . . . . . . . . . . . . . . . . | 2,394,963 | 2,006,924 | 1,574,233 |
| Health (including payments to HHC) | 2,874,032 | 3,277,736 | 2,186,493 |
| Libraries . . . | 420,994 | 457,653 | 350,475 |
| Debt service interest | 2,958,883 | 2,932,656 | 2,929,046 |
| Brooklyn Bridge Park. | ,958,883 | , | - |
| The Trust for Governor's Island | - | - | - |
| WTC Captive Insurance . . | - | - | - |
| New York City Tax Lien Trusts | - | 二 | 二 |
| Total expenses. | 85,842,368 | 86,867,258 | 71,783,392 |
| Change in net position | $(911,325)$ | $(5,917,150)$ | 9,046,559 |
| Net position (deficit)— beginning | $(193,524,916)$ | $(183,081,913)$ | $(191,103,187)$ |
| Restatement of beginning net position (deficit) | ( | $(4,525,853)$ | $(1,025,285)$ |
| Net position (deficit)—ending | $\underline{\text { \$(194,436,241) }}$ | $\underline{\$(193,524,916)}$ | $\underline{\$(183,081,913)}$ |

(a) The restatement of the beginning net deficit in Fiscal Year 2016 is the result of the City implementing GASB Statement No. 75 and 80 in Fiscal Year 2017.
The implementation is discussed further in footnote A. 2
N/A: Not Available.
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| Changes in Net Position (in thousands) <br> Business-type Activities |  |  |  |  | Total Primary Government |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 |  | $\begin{gathered} 2016 \\ \left(\text { restated) }{ }^{(\text {ar }}\right. \end{gathered}$ |  | 2015 | 2017 | $\begin{gathered} 2016 \\ \left(\text { restated) }{ }^{\text {ar }}\right. \end{gathered}$ | 2015 |
| \$ | 4,242 | \$ | 4,245 | N/A | \$ 4,923,851 | \$ 4,790,246 | 6,078,264 |
| \$ | 149,676 |  | 100,065 | N/A | 23,494,131 | 20,997,658 | 19,437,743 |
|  | 45,298 |  | 50,891 | N/A | 524,508 | 773,929 | 973,430 |
|  | 35,566 |  | 8,238 | N/A | 55,373,363 | 53,572,911 | 52,523,182 |
|  | 116,372 |  | 99,986 | N/A | 226,517 | 194,704 | 161,351 |
|  |  |  |  | N/A | 311,125 | 258,215 | 252,194 |
|  | 4,529 |  | 10,355 | N/A | 433,231 | 636,225 | 1,403,787 |
|  | 355,683 |  | 273,780 | N/A | 85,286,726 | 81,223,888 | 80,829,951 |
|  | - |  | - | N/A | 5,360,092 | 5,259,894 | 5,479,762 |
|  | - |  | - | N/A | 18,961,329 | 19,681,206 | 13,840,502 |
|  | - |  | - | N/A | 28,839,477 | 29,295,515 | 22,915,670 |
|  | - |  | - | N/A | 1,252,444 | 1,342,333 | 1,094,172 |
|  | - |  | - | N/A | 15,402,193 | 14,969,178 | 14,514,037 |
|  | - |  | - | N/A | 3,570,278 | 3,709,540 | 3,188,665 |
|  | - |  | - | N/A | 2,542,300 | 2,784,695 | 2,460,777 |
|  | - |  | - | N/A | 1,265,383 | 1,149,928 | 1,249,560 |
|  | - |  | - | N/A | 2,394,963 | 2,006,924 | 1,574,233 |
|  | - |  | - | N/A | 2,874,032 | 3,277,736 | 2,186,493 |
|  | - |  | - | N/A | 420,994 | 457,653 | 350,475 |
|  | - |  | - | N/A | 2,958,883 | 2,932,656 | 2,929,046 |
|  | 18,640 |  | 15,829 | N/A | 18,640 | 15,829 | - |
|  | 35,177 |  | 30,347 | N/A | 35,177 | 30,347 | - |
|  | 1,968 |  | 3,208 | N/A | 1,968 | 3,208 | - |
|  | 266,418 |  | 191,982 | N/A | 266,418 | 191,982 |  |
|  | 322,203 |  | 241,366 | N/A | 86,164,571 | 87,108,624 | 71,783,392 |
|  | 33,480 |  | 32,414 | N/A | $(877,845)$ | (5,884,736) | 9,046,559 |
|  | 834,817 |  | - | N/A | $(192,690,099)$ | $(183,081,913)$ | $(191,103,187)$ |
|  | - |  | 802,403 | N/A | - | ( 3,723,450) | (1,025,285) |
| \$ | 868,297 | \$ | 834,817 | N/A | \$(193,567,944) | \$(192,690,099) | $\underline{\text { \$(183,081,913) }}$ |

In Fiscal Year 2017, the government-wide revenues increased from Fiscal Year 2016 by approximately $\$ 4.0$ billion and government-wide expenses decreased by approximately $\$ 1.0$ billion.

The major components of the changes in government-wide revenue were:

- Grant revenue increased as a result of the following:
- Temporary Assistance for Needy Families (TANF): TANF increased due to greater spending on shelters as the homeless population increased slightly year over year. There was also an increase in the spending associated with increased prevention and outreach efforts, shelter maintenance, and shelter diversion strategies in the City's effort to combat the rise in homelessness.
- State Child Welfare: State Child Welfare increased due to new investments in preventive services and an increase in Administration for Children's Services (ACS) staff.
- Changes in tax revenues, net of refunds, were a result of the following:
- The increase in real estate taxes resulted from growth in billable assessed value during the fiscal year.
- The overall decrease in sales and use taxes was driven primarily by a significant reduction of School Tax Relief (STARC) collections due to a decrease in mortgage financing activity as a result of a slow-down in commercial transaction activity.
- There was an overall increase in income tax, despite there being a decrease in personal income tax due to a decline in estimated payments, the settlement of final returns, extension payments, and refunds reflecting weaker capital gains. A new corporate tax reform legislation went into effect in Fiscal Year 2017. The reform merged the general corporation tax and the banking corporation tax, redefined business and investment income, adopted a new business income base, and made many other changes regarding corporation tax, resulting in an overall increase in general corporation tax collections. The significant net gain in corporation tax was the primary driver of the overall increase in income taxes.
- For all other taxes, commercial rent tax increased due to a strong commercial office market with declining vacancy rates. However, overall other taxes decreased because of a significant decrease in the conveyance of real property tax revenue due to a slow-down in commercial transaction activity.
The major components of the changes in government-wide expenses were:
- Overall government-wide OPEB expenses increased, which was a result of changes related to implementation of new OPEB accounting standards. This was offset by decreases in overall pension expenses. Public Safety and Education had the highest decrease in pension expenses and increase in OPEB expenses due to this change.
- Social services expenses increased due to higher expenses incurred by the Department of Homeless Services for increased prevention services, street outreach efforts, improved shelter maintenance, and rate enhancements for homeless shelter providers. Additionally, ACS expenses increased due to new investments in training, child protective services and preventive services, and child care changing from a rate based payment system to an expense based system.
- Parks, recreation, and cultural activities (Parks) expenses increased primarily due to additional hiring of Parks full-time and season personnel and increased Other than Personal Services spending for new Parks programs. Additionally, expenses at the Department of Cultural Affairs increased due to higher subsidies and grants provided to cultural institutions and organizations, higher spending on diversity initiatives, and new spending to support energy costs of non-Culturals Institutions Group institutions that reside on City-owned property.
- Housing expenses increased due to higher Federal spending at Housing Preservation and Development in support of rental assistance and Super Storm Sandy recovery and spending at Department of Buildings on multiple initiatives to improve service delivery and update agency IT infrastructure.
- Health expenses decreased due to Health and Hospitals Corporation prepayments made in the prior fiscal year that resulted in higher expenses in the prior fiscal year, but lower expenses in the current fiscal year. This was offset by increased spending at Department of Health and Mental Hygiene for new investments in disease control, family and child health, and mental health.

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In Fiscal Year 2016, the government-wide revenues increased from Fiscal Year 2015 by approximately $\$ 120$ million and government-wide expenses increased by approximately $\$ 15.1$ billion.
The major components of the changes in government-wide revenue were:

- Grants increased due to more reimbursements for costs associated with Superstorm Sandy which impacted New York City in October 2012.
- Tax revenues, net of refunds, increased overall, as a result of the following:
- The increase in real estate taxes results from growth in billable assessed value during the fiscal year.
- The overall increase in sales and use taxes was driven primarily by large growth in mortgage financing activity for the commercial real estate market and stable financial activity for the residential market. Additionally, there was an increase in the collection of general sales tax which demonstrates an increase in taxable consumption resulting from growth in wages and visitor spending.
- The increase in personal income taxes reflects strong withholding growth and large gains in non-wage income.
- The increase in other income taxes (which includes general corporation, financial corporation, unincorporated business income, non-resident personal income taxes, and utility tax) is primarily attributable to an increase in financial corporation taxes which reflects increases in consumer and corporate lending, deposit taking, and reduced settlements related to mortgage securities and unfair banking practices. Additionally, growth in hedge fund asset management and employment, and growth in personal income payments from non-resident City employees increased unincorporated business income and personal income taxes, respectively.
- For all other taxes, the increase in taxes associated with the conveyance of real property reflects a continued recovery in the average sale price for both commercial and residential properties. Also increasing was payment in lieu of taxes (PILOT), which reflects higher payments for World Trade Center and Battery Park City Authority, offset by the forgiveness of New York City Housing Authority (HA) payments. Additionally, hotel room occupancy taxes grew due to continued growth in the tourism sector.
- The decrease in penalties and interest on delinquent taxes is primarily attributable to a decrease in penalties and interest on real estate taxes, which reflects a smaller percentage of delinquent properties paying penalties and interest. Additionally, refunds increased as a result of overpayments by taxpayers.

The major components of the changes in government-wide expenses were:

- General government expense increases are attributable to increases in Community Development Block Grant Disaster Recovery funded work, collective bargaining increases, and various Mayoral initiatives.
- Education expenses increased due to the expansion of Universal Pre-Kindergarten and after-school programming, new investments in low-performing schools, growth in mandated costs for special education pupils, and collective bargaining increases.
- Expenses in housing increased due to greater spending on initiatives associated with Super Storm Sandy housing recovery and resiliency efforts in Housing Preservation and Development (HPD). Department of Buildings expenses increased due to collective bargaining settlements and technology upgrades to improve service delivery. Expenses related to HA increased due to unit rehabilitations, extended hours at community centers, and collective bargaining increases.
- Parks, Recreation, Cultural Activities, and Health expenses decreased as a result of a reclassification of Capital work-in-progress that occurred during the fiscal year.
- Environmental protection expenses decreased primarily due to lower accruals for collective bargaining payments in Department of Environmental Protection in Fiscal Year 2015. Expenses in Sanitation increased due to landfill closure costs at Freshkills, start of operations at the North Shore Marine Transfer Station, and increase in collective bargaining expenses.
- Libraries expenses increased primarily due to budget increases to cover collective bargaining settlement payments made in Fiscal Year 2015.

The following charts compare the amounts of expenses and program revenues for Fiscal Years 2017 and 2016:
Expenses and Program Revenues - Governmental Activities for the Fiscal Year ended June 30, 2017 (in billions)


Expenses and Program Revenues - Governmental Activities for the Fiscal Year ended June 30, 2016 (in billions)


Expenses
Program Revenues

```
Functions/Programs
GG General government
PS Public safety and judicial
E Education (Primary and Secondary)
CU City University
SS Social services
EP Environmental protection
TS Transportation services
PK Parks, recreation, and cultural activities
HG Housing
H Health, including payments to HHC
L Libraries
DSI Debt service interest
```

The following charts compare the amounts of program and general revenues for Fiscal Years 2017 and 2016:

## Revenues by Source - Governmental Activities

 for the Fiscal Year ended June 30, 2017

Revenues by Source - Governmental Activities for the Fiscal Year ended June 30, 2016


As noted earlier, increases and decreases of net position may over time serve as a useful indicator of changes in a government's financial position. In the case of the City, governmental activities for Fiscal Year 2017 liabilities and deferred inflows of resources exceeded assets and deferred outflows of resources by $\$ 194.4$ billion, an increase in the net deficit of $\$ 911.3$ million from June 30, 2016 as restated, which in turn compares with an increase to the net deficit of $\$ 10.4$ billion over the prior Fiscal Year 2015.

See table below for further details.

|  | Governmental Activities |  |  |
| :---: | :---: | :---: | :---: |
|  | 2017 | $\begin{gathered} 2016 \\ \text { (restated) } \end{gathered}$ | 2015 |
| Current and other assets | \$ 40,355,566 | \$ 38,859,291 | \$ 40,367,330 |
| Capital assets (net of depreciation) | 57,516,792 | 54,952,234 | 53,122,237 |
| Total assets | 97,872,358 | 93,811,525 | 93,489,567 |
| Deferred outflows of resources | 5,098,543 | 13,489,496 | 5,334,087 |
| Long-term liabilities outstanding | 251,130,595 | 262,960,871 | 240,788,718 |
| Other liabilities | 22,467,090 | 22,233,855 | 22,860,910 |
| Total liabilities | 273,597,685 | 285,194,726 | 263,649,628 |
| Deferred inflows of resources | 23,809,457 | 15,631,211 | 18,255,939 |
| Net position: |  |  |  |
| Net investment in capital assets | $(12,522,029)$ | (12,684,965) | $(13,828,805)$ |
| Restricted | 2,793,287 | 4,226,381 | 5,277,387 |
| Unrestricted (deficit) | (184,707,499) | $(185,066,332)$ | $(174,530,495)$ |
| Total net position (deficit) | \$(194,436,241) | \$(193,524,916) | \$(183,081,913) |

N/A: Not Available.

| Net Position (in thousands) |  |  |  |  | Total Primary Government |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 |  | $\begin{gathered} 2016 \\ \text { (restated) } \end{gathered}$ |  | 2015 | 2017 | $\begin{gathered} 2016 \\ \text { (restated) } \end{gathered}$ | 2015 |
| \$ | 762,818 | \$ | 763,813 | N/A | \$ 41,118,384 | \$ 39,623,104 | \$ 40,367,330 |
|  | 571,320 |  | 540,547 | N/A | 58,088,112 | 55,492,781 | 53,122,237 |
|  | 1,334,138 |  | 1,304,360 | N/A | 99,206,496 | 95,115,885 | 93,489,567 |
|  | - |  | - | N/A | 5,098,543 | 13,489,496 | 5,334,087 |
|  | 405,352 |  | 402,017 | N/A | 251,535,947 | 263,362,888 | 240,788,718 |
|  | 60,489 |  | 67,526 | N/A | 22,527,579 | 22,301,381 | 22,860,910 |
|  | 465,841 |  | 469,543 | N/A | 274,063,526 | 285,664,269 | 263,649,628 |
|  | - |  | - | N/A | 23,809,457 | 15,631,211 | 18,255,939 |
|  | 571,319 |  | 540,548 | N/A | (11,950,710) | $(12,144,417)$ | $(13,828,805)$ |
|  | 296,978 |  | 302,740 | N/A | 3,090,265 | 4,529,121 | 5,277,387 |
|  | - |  | $(8,471)$ | N/A | $(184,707,499)$ | $(185,074,803)$ | (174,530,495) |
| \$ | 868,297 | \$ | 834,817 | N/A | \$(193,567,944) | \$(192,690,099) | \$(183,081,913) |

The excess of liabilities over assets reported for governmental activities on the governmentwide Statement of Net Position (deficit) is a result of several factors. The largest components of the net position (deficit) are the result of the City having long-term debt with no corresponding capital assets and the City's Post-retirement benefits liability. The following summarizes the main components of the net deficit as of June 30, 2017 and 2016:
$\frac{\text { Components of Net Deficit }}{\frac{2016 \text { (restated) }}{2017}}$

## Net Position Invested in Capital Assets

Some City-owned assets have a depreciable life used for financial reporting that is different from the period over which the related debt principal is being repaid. Schools and related education assets depreciate more quickly than their related debt is paid, and they comprise one of the largest components of this difference \$(12.5) \$ (12.7)

## Net Position Restricted for:

| Debt Service | 3.5 | 3.8 |
| :---: | :---: | :---: |
| Capital Projects | 0.6 | 0.4 |
| Total restricted net position | 4.1 | 4.2 |

## Unrestricted Net Position

TFA issued debt to finance costs related to the recovery from the September 11, 2001 World Trade Center disaster, which are operating expenses of the City .
STAR issued debt related to the defeasance of the MAC issued debt
The City has issued debt for the acquisition and construction of public purpose capital assets which are not reported as City-owned assets on the Statement of Net Position. This includes assets of the TA, the System, HHC, and certain public libraries and cultural institutions. This is the debt outstanding for non-City owned assets at year end.

| Certain long-term obligations do not require current funding: |  |  |
| :---: | :---: | :---: |
| OPEB liability | (88.4) | (94.5) |
| Judgments and claims | (6.9) | (7.1) |
| Vacation and sick leave | (4.6) | (4.3) |
| Pension liability | (56.2) | (64.8) |
| Landfill closure and postclosure costs | (1.5) | (1.5) |
| Deferred outflows of resources | 5.1 | 13.5 |
| Other: | 1.2 | 4.5 |
| Total unrestricted net position | (186.0) | (185.0) |
| Total net position (deficit) | \$(194.4) | \$(193.5) |

The following chart provides Fiscal Year ended June 30, 2017, pension statistics by pension system as of the dates of the most recent actuarial valuations:

|  | Summary of City Pension Information Fiscal Year 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NYCERS* | TRS** | BERS** | $\underline{\text { POLICE* }}$ | FIRE* | Total |
| City Membership (active, inactive and retired) as of $6 / 30 / 15$ | 189,339 | 211,634 | 45,529 | 85,168 | 27,540 | 559,210 |
|  | (in billions, except \%) |  |  |  |  |  |
| Total Pension Liability (TPL) | \$ 44.8 | \$ 71.6 | \$ 5.1 | \$ 52.4 | \$21.3 | \$ 195.2 |
| Less Plan Fiduciary Net Position (PFNP) | 33.5 | 48.9 | 4.1 | 39.4 | 13.0 | 138.9 |
| Net Pension Liability (NPL) | \$ 11.3 | \$22.7 | \$ 1.0 | \$ 13.0 | \$ 8.3 | \$ 56.3 |
| PFNP as a \% of TPL*** | 74.8\% | 68.3\% | 80.8\% | 75.2\% | 61.0\% | 71.2\% |
| Pension Expense | \$ 1.3 | \$ 3.6 | \$ 0.2 | \$ 1.8 | \$ 1.1 | \$ 8.0 |

```
* Includes QPP and VSFs
** QPP only
*** Calculated based on whole dollar unrounded amounts.
```

The following chart provides Fiscal Year ended June 30, 2016, pension statistics by pension system as of the dates of the most recent actuarial valuations:

|  | Summary of City Pension Information Fiscal Year 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NYCERS* | TRS** | BERS** | $\underline{\text { POLICE* }}$ | FIRE* | Total |
| City Membership (active, inactive and retired) as of 6/30/14 . . . . | 187,548 | 206,481 | 45,358 | 84,555 | 27,138 | 551,080 |
|  | (in billions, except \%) |  |  |  |  |  |
| Total Pension Liability (TPL) | \$ 43.7 | \$ 68.0 | \$ 4.8 | \$ 51.1 | \$ 20.6 | \$ 188.2 |
| Less Plan Fiduciary Net Position (PFNP) | 30.4 | 42.4 | 3.4 | 35.5 | 11.7 | 123.4 |
| Net Pension Liability (NPL). | \$ 13.3 | \$ 25.6 | \$ 1.4 | \$ 15.6 | \$ 8.9 | \$ 64.8 |
| PFNP as a \% of TPL*** | 69.6\% | 62.4\% | 70.8\% | 69.5\% | 56.8\% | 65.6\% |
| Pension Expense. | \$ 1.7 | \$ 3.8 | \$ 0.3 | \$ 2.2 | \$ 1.1 | \$ 9.1 |
| * Includes QPP and VSFs |  |  |  |  |  |  |
| ** QPP only |  |  |  |  |  |  |
| *** Calculated based on whole dollar un | ounded amou |  |  |  |  |  |

More information about pensions is available in Note E.5.

## Financial Analysis of the Governmental Funds

As noted earlier, the City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. The table below summarizes the changes in the fund balances of the City's governmental funds.

|  | General Fund |  | Capital <br> Projects Fund | Governmental Funds |  | Adjustments/Eliminations |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | General Debt Service Fund | $\begin{gathered} \text { Nonmajor } \\ \text { Governmental } \\ \text { Funds } \end{gathered}$ |  |  |  |
|  |  |  |  |  | (in thousands) |  |  |  |  |
| Fund Balances (deficit), June 30, 2015 | \$ | 467,621 | \$ (1,779,591) | \$ 1,970,220 | \$ 4,378,186 | \$ | - | \$ 5,036,436 |
| Revenues |  | 79,399,507 | 1,996,759 | 87,611 | 3,603,517 |  | $(2,746,399)$ | 82,340,995 |
| Expenditures |  | $(73,700,743)$ | $(8,079,916)$ | $(3,912,444)$ | $(5,613,288)$ |  | 2,566,109 | (88,740,282) |
| Other financing sources (uses) |  | $(5,693,566)$ | 4,884,351 | 3,629,730 | 2,026,286 |  | 180,290 | 5,027,091 |
| Restatement of beginning net position |  | - | - | - | $(120,417)$ |  |  | $(120,417)$ |
| Fund Balances (deficit), June 30, 2016 |  | 472,819 | $(2,978,397)$ | 1,775,117 | 4,274,284 |  | - | 3,543,823 |
| Revenues |  | 83,029,725 | 2,128,070 | 118,404 | 4,151,266 |  | $(3,590,121)$ | 85,837,344 |
| Expenditures |  | $(77,027,929)$ | $(8,825,550)$ | $(3,815,106)$ | $(6,601,521)$ |  | 3,292,870 | $(92,977,236)$ |
| Other financing sources (uses) |  | $(5,996,586)$ | 7,156,028 | 3,504,329 | 2,704,554 |  | 297,251 | 7,665,576 |
| Fund Balances (deficit), June 30, 2017 | \$ | 478,029 | \$(2,519,849) | \$ 1,582,744 | \$ 4,528,583 | \$ | - | \$ 4,069,507 |

The City's General Fund is required to adopt an annual budget prepared on a basis generally consistent with Generally Accepted Accounting Principles (GAAP). Surpluses from any fiscal year cannot be appropriated in future fiscal years.

If the City anticipates that the General Fund will have an operating surplus, the City will make discretionary transfers to the General Debt Service Fund and other payments that reduce the amount of the General Fund surplus for financial reporting purposes and reduce the need for expenditures in the succeeding fiscal year or years. As detailed later, the General Fund had an operating surplus of $\$ 4.2$ billion and $\$ 4.0$ billion before these expenditures and transfers (discretionary and other) for Fiscal Years 2017 and 2016, respectively. After these certain expenditures and transfers, the General Fund reported an operating surplus of $\$ 5$ million in both Fiscal Years 2017 and 2016, which resulted in an increase in fund balance by this amount.

The General Debt Service Fund receives transfers (discretionary and other) from the General Fund from which it pays the City's debt service requirements. Its fund balance at June 30, 2017 can be attributed principally to transfers (discretionary transfer and other) from the General Fund totaling $\$ 1.6$ billion in Fiscal Year 2017 for Fiscal Year 2018 debt service. Similar transfers in Fiscal Year 2016 of $\$ 1.8$ billion for Fiscal Year 2017 debt service also primarily account for the General Debt Service Fund balance at June 30, 2016.

The Capital Projects Fund accounts for the financing of the City's capital program. The primary source of funding is the issuance of City and TFA debt. Capital-related expenditures are first paid from the General Fund, which is reimbursed for these expenditures by the Capital Projects Fund. To the extent that capital expenditures exceed proceeds from bond issuances, and other revenues and financing sources, the Capital Projects Fund will have a deficit. The deficit fund balances at June 30, 2017 and 2016 represent the amounts expected to be financed from future bond issues or intergovernmental reimbursements. To the extent the deficits will not be financed or reimbursed, transfers from the General Fund will be required.

General Fund
Budgetary Highlights

GAAP require recognition of pollution remediation obligations and generally preclude costs incurred for pollution remediation from being reported as capital expenditures. Thus, the City's Fiscal Year 2017 General Fund expenditures include approximately \$142.7 million of pollution remediation expenditures associated with projects which were originally included in the City's capital program. The City also reported $\$ 139.9$ million of City bond proceeds and $\$ 2.8$ million of other revenues (New York City Municipal Water Finance Authority bond proceeds transferred to the City) supporting the $\$ 142.7$ million of pollution remediation expenditures in the General Fund for Fiscal Year 2017. In Fiscal Year 2016, $\$ 159.2$ million of City bond proceeds and $\$ 4.7$ million of other revenues supported the $\$ 163.9$ million of pollution remediation expenditures reported in the General Fund. Although amounts were not established in the Adopted Budget, a modification to the budget was made to accommodate the amount of pollution remediation expenditure charge in the General Fund. These pollution remediation expenditures were incurred by various agencies, as follows:

|  | General Fund Pollution Remediation Expenditures |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
|  | (in thousands) |  |  |  |
| General government. | \$ | 24,290 | \$ | 23,456 |
| Public safety and judicial |  | 2,602 |  | 3,172 |
| Education. |  | 81,828 |  | 107,083 |
| Social services |  | 635 |  | 154 |
| Environmental protection. |  | 16,077 |  | 10.929 |
| Transportation services |  | 8,459 |  | 5,879 |
| Parks, recreation, and cultural activities |  | 5,848 |  | 3,227 |
| Housing |  | 616 |  | 1,892 |
| Health, including HHC |  | 1,962 |  | 7,665 |
| Libraries. |  | 381 |  | 437 |
| Total expenditures | \$ | 142,698 | \$ | 163,894 |

The following charts and tables summarize actual revenues by category for Fiscal Years 2017 and 2016 and compare revenues with each fiscal year's Adopted Budget and Modified Budget.

General Fund Revenues
Fiscal Year 2017
(in billions)


## General Fund Revenues Fiscal Year 2017



## General Fund Revenues

Fiscal Year 2016 (in billions)


## General Fund Revenues Fiscal Year 2016

|  | Adopted <br> Budget | Modified Budget | Actual |
| :---: | :---: | :---: | :---: |
|  |  | (in millions) |  |
| Taxes (net of refunds): |  |  |  |
| Real estate taxes | \$22,589 | \$23,120 | \$23,181 |
| Sales and use taxes | 8,068 | 8,560 | 8,540 |
| Personal income tax | 11,154 | 11,454 | 11,392 |
| Income taxes, other | 6,662 | 7,171 | 6,948 |
| Other taxes | 3,745 | 3,484 | 3,560 |
| Taxes (net of refunds) | 52,218 | 53,789 | 53,621 |
| Federal, State and other aid: |  |  |  |
| Categorical... | 20,766 | 21,969 | 20,904 |
| Federal, State and other aid | 20,766 | 21,969 | 20,904 |
| Other than taxes and aid: |  |  |  |
| Charges for services | 2,735 | 2,734 | 2,624 |
| Other revenues | 1,911 | 2,755 | 2,250 |
| Bond proceeds | - | 159 | 159 |
| Transfers from Nonmajor Debt Service Fund | 240 | 346 | 346 |
| Transfers from General Nonmajor Debt Service Fund | 82 | 82 | 82 |
| Other than taxes and aid | 4,968 | 6,076 | 5,461 |
| Total revenues | \$77,952 | \$81,834 | \$79,986 |

The following charts and tables summarize actual expenditures by function/program for Fiscal Years 2017 and 2016 and compare expenditures with each fiscal year's Adopted Budget and Modified Budget.

General Fund Expenditures
Fiscal Year 2017
(in billions)


## General Fund Expenditures

Fiscal Year 2017

|  | Adopted Budget | Modified Budget | Actual |
| :---: | :---: | :---: | :---: |
|  |  | (in millions) |  |
| General government (GG) | \$ 3,398 | \$ 3,471 | \$ 3,247 |
| Public safety and judicial (PS) | 9,233 | 9,831 | 9,694 |
| Education (E) | 23,179 | 23,465 | 23,318 |
| City University (CU) | 1,041 | 1,115 | 1,067 |
| Social services (SS) | 14,281 | 14,817 | 14,485 |
| Environmental protection (EP) | 3,044 | 2,967 | 2,923 |
| Transportation services (TS) | 1,729 | 1,800 | 1,754 |
| Parks, recreation and cultural activities (PK) | 587 | 610 | 599 |
| Housing (HG) | 1,488 | 1,328 | 1,220 |
| Health, including HHC (H) | 1,813 | 2,271 | 2,233 |
| Libraries (L) | 365 | 371 | 370 |
| Pensions (P) | 9,310 | 9,283 | 9,281 |
| Judgments and claims (JC) | 676 | 751 | 750 |
| Fringe benefits and other benefit payments (FB) | 5,654 | 5,963 | 5,909 |
| Other (O). | 2,088 | 268 | 147 |
| Transfers and other payments for debt service (T) | 3,584 | 6,466 | 6,466 |
| Total expenditures | \$81,470 | \$84,777 | \$83,463 |

General Fund Expenditures
Fiscal Year 2016 (in billions)


## General Fund Expenditures

Fiscal Year 2016

|  | Adopted Budget | Modified <br> Budget | Actual |
| :---: | :---: | :---: | :---: |
|  |  | (in millions) |  |
| General government (GG) | \$ 3,267 | \$ 3,201 | \$ 2,985 |
| Public safety and judicial (PS) | 8,777 | 9,483 | 9,326 |
| Education (E) | 21,894 | 22,374 | 21,974 |
| City University (CU) | 978 | 1,003 | 955 |
| Social services (SS) | 14,027 | 13,980 | 13,800 |
| Environmental protection (EP) | 2,748 | 2,796 | 2,569 |
| Transportation services (TS) | 1,659 | 1,754 | 1,708 |
| Parks, recreation and cultural activities (PK) | 525 | 549 | 534 |
| Housing (HG) | 939 | 1,118 | 1,023 |
| Health, including HHC (H) | 1,673 | 2,712 | 2,667 |
| Libraries (L) | 358 | 360 | 360 |
| Pensions (P) | 8,643 | 9,173 | 9,171 |
| Judgments and claims (JC) | 710 | 720 | 720 |
| Fringe benefits and other benefit payments (FB) | 5,310 | 5,691 | 5,511 |
| Other (O) | 2,904 | 435 | 198 |
| Transfers and other payments for debt service (T) | 3,540 | 6,485 | 6,480 |
| Total expenditures | \$77,952 | \$81,834 | \$79,981 |

The City had General Fund surpluses of $\$ 4.2$ billion, $\$ 4.0$ billion and $\$ 3.6$ billion before certain expenditures and transfers (discretionary and other) for Fiscal Years 2017, 2016 and 2015, respectively. For the Fiscal Years 2017, 2016 and 2015, the General Fund surplus was $\$ 5$ million after expenditures and transfers (discretionary and other).

The expenditures and transfers (discretionary and other) made by the City after the adoption of its Fiscal Years 2017, 2016 and 2015 budgets follow:

|  | General Fund |  |  |
| :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 |
|  |  | (in millions) |  |
| Transfer, as required by law, to the General |  |  |  |
| Debt Service Fund of real estate taxes collected in excess of the amount needed to finance debt service. | \$ 239 | \$ 382 | \$ 428 |
| Discretionary transfers to the General Debt |  |  |  |
| Service Fund | 1,321 | 1,378 | 1,548 |
| Equity contribution set aside to bond refunding escrow accounts for current fiscal year interest costs. | 11 | 44 | 47 |
| Debt service prepayments for lease purchase deb service due in the fiscal year | - | 100 | - |
| Grant to TFA | 1,909 | 1,734 | 1,578 |
| Advance cash subsidies to the HHC | 300 | 400 | - |
| Payment to the Retiree Health Benefits Trust | 400 | - | - |
| Total expenditures and transfers (discretionary and other) | 4,180 | 4,038 | 3,601 |
| Reported surplus | 5 | 5 | 5 |
| Total surplus | \$4,185 | \$4,043 | \$3,606 |

Final results for any given fiscal year may differ greatly from that year's Adopted Budget. The following table shows the variance between actuals and amount for the Fiscal Year ended 2017 Adopted Budget:
2017
Additional Resources: ..... (in millions)
Reallocation of General Reserve ..... \$1,000
Lower than expected all other administrative Other Than Personal Services (OTPS) costs ..... 900
Reduced provisions for disallowance reserve ..... 573
Lower than expected debt service costs ..... 518
Higher than expected real estate tax collections ..... 450
Lower than expected all other personal services costs ..... 421
Higher than expected state categorical aid ..... 317
Lower than expected health insurance costs ..... 308
Greater than expected banking corporation tax collections ..... 304
Greater than expected federal categorical aid ..... 254
Lower than expected supplies and materials costs ..... 230
Higher than expected non-governmental grants ..... 215
Pollution remediation bond proceeds ..... 140
Higher than expected all other miscellaneous revenues ..... 123
Lower than expected public assistance spending ..... 115
Greater than expected revenues from licenses, permits \& privileges ..... 114
Lower than expected all other fixed and miscellaneous charges ..... 114
Greater than expected all other taxes collections ..... 99
Higher than expected commercial rent tax collections ..... 94
Greater than expected revenues from fines and forfeitures ..... 80
Higher than expected all other general government charges (collections) ..... 60
Higher than expected unrestricted aid ..... 59
Lower than expected fuel and energy costs ..... 42
Higher than expected housing revenues ..... 40
Greater than expected rental revenues ..... 36
Greater than expected mortgage tax collections ..... 33
Higher than expected proceeds from asset sales ..... 31
Lower than expected pension costs ..... 29
Total ..... 6,699
Enabled the City to provide for:
Additional prepayments for certain debt service, future retirees' healthbenefits costs and subsidies due in Fiscal Year 20184,169
Greater than expected overtime costs. ..... 520
Greater than expected contractual services costs ..... 372
Lower than expected personal income tax collections ..... 358
Lower than expected general corporation tax collections ..... 301
Lower than expected real property transfer tax collections. ..... 146
Pollution remediation costs ..... 143
Higher than expected property and equipment costs ..... 133
Higher than expected payments to HHC ..... 127
Lower than expected sales tax collections ..... 106
Higher than expected future retirees' health benefits costs (net of prepayment). ..... 100
Greater than expected judgments \& claims costs ..... 69
Lower than expected unincorporated business tax collections ..... 50
Lower than expected water and sewer charges ..... 41
Greater than expected all other social services spending (excluding Medicaid and public assistance) ..... 26
Lower than expected tobacco settlement proceeds ..... 23
All other net overspending or revenues below budget ..... 10
Total ..... 6,694
Reported Surplus ..... $\$ \quad 5$

The following table shows the variance between actuals and amounts for the Fiscal Year ended 2016 Adopted Budget:
2016
Additional Resources: ..... (in millions)
Lower than expected all other administrative OTPS costs ..... \$ 1,148
Lower than expected all other personal services spending ..... 1,031
Reallocation of the General Reserve ..... 1,000
Greater than expected real estate tax collections ..... 591
Lower than expected debt service costs ..... 580
Higher than expected banking corporation tax collections ..... 481
Lower than expected Medicaid spending ..... 414
Greater than expected real property transfer tax collections ..... 364
Higher than expected mortgage tax collections ..... 319
Lower than expected current health insurance costs ..... 302
Higher than expected Federal categorical aid ..... 248
Greater than expected personal income tax collections ..... 217
Lower than expected fuel and energy costs ..... 208
Greater than expected revenues from fines and forfeitures ..... 185
Lower than expected supplies and materials costs ..... 168
Pollution remediation bond proceeds ..... 159
Greater than expected sales tax collections ..... 117
Higher than expected tobacco settlement proceeds ..... 106
Greater than expected all other general government charges (collections) ..... 100
Higher than expected revenues from licenses, permits \& privileges ..... 87
Higher than expected commercial rent tax collections ..... 47
Greater than expected all other tax collections ..... 47
Higher than expected all other miscellaneous revenues ..... 34
Greater than expected proceeds from asset sales ..... 33
Greater than expected State categorical aid (including prior year adjustments) ..... 24
Lower than expected provisions for disallowance reserve ..... 14
Greater than expected unincorporated business tax collections ..... 9
Greater than expected rental revenues ..... 8
Lower than expected public assistance spending ..... 4
Total ..... 8,045
Enabled the City to provide for:
Additional prepayments for certain debt service costs and subsidies due inFiscal Year 20173,994
Lower than expected general corporation tax collections ..... 789
Higher than expected payments to HHC ..... 574
Greater than expected pension costs ..... 528
Higher than expected reserve for future retirees' health insurance costs ..... 500
Greater than expected uniformed overtime costs ..... 296
Lower than expected reimbursement and payment for the water and sewer system ..... 219
Greater than expected all other overtime costs ..... 193
Higher than expected all other fixed and miscellaneous charges ..... 193
Greater than expected property and equipment costs ..... 179
Pollution remediation costs ..... 164
Lower than expected non-governmental grants ..... 154
Higher than expected contractual services spending ..... 126
Higher than expected all other social services spending (excluding Medicaid and public assistance) ..... 102
Greater than expected judgments \& claims costs ..... 21
All other net overspending or revenues below budget ..... 8
Total ..... 8,040
Reported Surplus ..... $\$ \quad 5$

## Capital Assets

The City's investment in capital assets (net of accumulated depreciation/amortization), is detailed as follows:

| Governmental Activities |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 |
|  |  | (in millions) |  |
| Land* | \$2,181 | \$ 1,941 | \$ 1,907 |
| Buildings | 34,826 | 33,733 | 33,081 |
| Equipment (including software) | 2,900 | 2,643 | 2,602 |
| Infrastructure** | 13,866 | 13,124 | 12,552 |
| Construction work-in-progress* | 3,744 | 3,511 | 2,980 |
| Total | \$57,517 | \$54,952 | \$53,122 |

* Not depreciable/amortizable
** Infrastructure elements include the roads, bridges, curbs and gutters, streets and sidewalks, park land and improvements, piers, bulkheads and tunnels.
The net increase in the City's governmental activities capital assets during Fiscal Year 2017 was $\$ 2.56$ billion, a 5\% increase. Capital assets additions in Fiscal Year 2017 were $\$ 9.2$ billion, an increase of $\$ 1.46$ billion from Fiscal Year 2016.
In 2017, construction work-in-progress was $\$ 3.74$ billion, representing a $6.6 \%$ net increase. The 2017 addition to work-in-progress was $\$ 3.30$ billion, a $9 \%$ increase from prior year. In 2017 building additions (work-in-progress deletions) were $\$ 3.07$ billion, representing a $22 \%$ increase from Fiscal Year 2016.
The net increase in the City's governmental activities capital assets during Fiscal Year 2016 was $\$ 1.83$ billion, a $3 \%$ increase. Capital assets additions in Fiscal Year 2016 were $\$ 7.71$, a decrease of $\$ 2.19$ billion from Fiscal Year 2015.
In 2016, construction work-in-progress was $\$ 3.51$ billion, representing a $18 \%$ net increase. The 2016 addition to work-in-progress was $\$ 3.04$ billion, a $15 \%$ decrease from prior year. The increase in the work-in-progress ending balance was the result of a decrease in building additions (work-in-progress deletion) of $\$ 2.35$ billion, which represents a $48 \%$ decrease from Fiscal Year 2015.

Additional information on the City's capital assets can be found in Note D. 2 of the Basic Financial Statements and in schedule CA1 through CA3 of other supplementary information.

Business-type Activities

|  | 2017 | 2016 | 2015 |
| :---: | :---: | :---: | :---: |
|  |  | (in millions) |  |
| Land* | \$ - | \$ - | \$ - |
| Buildings | 30 | 28 | 23 |
| Equipment (including software) | 5 | 4 | 4 |
| Infrastructure** | 392 | 342 | 313 |
| Construction work-in-progress* | 144 | 167 | 162 |
| Total | \$571 | \$541 | \$502 |

* Not depreciable/amortizable
** Infrastructure elements include the roads, bridges, curbs and gutters, streets and sidewalks, park land and improvements, piers, and bulkheads.

The net increase in the City's business-type activities Capital assets during Fiscal Year 2017 was $\$ 30$ million, a 6\% increase. Capital asset additions net of depreciation in Fiscal Year 2017 were $\$ 105$ million, an increase of $\$ 9$ million, from Fiscal Year 2016.

In 2017, construction work-in-progress was $\$ 144$ million, representing a $13 \%$ net decrease. The 2017 addition to work-in-progress was $\$ 52$ million, a $16 \%$ decrease from prior year.
The net increase in the City's business-type activities capital assets during Fiscal Year 2016 was $\$ 39$ million, an $8 \%$ increase. In 2016, construction work-in-progress was $\$ 166.52$ million, representing a $3 \%$ net increase. The 2016 net increase to work-in-progress was $\$ 4.32$ million, a $2.7 \%$ increase.

## Debt Administration

General Obligation

The City, through the Comptroller's Office of Public Finance, in conjunction with the Mayor's Office of Management and Budget, is charged with issuing debt to finance the City's capital program. The following table summarizes the debt outstanding for the City and certain City-related issuing entities at the end of Fiscal Years 2017, 2016 and 2015.

|  | New York City and City-Related Debt |  |  |
| :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 |
|  |  | (in millions) |  |
| Governmental activities: |  |  |  |
| Bonds and notes payable |  |  |  |
| General Obligation Bonds ${ }^{(1)}$ | \$37,891 | \$38,073 | \$40,460 |
| TFA Bonds | 32,014 | 28,408 | 25,488 |
| TFA Recovery Bonds | 800 | 906 | 936 |
| TFA BARBs | 7,882 | 8,044 | 7,426 |
| TSASC Bonds | 1,089 | 1,145 | 1,222 |
| IDA Bonds | 80 | 84 | 87 |
| STAR Bonds | 1,884 | 1,961 | 2,035 |
| FSC Bonds | 132 | 175 | 198 |
| HYIC Bonds | 2,751 | 3,000 | 3,000 |
| ECF Bonds | 236 | 240 | 264 |
| Total bonds and notes outstanding governmental activities | 84,759 | 82,036 | 81,116 |
| Business-type activities: |  |  |  |
| Bonds and notes payable |  |  |  |
| Tax Lien Collateralized Bonds | 37 | 32 | 34 |
| Total bonds and notes outstanding business-type activities | 37 | 32 | 34 |
| Total before premiums/discounts (net) | 84,796 | 82,068 | 81,150 |
| Premiums/discounts (net) | 4,827 | 4,173 | 3,825 |
| Total bonds and notes outstanding | \$89,623 | \$86,241 | \$84,975 |

(1) Does not include capital contractual liabilities.

The State Constitution provides that, with certain exceptions, the City may not contract indebtedness in an amount greater than $10 \%$ of the average full value of taxable real estate in the City for the most recent five years (Debt Limit). State law further provides that certain TFA debt also be counted against the Debt Limit. On June 30, 2017, the City's outstanding General Obligation (GO) debt, including capital contract liabilities and TFA's outstanding debt above $\$ 13.5$ billion (refer to Note D5 for further details) totaled $\$ 66.21$ billion (compared with $\$ 62.21$ billion and $\$ 59.63$ billion as of June 30, 2016 and 2015, respectively). As of June 30, 2017, the City's Debt Limit was $\$ 90.24$ billion (compared with $\$ 85.18$ billion and $\$ 81.35$ billion as of June 30, 2016 and 2015, respectively). The remaining debt incurring power for the City and TFA's combined debt as of June 30, 2017, after providing for capital contract liabilities, totaled $\$ 24.02$ billion. As of July 1, 2017, the remaining debt incurring power is $\$ 34.21$ billion, based on the change in the five- year full valuation average for fiscal year 2018.

As of June 30, 2017, the City's outstanding GO debt was $\$ 37.89$ billion, consisting of $\$ 7.05$ billion of variable rate bonds and $\$ 30.84$ billion of fixed rate bonds. In Fiscal Year 2017, a total of $\$ 900.07$ million GO bonds were issued to refund a portion of the City's outstanding bonds at lower interest rates and $\$ 2.28$ billion of bonds were issued for new money capital purposes. The proceeds of the refunding issues were placed in irrevocable escrow accounts in amounts sufficient to pay, when due, all principal, interest, and applicable redemption premium, if any, on the refunded bonds. These refundings produce a budgetary savings of $\$ 8.39$ million in Fiscal Year 2017 and $\$ 29.74$ million in both Fiscal Year 2018 and 2019. The refunding will generate $\$ 133.68$ million in budgetary savings over the life of the bonds and approximately $\$ 118.81$ million of savings on a net present value basis.

Short-Term Financing
Transitional Finance Authority

In Fiscal Year 2017, the City issued $\$ 450$ million of taxable fixed rate bonds.
In addition, the City converted $\$ 209.83$ million of bonds between variable to fixed rate interest modes.

During Fiscal Year 2017, GO variable rate debt traded at the following average interest rates:

|  | Tax Exempt | Taxable |
| :---: | :---: | :---: |
| Dailies ${ }^{(1)}$ | 0.63\% | - |
| 2-Day Mode ${ }^{(1)}$ | 0.66\% | - |
| Weeklies ${ }^{(1)}$ | 0.69\% | 0.79\% |
| Auction Rate Securities-7 day | 1.10\% | - |
| Index Floaters | 2.05\% | 1.48\% |

${ }^{(1)}$ Remarketed with bank credit and/or liquidity support; rates do not include bank fee.
During Fiscal Year 2017, Standard \& Poor's Ratings Services (S\&P) and Fitch Ratings (Fitch) maintained the GO rating at AA. Moody's Investors Service (Moody's) continued to rate GO bonds at Aa 2 .

In Fiscal Year 2017, the City had no short-term borrowings.
During Fiscal Year 2017, TFA issued $\$ 5.19$ billion of Future Tax Secured (FTS) bonds. This total included $\$ 4.40$ billion issued for new money capital purposes and $\$ 794.56$ million issued to refund a portion of its outstanding bonds at lower interest rates. The refunding will generate $\$ 99.17$ million in budgetary savings over the life of the bonds and approximately $\$ 85$ million on a net present value basis.

In addition TFA converted $\$ 39.04$ million of bonds from variable rate bonds to fixed rate bonds.

As of June 30, 2017, the total outstanding FTS and Recovery Bond debt was approximately $\$ 32.81$ billion. Of the amount outstanding, variable rate debt totaled $\$ 4.22$ billion, including $\$ 645.1$ million of variable rate Recovery Bonds. During Fiscal Year 2017, TFA's variable rate debt traded at the following average interest rates:

|  | $\underline{\text { Tax Exempt }}$ |
| :---: | :---: |
| Dailies ${ }^{(1)}$ | 0.66\% |
| 2-Day Mode ${ }^{(1)}$ | 0.66\% |
| Weeklies ${ }^{(1)}$ | 0.74\% |
| Auction Rate Securities-7 day | 0.84\% |
| Index Floaters | 1.34\% |

${ }^{(1)}$ Remarketed with bank credit and/or liquidity support; rates do not include bank fee.
In Fiscal Year 2017, Standard \& Poor's and Fitch Ratings maintained AAA ratings on both Senior Lien and Subordinate Lien TFA FTS Bonds. Moody's Investors Service maintained its rating of Aaa on FTS Senior Lien and Aa1 on Subordinate Lien Bonds.

TFA is authorized to issue bonds and notes or other obligations in an amount outstanding of up to $\$ 9.4$ billion to finance a portion of the City's educational facilities capital plan. TFA is authorized to use all or any portion of the state aid payable to the City or its school district pursuant to Section 3602.6 of the New York State Education Law (State Building Aid) as security for these Building Aid Revenue Bonds (BARBs). BARBs do not count against the FTSB Debt Limit. As of June 30, 2017, the TFA BARBs outstanding totaled $\$ 7.88$ billion. The TFA did not issue any TFA BARBs in Fiscal Year 2017.

TFA BARBs are rated AA by both Fitch Ratings and Standard \& Poor's and Moody's Investor Services rates TFA BARBs Aa2.

TSASC, Inc.

Sales Tax Asset Receivable Corporation

Fiscal Year 2005 Securitization Corporation

Hudson Yards Infrastructure Corporation

New York City Educational Construction Fund

New York City Tax Lien Trusts

Interest Rate Exchange Agreements

TSASC issued $\$ 1.10$ billion of refunding bonds in Fiscal Year 2017. As of June 30, 2017, TSASC had approximately $\$ 1.09$ billion of bonds outstanding.

TSASC bond ratings vary by maturity. As of June 30, 2017, Standard and Poor's (S\&P) rated TSASC senior bonds maturing June 1, 2026 at A; June 1, 2036 at A-; and June 1, 2041 at BBB+. S\&P rated TSASC subordinate bonds maturing June 1, 2018 at A-; June 1, 2019 at BBB+; June 1, 2025 at BBB; and June 1, 2045 at BBB-. S\&P placed all of these ratings on negative credit watch on May 16, 2017, where they remained as of June 30, 2017.

As of June 30, 2017, STAR had $\$ 1.88$ billion of bonds outstanding. In Fiscal Year 2017, STAR had no financing activity.

STAR maintained its Aa1 rating from Moody's Investor Services and AA+ from Fitch Ratings throughout Fiscal 2017. Standard \& Poor's maintained its AAA rating.

As of June 30, 2017, FSC had $\$ 131.71$ million of bonds outstanding. It had no financing activity in Fiscal Year 2017.

As of June 30, 2017, the bonds were rated AA+ by S\&P, Aaa by Moody's, and AAA by Fitch.
As of June 30, 2017, HYIC had \$2.75 billion of bonds outstanding. In Fiscal Year 2017 HYIC issued $\$ 2.14$ billion of Second Indenture Revenue bonds to refund a portion of its outstanding bonds at lower interest rates and establish amortization for both First and Second Indenture bonds.

The First Indenture bonds are rated AA- by S\&P, Aa3 by Moody's, and AA- by Fitch. The Second Indenture bonds are rated A+ by S\&P, Aa3 by Moody's, and A+ by Fitch.

The ECF had no financing activity in Fiscal Year 2017.
As of June 30, 2017, ECF had $\$ 235.88$ million of bonds outstanding. The bonds are rated AA-by S\&P and Aa3 by Moody's.

As of June 30, 2017, the New York City Tax Lien Trusts had in aggregate $\$ 37.41$ million in bonds outstanding. In Fiscal Year 2017, the New York City Tax Lien Trust, NYCTLT 2016A, sold $\$ 64.98$ million of bonds. The bonds are rated AAA by Kroll Bond Rating Agency Inc. and Aaa by Moody's Investors Service.

No new swaps were initiated in Fiscal Year 2017 and one outstanding swap was terminated. As of June 30, 2017, the outstanding notional amount on the City's various swap agreements in connection with General Obligation debt and City-related debt of the Dormitory Authority of the State of New York was $\$ 1.41$ billion.

The Water Authority has also entered into interest rate exchange agreements from time to time in order to lower its borrowing costs over the life of its bonds and to diversify its existing portfolio. In Fiscal Year 2017, the Authority did not initiate or terminate any swaps. As of June 30, 2017, the outstanding notional amount on the Water Authority's various swap agreements was $\$ 401$ million.

Additional information on the City's long-term liabilities can be found in Note D. 5 of the Basic Financial Statements.

## Subsequent Events

## Commitments

Request for Information

Subsequent to June 30, 2017, the City, TFA, Water Authority, and NYCTLT completed the following long-term financings:
Water Authority: On July 11, 2017, the New York City Municipal Water Finance Authority issued $\$ 162,405,000$ of Fiscal Series 2018 AA Second General Resolution Bonds to refund a portion of its outstanding bonds at lower interest rates.

On October 12, 2017 the New York City Municipal Water Finance Authority issued $\$ 383,975,000$ of Fiscal Series 2018 BB Bonds for capital purposes and to convert a portion of its outstanding variable rate bonds to fixed rate.

TFA Debt: $\quad$ On July 20, 2017, the New York City Transitional Finance Authority issued $\$ 1,007,545,000$ of Fiscal 2018 Series S Building Aid Revenue Bonds to refund a portion of its outstanding bonds at lower interest rates.

On August 17, 2017, the New York City Transitional Finance Authority issued $\$ 1,350,000,000$ of Fiscal 2018 Series A Future Tax Secured bonds for capital purposes and reoffered $\$ 161,075,500$ of Fiscal 2018 Series 1 Future Tax Secured Bonds to convert a portion of its outstanding variable rate bonds to fixed rate.

On October 26, 2017, the New York City Transitional Finance Authority issued \$990,000,000 of Fiscal 2018 Series B Future Tax Secured Bonds for capital purposes.
NYCTLT 2017-A: On July 27, 2017, NYCTLT 2017-A issued Tax Lien Collateralized Bonds, Series 2017-A of $\$ 68,017,000$ to fund the purchase of certain liens from the City.

## Interest Rate

Exchange Agreements:
On August 1, 2017, $\$ 18.04$ million of Hedging Derivative L matured as scheduled.

City Debt:
On August 10, 2017, The City of New York issued \$898,965,000 of Fiscal 2018 Series A General Obligation bonds to refund a portion of its outstanding bonds at lower interest rates and reoffered $\$ 59,970,000$ of Fiscal 2002 Subseries A-10 to convert a portion of its outstanding variable rate bonds to fixed rate.

On October 3, 2017, The City of New York issued \$1,000,000,000 of Fiscal 2018 Series B General Obligation bonds for capital purposes and $\$ 307,305,000$ of Fiscal 2018 Series 1 General Obligation bonds to convert a portion of its outstanding variable rate bonds to fixed rate.

At June 30, 2017, the outstanding commitments relating to projects of the New York City's Capital Projects Fund amounted to approximately $\$ 18.0$ billion.

To address the need for significant infrastructure and public facility capital investments, the City has prepared a ten-year capital spending program which contemplates New York City Capital Projects Fund expenditures of $\$ 89.6$ billion over Fiscal Years 2017 through 2025. To help meet the financing needs for its capital spending program, the City and TFA borrowed $\$ 5.5$ billion in the public credit market in Fiscal Year 2017. The City and TFA plan to borrow $\$ 6.7$ billion in the public credit market in Fiscal Year 2018.
This comprehensive annual financial report is designed to provide a general overview of the City's finances for all those with an interest in its finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to The City of New York, Office of the Comptroller, Bureau of Accountancy, 1 Centre Street-Room 200 South, New York, New York 10007, or at Accountancy@comptroller.nyc.gov.
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# The City of New York 

Comprehensive<br>Annual Financial Report<br>of the<br>Comptroller

Part II-A

# BASIC FINANCIAL STATEMENTS 

Fiscal Year Ended June 30, 2017
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## THE CITY OF NEW YORK

 STATEMENT OF NET POSITIONJUNE 30, 2017
(in thousands)

|  | Primary Government (PG) |  |  |  | Component Units (CU) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Governmental Activities | Business - Type Activities |  | Total - (PG) |  |  |
| Assets: |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 6,587,981 | \$ | 44,114 \$ | 6,632,095 |  | 2,529,684 |
| Investments | 8,066,538 |  | 305,348 | 8,371,886 |  | 1,669,863 |
| Receivables: |  |  |  |  |  |  |
| Real estate taxes (less allowance for uncollectible amounts of $\$ 221,304$ ) | 350,028 |  | - | 350,028 |  |  |
| Federal, State and other aid | 9,041,862 |  | 1,395 | 9,043,257 |  |  |
| Taxes other than real estate | 6,458,927 |  | - | 6,458,927 |  |  |
| Leases |  |  |  |  |  | 1,677,674 |
| Other | 1,517,449 |  | 335,139 | 1,852,588 |  | 4,196,913 |
| Mortgage loans and interest receivable, net |  |  | - |  |  | 10,046,866 |
| Inventories | 465,232 |  | - | 465,232 |  | 13,061 |
| Due from PG, net |  |  | - |  |  | 57,631 |
| Due from CUs (less allowance for uncollectible amounts of $\$ 61,690$ ) | 2,454,470 |  |  | 2,454,470 |  |  |
| Restricted cash, cash equivalents and investments | 4,968,841 |  | 76,700 | 5,045,541 |  | 6,717,607 |
| Other . . . . . . . | 444,238 |  | 122 | 444,360 |  | 272,805 |
| Capital assets: |  |  |  |  |  |  |
| Land and construction work-in-progress | 5,924,772 |  | 144,081 | 6,068,853 |  | 7,795,167 |
| Other capital assets (net of depreciation/amortization): |  |  |  |  |  |  |
| Property, plant and equipment (including software) | 37,726,059 |  | 35,071 | 37,761,130 |  | 32,175,234 |
| Infrastructure | 13,865,961 |  | 392,168 | 14,258,129 |  |  |
| Total assets | 97,872,358 |  | 1,334,138 | 99,206,496 |  | 67,152,505 |
| Deferred Outflows Of Resources: |  |  |  |  |  |  |
| Deferred outflows from pensions | 3,885,847 |  | - | 3,885,847 |  | 260,406 |
| Deferred outflows from OPEB | 640,932 |  | - | 640,932 |  |  |
| Other deferred outflows of resources | 571,764 |  | - | 571,764 |  | 136,418 |
| Total deferred outflows of resources | 5,098,543 |  | - | 5,098,543 |  | 396,824 |
| Liabilities: |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | 15,066,744 |  | 34,730 | 15,101,474 |  | 3,020,630 |
| Accrued interest payable | 1,079,876 |  | 90 | 1,079,966 |  | 175,085 |
| Unearned revenue | 3,610 |  | 29,423 | 33,033 |  | 470,984 |
| Due to PG |  |  | - |  |  | 2,516,160 |
| Due to CUs, net | 57,631 |  | - | 57,631 |  |  |
| Estimated disallowance of Federal, State and other aid | 552,875 |  | - | 552,875 |  |  |
| Other | 5,667,595 |  | $(3,754)$ | 5,663,841 |  | 223,306 |
| Derivative instruments-interest rate swaps | 38,759 |  | - | 38,759 |  | 112,842 |
| Noncurrent liabilities: |  |  |  |  |  |  |
| Due within one year | 5,884,716 |  | 79,170 | 5,963,886 |  | 1,887,437 |
| Bonds \& notes payable (net of amount due within one year) | 86,028,278 |  | - | 86,028,278 |  | 43,305,379 |
| Net pension liability . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 56,241,371 |  | - | 56,241,371 |  | 3,813,831 |
| Net OPEB liability | 88,422,672 |  |  | 88,422,672 |  | 7,531,903 |
| Other (net of amount due within one year) | 14,553,558 |  | 326,182 | 14,879,740 |  | 1,791,989 |
| Total liabilities | 273,597,685 |  | 465,841 | 274,063,526 |  | 64,849,546 |
| Deferred Inflows Of Resources: |  |  |  |  |  |  |
| Deferred inflows from pensions | 5,386,509 |  | - | 5,386,509 |  | 47,715 |
| Deferred real estate taxes | 8,748,771 |  | - | 8,748,771 |  |  |
| Deferred inflows from OPEB | 9,451,365 |  | - | 9,451,365 |  | 694,750 |
| Other deferred inflows of resources | 222,812 |  | - | 222,812 |  | 99,710 |
| Total deferred inflows of resources | 23,809,457 |  |  | 23,809,457 |  | 842,175 |
| Net Position: |  |  |  |  |  |  |
| Net investment in capital assets | $(12,522,029)$ |  | 571,319 | (11,950,710) |  | 8,501,865 |
| Restricted for: |  |  |  |  |  |  |
| Capital projects | 592,608 |  | 28,600 | 621,208 |  | 83,885 |
| Debt service | 2,200,679 |  | , | 2,200,679 |  | 3,316,842 |
| Loans/security deposits | - |  | - |  |  | 54,742 |
| Donor/statutory restrictions | - |  |  |  |  | 396,746 |
| Operations ... |  |  | 268,378 | 268,378 |  | 307,157 |
| Unrestricted (deficit) | (184,707,499) |  | - | (184,707,499) |  | $(10,803,629)$ |
| Total net position (deficit) | \$(194,436,241) | \$ | 868,297 \$ | (193,567,944) |  | 1,857,608 |

See accompanying notes to financial statements.

## THE CITY OF NEW YORK

 STATEMENT OF NET POSITIONJUNE 30, 2016
(in thousands)

|  | Restated |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary Government (PG) |  |  |  | $\begin{aligned} & \text { Component } \\ & \text { Units (CU) } \\ & \hline \end{aligned}$ |  |
|  | Governmental Activities | $\begin{gathered} \text { Business - Type } \\ \quad \text { Activities } \\ \hline \end{gathered}$ |  | Total - (PG) |  |  |
| Assets: |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 6,619,456 | \$ | 25,667 | \$ 6,645,123 |  | 2,444,883 |
| Investments | 9,878,993 |  | 318,545 | 10,197,538 |  | 1,862,981 |
| Receivables: |  |  |  |  |  |  |
| Real estate taxes (less allowance for uncollectible amounts of $\$ 223,031$ ) | 352,832 |  | - | 352,832 |  |  |
| Federal, State and other aid .... | 7,848,075 |  | 3,013 | 7,851,088 |  |  |
| Taxes other than real estate | 6,127,117 |  | - | 6,127,117 |  |  |
| Leases |  |  |  |  |  | 1,694,490 |
| Other | 1,359,191 |  | 335,297 | 1,694,488 |  | 4,273,483 |
| Mortgage loans and interest receivable, net |  |  |  |  |  | 9,690,571 |
| Inventories | 402,433 |  | - | 402,433 |  | 13,394 |
| Due from CUs (less allowance for uncollectible amounts |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Restricted cash, cash equivalents and investments | 4,060,771 |  | 81,148 | 4,141,919 |  | 5,996,040 |
| Other | 429,238 |  | 143 | 429,381 |  | 277,335 |
| Capital assets: |  |  |  |  |  |  |
| Land and construction work-in-progress | 5,452,463 |  | 166,515 | 5,618,978 |  | 7,740,888 |
| Other capital assets (net of depreciation/amortization): |  |  |  |  |  |  |
| Property, plant and equipment (including software) | 36,376,135 |  | 32,135 | 36,408,270 |  | 31,317,167 |
| Infrastructure | 13,123,636 |  | 341,897 | 13,465,533 |  |  |
| Total assets | 93,811,525 |  | 1,304,360 | 95,115,885 |  | 65,528,660 |
| Deferred Outflows Of Resources: |  |  |  |  |  |  |
| Deferred outflows from pensions | 12,814,357 |  | - | 12,814,357 |  | 577,146 |
| Deferred outflows from OPEB | 102,045 |  | - | 102,045 |  |  |
| Other deferred outflows of resources | 573,094 |  | - | 573,094 |  | 190,675 |
| Total deferred outflows of resources | 13,489,496 |  | - | 13,489,496 |  | 767,821 |
| Liabilities: |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | 14,765,752 |  | 38,410 | 14,804,162 |  | 3,528,283 |
| Accrued interest payable | 1,068,187 |  | 71 | 1,068,258 |  | 166,683 |
| Unearned revenue | 4,206 |  | 29,571 | 33,777 |  | 362,786 |
| Due to PG |  |  |  |  |  | 2,152,665 |
| Due to CUs, net | 217,428 |  | - | 217,428 |  |  |
| Estimated disallowance of Federal, State and other aid | 1,110,512 |  | (520) | 1,110,512 |  |  |
| Other | 5,011,216 |  | (526) | 5,010,690 |  | 231,638 |
| Derivative instruments-interest rate swaps | 56,554 |  | - | 56,554 |  | 161,319 |
| Noncurrent liabilities: |  |  |  |  |  |  |
| Due within one year | 5,446,522 |  | 60,572 | 5,507,094 |  | 1,931,025 |
| Bonds \& notes payable (net of amount due within one year) | 82,896,721 |  | 10,918 | 82,907,639 |  | 43,175,695 |
| Net pension liability | 64,846,995 |  |  | 64,846,995 |  | 4,145,300 |
| Net OPEB liability | 94,502,356 |  | 85 | 94,502,441 |  | 7,810,703 |
| Other (net of amount due within one year) | 15,268,277 |  | 330,442 | 15,598,719 |  | 1,183,460 |
| Total liabilities | 285,194,726 |  | 469,543 | 285,664,269 |  | 64,849,557 |
| Deferred Inflows Of Resources: |  |  |  |  |  |  |
| Deferred inflows from pensions | 7,210,537 |  | - | 7,210,537 |  | 95,935 |
| Deferred real estate taxes | 8,105,167 |  | - | 8,105,167 |  |  |
| Deferred inflows from OPEB | 102,531 |  | - | 102,531 |  | 36,843 |
| Other deferred inflows of resources | 212,976 |  | - | 212,976 |  | 16,647 |
| Total deferred inflows of resources | 15,631,211 |  | - | 15,631,211 |  | 149,425 |
| Net Position: |  |  |  |  |  |  |
| Net investment in capital assets | $(12,684,965)$ |  | 540,548 | $(12,144,417)$ |  | 7,898,733 |
| Restricted for: |  |  |  |  |  |  |
| Capital projects | 416,919 |  | 38,300 | 455,219 |  | 63,881 |
| Debt service | 3,809,462 |  | - | 3,809,462 |  | 2,805,934 |
| Loans/security deposits | - |  | - | - |  | 54,865 |
| Donor/statutory restrictions | - |  |  |  |  | 172,613 |
| Operations .... |  |  | 264,440 | 264,440 |  | 317,493 |
| Unrestricted (deficit) | (185,066,332) |  | $(8,471)$ | (185,074,803) |  | $(10,016,020)$ |
| Total net position (deficit) | \$(193,524,916) | \$ | 834,817 | \$(192,690,099) | \$ | 1,297,499 |

See accompanying notes to financial statements.

## THE CITY OF NEW YORK

## STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

| Functions/Programs | Expenses | Program Revenues |  |  |  | Net (Expense) Revenue and Changes in Net Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Charges for Services | Operating Grants and Contributions | Capital Grants and Contributions |  | Primary Government (PG) |  |  | Component Units (CU) |
|  |  |  |  |  |  | Governmental Activities | BusinessType Activities | Total - (PG) |  |
| Primary Government (PG) |  |  |  |  |  |  |  |  |  |
| Governmental Activities: |  |  |  |  |  |  |  |  |  |
| General government | \$ 5,360,092 | \$ 905,738 | \$ 3,142,123 | \$ | $(142,958)$ | \$ (1,455,189) | \$ | \$ (1,455,189) | \$ |
| Public safety and judicial | 18,961,329 | 332,938 | 661,440 |  | 1,938 | $(17,965,013)$ | - | $(17,965,013)$ | - |
| Education | 28,839,477 | 148,009 | 12,134,532 |  | 148,512 | $(16,408,424)$ | - | $(16,408,424)$ | - |
| City University | 1,252,444 | 404,758 | 260,528 |  | - | $(587,158)$ | - | $(587,158)$ | - |
| Social services | 15,402,193 | 66,693 | 5,286,726 |  | 21,802 | $(10,026,972)$ | - | $(10,026,972)$ | - |
| Environmental protection | 3,570,278 | 1,445,740 | 14,191 |  | 3,890 | $(2,106,457)$ | - | $(2,106,457)$ | - |
| Transportation services $\ldots \ldots \ldots \ldots$ $2,542,300$ $1,039,443$ 393,553 337,998 $(771,306)$ (771,306) <br> Parks, recreation and cultural       |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Housing | 2,394,963 | 424,844 | 538,354 |  | 32,056 | $(1,399,709)$ | - | $(1,399,709)$ | - |
| Health (including payments to HHC) | 2,874,032 | 55,842 | 904,571 |  | 1,750 | $(1,911,869)$ | - | $(1,911,869)$ | - |
| Libraries | 420,994 | - | - |  | 6,668 | $(414,326)$ | - | $(414,326)$ | - |
| Debt service interest | 2,958,883 | - | - |  | - | $(2,958,883)$ | - | $(2,958,883)$ | - |
| Total governmental activities . . . | 85,842,368 | 4,919,609 | 23,344,455 |  | 479,210 | (57,099,094) | - | (57,099,094) | - |
| Business-Type Activities: |  |  |  |  |  |  |  |  |  |
| Brooklyn Bridge Park | 18,640 | 1,862 |  |  | 20,625 | - | 3,847 | 3,847 | - |
| The Trust for Governor's Island | 35,177 | 2,380 | 17,399 |  | 24,673 | - | 9,275 | 9,275 | - |
| WTC Captive Insurance | 1,968 | - | 132, |  | - | - | $(1,968)$ | $(1,968)$ | - |
| New York City Tax Lien Trusts | 266,418 | - | 132,277 |  | - | - | $(134,141)$ | $(134,141)$ | - |
| Total business-type activities . . . . . . | 322,203 | 4,242 | 149,676 |  | 45,298 | - | $(122,987)$ | $(122,987)$ | - |
| Total Primary Government (PG) | \$86,164,571 | \$ 4,923,851 | \$23,494,131 | \$ | 524,508 | (57,099,094) | $(122,987)$ | (57,222,081) | - |
| Component Units | \$18,690,644 | \$13,406,968 | \$ 3,305,202 | \$ | 1,265,020 | - | - | - | \$(713,454) |
|  | General Revenues: |  |  |  |  |  |  |  |  |
|  | Taxes (net of refunds): |  |  |  |  |  |  |  |  |
|  | Real est | ate taxes |  |  |  | 24,586,758 | - | 24,586,758 | - |
|  | Sales and | d use taxes |  |  |  | 8,307,525 | - | 8,307,525 | - |
|  | Personal | income tax |  |  |  | 11,256,809 | - | 11,256,809 | - |
|  | Income | taxes, other |  |  |  | 7,875,921 | - | 7,875,921 | - |
|  | Other ta | xes: . . . . . |  |  |  |  |  |  |  |
|  | Comm | mercial rent |  |  |  | 921,374 | - | 921,374 | - |
|  | Conve | eyance of real | property |  |  | 1,418,683 | - | 1,418,683 | - |
|  | Hotel | room occupan |  |  |  | 582,481 | - | 582,481 | - |
|  | Paym | ents in lieu of | taxes |  |  | 351,438 | 35,566 | 387,004 | - |
|  | Other |  |  |  |  | 36,808 | 116,372 | 36,808 | - |
|  | Investme | nt income |  |  |  | 110,145 | 116,372 | 226,517 | 66,335 |
|  | Unrestri | cted Federal an | nd State aid |  |  | 311,125 |  | 311,125 | 9,572 |
|  | Other |  |  |  |  | 428,702 | 4,529 | 433,231 | 1,197,656 |
|  | Total | general revenu |  |  |  | 56,187,769 | 156,467 | 56,344,236 | 1,273,563 |
|  |  | ange in net pos | sition |  |  | $(911,325)$ | 33,480 | $(877,845)$ | 560,109 |
|  | Net positio | (deficit)-be | ginning |  |  | (193,524,916) | 834,817 | (192,690,099) | 1,297,499 |
|  | Net positio | (deficit)-en | ding |  |  | \$(194,436,241) | \$868,297 | (193,567,944) | \$1,857,608 |

See accompanying notes to financial statements.

## THE CITY OF NEW YORK <br> STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

| Functions/Programs | Expenses | Charges for Services | ogram Revenues |  | Net (Expense) Revenue and Changes in Net Position |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | Operating Grants and Contributions | Capital Grants and Contributions | Primary Government (PG) |  |  | Component <br> Units (CU) |  |
|  |  |  |  |  | Governmental Activities | BusinessType Activities | Total - (PG) |  |  |
| Primary Government (PG) |  |  |  |  |  |  |  |  |  |
| Governmental Activities: |  |  |  |  |  |  |  |  |  |
| General government | \$ 5,259,894 | \$ 928,917 | \$ 2,050,077 | \$ (347,632) | \$ (2,628,532) | \$ | \$ (2,628,532) | \$ | - |
| Public safety and judicial | 19,681,206 | 311,520 | 690,006 | 13,669 | $(18,666,011)$ | - | $(18,666,011)$ |  | - |
| Education | 29,295,515 | 75,555 | 11,435,552 | 281,227 | $(17,503,181)$ | - | $(17,503,181)$ |  | - |
| City University | 1,342,333 | 394,974 | 248,789 | 484 | $(698,086)$ | - | $(698,086)$ |  | - |
| Social services | 14,969,178 | 61,592 | 4,832,462 | 7,226 | $(10,067,898)$ | - | $(10,067,898)$ |  | - |
| Environmental protection | 3,709,540 | 1,343,526 | 8,567 | 9,745 | $(2,347,702)$ | - | $(2,347,702)$ |  | - |
| Transportation services | 2,784,695 | 1,069,257 | 226,858 | 512,611 | $(975,969)$ | - | $(975,969)$ |  | - |
| Parks, recreation and cultural activities | 1,149,928 | 96,456 | 9,938 | 173,822 | $(869,712)$ | - | $(869,712)$ |  | - |
| Housing | 2,006,924 | 416,901 | 504,946 | 43,611 | $(1,041,466)$ | - | $(1,041,466)$ |  | - |
| Health (including payments to HHC) . | 3,277,736 | 87,303 | 890,398 | 19,135 | $(2,280,900)$ | - | $(2,280,900)$ |  | - |
| Libraries | 457,653 | - | - | 9,140 | $(448,513)$ | - | $(448,513)$ |  | - |
| Debt service interest | 2,932,656 | - | - | - | $(2,932,656)$ | - | $(2,932,656)$ |  | - |
| Total governmental activities . . | 86,867,258 | 4,786,001 | 20,897,593 | 723,038 | (60,460,626) | - | $(60,460,626)$ |  | - |
| Business-type Activities: |  |  |  |  |  |  |  |  |  |
| Brooklyn Bridge Park | 15,829 | 1,785 | 1,043 | 12,928 | - | (73) | (73) |  | - |
| The Trust for Governor's Island | 30,347 | 2,460 | 13,765 | 37,963 | - | 23,841 | 23,841 |  | - |
| WTC Captive Insurance | 3,208 | - | - - | - | - | $(3,208)$ | $(3,208)$ |  | - |
| New York City Tax Lien Trusts | 191,982 | - | 85,257 | - | - | $(106,725)$ | $(106,725)$ |  | - |
| Total business-type activities | 241,366 | 4,245 | 100,065 | 50,891 | - | $(86,165)$ | $(86,165)$ |  |  |
| Total Primary Government (PG) | \$87,108,624 | \$ 4,790,246 | \$20,997,658 | \$ 773,929 | (60,460,626) | $(86,165)$ | $(60,546,791)$ |  |  |
| Component Units | \$18,079,176 | \$13,400,494 | \$ 2,888,478 | \$1,142,304 | - | - | - |  | 900) |
|  | General Revenues: |  |  |  |  |  |  |  |  |
|  | Taxes (net of refunds): |  |  |  |  |  |  |  |  |
|  | Real estate | taxes |  |  | 23,171,276 | - | 23,171,276 |  | - |
|  | Sales and u | use taxes |  |  | 8,534,604 | - | 8,534,604 |  | - |
|  | Personal in | come tax |  |  | 11,565,473 | - | 11,565,473 |  | - |
|  | Income tax | es, other |  |  | 6,760,614 | - | 6,760,614 |  | - |
|  | Other taxes |  |  |  |  |  |  |  |  |
|  | Commer | rcial rent |  |  | 836,816 | - | 836,816 |  | - |
|  | Convey | ance of real prop | perty |  | 1,788,182 | - | 1,788,182 |  | - |
|  | Hotel ro | om occupancy |  |  | 568,069 | - | 568,069 |  | - |
|  | Payment | ts in lieu of tax |  |  | 320,634 | 8,238 | 328,872 |  | - |
|  | Other |  |  |  | 19,005 | - | 19,005 |  | - |
|  | Investment inc | come |  |  | 94,718 | 99,986 | 194,704 |  | ,955 |
|  | Unrestricted F | Federal and St | te aid |  | 258,215 | - | 258,215 |  | ,966 |
|  | Other |  |  |  | 625,870 | 10,355 | 636,225 |  |  |
|  | Total gen | neral revenues |  |  | 54,543,476 | 118,579 | 54,662,055 |  | ,946 |
|  | Chan | ge in net posit |  |  | $(5,917,150)$ | 32,414 | $(5,884,736)$ |  | 1,046 |
|  | Net position ( | deficit)-begi | ning |  | (183,081,913) | - | $(183,081,913)$ |  | ,92 |
|  | Restatement of | f beginning n | t position |  | $(4,525,853)$ | 802,403 | $(3,723,450)$ |  |  |
|  | Net position ( | deficit)—endi |  |  | \$(193,524,916) | \$834,817 | \$(192,690,099) | \$1,2 | 499 |

See accompanying notes to financial statements.

## THE CITY OF NEW YORK

GOVERNMENTAL FUNDS
BALANCE SHEET
JUNE 30, 2017
(in thousands)

|  | General Fund | Capital Projects Fund | General Debt Service Fund | Nonmajor Governmental Funds | Adjustments/ Eliminations | Total <br> Governmental <br> Funds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 6,029,520 | \$ 357,501 | \$ - | \$ 200,960 | \$ - | \$ 6,587,981 |
| Investments . . | 6,126,819 | - | - | 1,988,605 | - | 8,115,424 |
| Accounts receivable: |  |  |  |  |  |  |
| Real estate taxes (less allowance for uncollectible amounts of |  |  |  |  |  |  |
| Federal, State and other aid .... | 7,872,008 | 1,169,854 | - | 753,22 | - | 9,041,862 |
| Taxes other than real estate | 5,705,705 | - |  | 753,222 | - | 6,458,927 |
| Other receivables, net | 1,399,813 |  | 15 | 117,375 |  | 1,517,203 |
| Due from other funds | 3,610,020 | 1,050,881 | - | 514,847 | $(514,589)$ | 4,661,159 |
| Due from component units, net | 1,790,186 | 664,284 | 1,58,596 |  |  | 2,454,470 |
| Restricted cash and investments | , | 114,038 | 1,583,596 | 3,271,207 | - | 4,968,841 |
| Other assets | - | 97,665 |  | 302,860 | - | 400,525 |
| Total assets | $\underline{\underline{\$ 32,884,099}}$ | \$3,454,223 | \$ 1,583,611 | \$ 7,149,076 | \$ (514,589) | \$ 44,556,420 |
| Liabilities: |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | \$12,918,991 | \$ 1,431,626 | \$ 867 | \$ 715,576 | \$ - | \$ 15,067,060 |
| Accrued tax refunds: |  |  |  |  |  |  |
| Real estate taxes | 61,603 | - | - | - | - | 61,603 |
| Personal income tax | 60,429 | - | - | - | - | 60,429 |
| Other | 52,064 |  | - | - | - | 52,064 |
| Accrued judgments and claims | 533,892 | 56,540 | - | - | - | 590,432 |
| Unearned revenue. |  |  | - | 3,610 | - | 3,610 |
| Due to other funds | 57, $\overline{-1}$ | 4,046,387 | - | 1,129,361 | $(514,589)$ | 4,661,159 |
| Due to component units, net | 57,631 | - | - | - | - | 57,631 |
| Estimated disallowance of Federal, State and other aid | 552,875 $4,464,468$ |  | - | - | - | 552,875 4 |
| Other liabilities | 4,464,468 | 439,519 | - | - | (514.589) | 4,903,987 |
| Total liabilities | 18,701,953 | 5,974,072 | 867 | 1,848,547 | (514,589) | 26,010,850 |
| Deferred Inflows of Resources: |  |  |  |  |  |  |
| Prepaid real estate taxes | 8,748,771 | - | - | - | - | 8,748,771 |
| Grant advances | 18,124 | - | - | - | - | 18,124 |
| Uncollected real estate taxes | 269,666 | - | - | - | - | 269,666 |
| Taxes other than real estate | 4,428,859 | - | - | 771,946 | - | 4,428,859 |
| Other deferred inflows of resources | 238,697 | - | - | 771,946 | - | 1,010,643 |
| Total deferred inflows of resources . . . . . . | 13,704,117 | - | - | 771,946 | - | 14,476,063 |
| Fund Balances (Deficits): |  |  |  |  |  |  |
| Nonspendable | 478,029 | - | - | 295 | - | 478,324 |
| Spendable: |  |  |  |  |  |  |
| Restricted | - | 114,038 | 238,845 | 2,440,404 | - | 2,793,287 |
| Committed | - | - | 1,343,899 | , | - | 1,343,899 |
| Assigned | - | (2,633,887) | - | 2,087,896 | - | 2,087,896 |
| Unassigned | - | $(2,633,887)$ | - | (12) | - | $(2,633,899)$ |
| Total fund balances (deficit) | 478,029 | $(2,519,849)$ | 1,582,744 | 4,528,583 | - | 4,069,507 |
| Total liabilities, deferred inflows of resources and fund balances | \$32,884,099 | \$ 3,454,223 | \$ 1,583,611 | \$ 7,149,076 | \$ (514,589) | \$ 44,556,420 |

The reconciliation of the fund balances of governmental funds to the net position (deficit) of governmental activities in the Statement of Net Position is presented in an accompanying schedule.
See accompanying notes to financial statements.

## THE CITY OF NEW YORK

GOVERNMENTAL FUNDS
BALANCE SHEET
JUNE 30, 2016
(in thousands)

|  | Restated |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General Fund | Capital <br> Projects <br> Fund | General <br> Debt <br> Service <br> Fund | Nonmajor Governmental Funds | Adjustments/ Eliminations | Total Governmental Funds |
| Assets: |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 6,218,872 | \$ 261,047 | \$ | \$ 139,537 | \$ | \$ 6,619,456 |
| Investments | 8,025,500 | - | - | 1,927,972 | - | 9,953,472 |
| Accounts receivable: |  |  |  |  |  |  |
| Real estate taxes (less allowance for uncollectible amounts of |  |  |  |  |  |  |
| Federal, State and other aid .... | 6,437,418 | 1,410,657 | - | - | - | 7,848,075 |
| Taxes other than real estate | 5,387,712 |  | - | 739,405 | - | 6,127,117 |
| Other receivables, net | 1,251,694 |  | - | 77,000 |  | 1,328,694 |
| Due from other funds | 3,230,864 | 6,668 | - | 414,751 | $(414,614)$ | 3,237,669 |
| Due from component units, net | 1,155,612 | 625,573 |  |  | - | 1,781,185 |
| Restricted cash and investments |  | 129,509 | 1,778,906 | 2,152,356 | - | 4,060,771 |
| Other assets | - | 107,136 |  | 308,338 | - | 415,474 |
| Total assets | \$32,060,504 | \$ 2,540,590 | \$1,778,906 | \$ 5,759,359 | \$ (414,614) | \$41,724,745 |
| Liabilities: |  |  |  |  |  |  |
| Accounts payable and accrued |  |  |  |  |  |  |
| Accrued tax refunds: |  |  |  |  |  |  |
| Real estate taxes | 45,308 | - | - | - | - | 45,308 |
| Personal income tax | 56,820 | - | - | - | - | 56,820 |
| Other | 36,093 |  | - | - | - | 36,093 |
| Accrued judgments and claims | 510,048 | 44,925 | - | - | - | 554,973 |
| Unearned revenue | - |  | - | 4,206 |  | 4,206 |
| Due to other funds | - - | 3,581,794 | - | 70,489 | $(414,614)$ | 3,237,669 |
| Due to component units, net | 217,428 | - | - | - | - | 217,428 |
| Estimated disallowance of Federal, State and other aid | 1,110,512 | , - | - | - | - | 1,110,512 |
| Other liabilities | 3,808,801 | 438,875 | - | - | - | 4,247,676 |
| Total liabilities | 18,442,096 | 5,518,987 | 3,789 | 726,559 | $(414,614)$ | 24,276,817 |
| Deferred Inflows Of Resources: |  |  |  |  |  |  |
| Prepaid real estate taxes | 8,105,167 | - | - | - | - | 8,105,167 |
| Grant advances | 30,613 | - | - | - | - | 30,613 |
| Uncollected real estate taxes | 287,280 | - | - | - | - | 287,280 |
| Taxes other than real estate | 4,496,113 | - | - | 758,516 | - | 4,496,113 |
| Other deferred inflows of resources | 226,416 | - | - | 758,516 | - | 984,932 |
| Total deferred inflows of resources . . . . . . . . . | 13,145,589 | - | - | 758,516 | - | 13,904,105 |
| Fund Balances (Deficits): |  |  |  |  |  |  |
| Nonspendable | 472,819 | - | - | 612 | - | 473,431 |
| Spendable: |  |  |  |  |  |  |
| Restricted | - | 129,509 | 382,005 | 2,321,755 | - | 2,833,269 |
| Committed | - | - | 1,393,112 |  | - | 1,393,112 |
| Assigned | - | (3,107,9-6) | - | 1,951,917 | - | 1,951,917 |
| Unassigned | - | (3,107,906) | - | - | - | (3,107,906) |
| Total fund balances (deficit) | 472,819 | $(2,978,397)$ | 1,775,117 | 4,274,284 | - | 3,543,823 |
| Total liabilities, deferred inflows of resources and fund balances ... | \$32,060,504 | \$ 2,540,590 | \$ 1,778,906 | \$ 5,759,359 | \$ (414,614) | \$41,724,745 |

The reconciliation of the fund balances of governmental funds to the net position (deficit) of governmental activities in the Statement of Net Position is presented in an accompanying schedule.
See accompanying notes to financial statements.

## THE CITY OF NEW YORK

## RECONCILIATION OF THE GOVERNMENTAL FUNDS BALANCE SHEET TO THE STATEMENT OF NET POSITION

JUNE 30, 2017<br>(in thousands)

Total fund balances - governmental funds ..... \$ 4,069,507
Amounts reported for governmental activities in the Statement of Net Position are different because
Inventories recorded in the Statement of Net Position are recorded as expenditures in the governmental funds. ..... 465,232
Capital assets used in governmental activities are not financial resourcesand therefore are not reported in the funds57,516,792
Other long-term assets and deferred outflows of resources are not available to pay for current period expenditures and, therefore, are deferred in the funds
Deferred outflows of resources ..... 5,098,543
Other long-term assets ..... 43,959Long-term liabilities and deferred inflows of resources are not due and payable in the current period andaccordingly are not reported in the funds:
(89,585,973)
Bonds and notes payable ..... (88,422,672)
Accrued interest payable ..... $(1,079,876)$
Capital lease obligations$(1,548,591)$
Accrued vacation and sick leave ..... $(4,648,180)$
Net pension liability ..... $(56,241,371)$
Landfill closure and post-closure care costs ..... $(1,508,009)$
Pollution Remediation obligations ..... $(202,577)$
Accrued judgments and claims ..... $(6,267,216)$
Other accrued tax refunds$(929,700)$
Deferred inflows of resources ..... $(9,333,394)$
Other long-term liabilities ..... $(1,862,715)$
Net position (deficit) - governmental activities ..... \$(194,436,241)

See accompanying notes to financial statements.

## THE CITY OF NEW YORK

## RECONCILIATION OF THE GOVERNMENTAL FUNDS BALANCE SHEET TO THE STATEMENT OF NET POSITION

JUNE 30, 2016<br>(in thousands)

| Total fund balances - governmental funds | \$ 3,543,823 |
| :---: | :---: |
| Amounts reported for governmental activities in the Statement of Net Position are different because: |  |
| Inventories recorded in the Statement of Net Position are recorded as expenditures in the governmental funds. | 402,433 |
| Capital assets used in governmental activities are not financial resources and therefore are not reported in the funds | 54,952,234 |
| Other long-term assets and deferred outflows of resources are not available to pay for current period expenditures and, therefore, are deferred in the funds <br> Deferred outflows of resources $\qquad$ <br> Other long-term assets | $\begin{array}{r} 13,489,496 \\ 44,261 \end{array}$ |
| Long-term liabilities and deferred inflows of resources are not due and payable in the current period and accordingly are not reported in the funds: |  |
| Bonds and notes payable | $(86,208,962)$ |
| OPEB liability | $(94,502,356)$ |
| Accrued interest payable | $(1,068,187)$ |
| Capital lease obligations | $(1,571,006)$ |
| Accrued vacation and sick leave | $(4,262,698)$ |
| Net pension liability | $(64,846,995)$ |
| Landfill closure and post-closure care costs | $(1,465,689)$ |
| Pollution Remediation obligations | $(208,873)$ |
| Accrued judgments and claims | (6,499,359) |
| Other accrued tax refunds | $(1,765,000)$ |
| Deferred inflows of resources | $(1,727,106)$ |
| Other long-term liabilities | $(1,830,932)$ |
| Net position (deficit) - governmental activities | \$(193,524,916) |

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> GOVERNMENTAL FUNDS STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES 

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)


The reconciliation of the net change in fund balances of governmental funds to the change in net position of governmental activities in the Statement of Net Position is presented in an accompanying schedule.

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> GOVERNMENTAL FUNDS STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | Restated |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General Fund | Capital <br> Projects <br> Fund | General Debt Service Fund | Nonmajor Governmental Funds | Adjustments/ Eliminations | Total Governmental Funds |
| Revenues: |  |  |  |  |  |  |
| Real estate taxes | \$23,180,583 | \$ | \$ - | \$ | \$ | \$23,180,583 |
| Sales and use taxes | 8,540,154 | - | - | - | - | 8,540,154 |
| Personal income tax | 11,392,473 | - | - | 180,290 | $(180,290)$ | 11,392,473 |
| Income taxes, other | 6,947,614 | - | - | - | - | 6,947,614 |
| Other taxes | 3,559,825 | - | - | - | - | 3,559,825 |
| Federal, State and other categorical aid | 20,897,592 | 986,523 | 82,047 | - | - | 21,966,162 |
| Unrestricted Federal and State aid . | 6,168 | - | - | 170,000 | - | 176,168 |
| Charges for services | 2,624,357 | - | - | - | - | 2,624,357 |
| Tobacco settlement | - | - | - | 365,783 | - | 365,783 |
| Investment income | 78,791 | - | 203 | 16,299 | - | 95,293 |
| Other revenues | 2,171,950 | 1,010,236 | 5,361 | 2,871,145 | $(2,566,109)$ | 3,492,583 |
| Total revenues | 79,399,507 | 1,996,759 | 87,611 | 3,603,517 | $(2,746,399)$ | 82,340,995 |
| Expenditures: |  |  |  |  |  |  |
| General government | 2,985,013 | 664,819 | - | 61,344 | - | 3,711,176 |
| Public safety and judicial | 9,325,708 | 327,079 | - | - | - | 9,652,787 |
| Education | 21,973,688 | 2,475,122 | - | 2,706,580 | $(2,566,109)$ | 24,589,281 |
| City University | 955,775 | 56,994 | - | - | - | 1,012,769 |
| Social services | 13,800,868 | 60,086 | - | - | - | 13,860,954 |
| Environmental protection | 2,569,229 | 1,701,883 | - | - | - | 4,271,112 |
| Transportation services | 1,707,930 | 1,262,685 | - | - | - | 2,970,615 |
| Parks, recreation and cultural activities | 533,855 | 587,601 | - | - | - | 1,121,456 |
| Housing | 1,023,213 | 752,753 | - | - | - | 1,775,966 |
| Health (including payments to HHC) | 2,666,511 | 150,022 | - | - | - | 2,816,533 |
| Libraries | 359,548 | 40,872 | - | - | - | 400,420 |
| Pensions | 9,170,963 | - | - | - | - | 9,170,963 |
| Judgments and claims | 719,968 | - | - | - | - | 719,968 |
| Fringe benefits and other benefit payments | 5,511,572 | - | 76, | 57,853 | - | 5,511,572 |
| Administrative and other | 197,649 | - | 76,101 | 57,853 | - | 331,603 |
| Debt Service: |  |  |  |  |  |  |
| Interest | - | - | 1,605,023 | 1,749,886 | - | 3,354,909 |
| Redemptions | - | - | 2,231,320 | 1,037,625 | - | 3,268,945 |
| Lease payments | 199,253 | - | - | - | - | 199,253 |
| Total expenditures | 73,700,743 | 8,079,916 | 3,912,444 | 5,613,288 | $(2,566,109)$ | 88,740,282 |
| Excess (deficiency) of revenues over expenditures .......... | 5,698,764 | $(6,083,157)$ | $(3,824,833)$ | $(2,009,771)$ | $(180,290)$ | $(6,399,287)$ |
| Other Financing Sources (Uses): |  |  |  |  |  |  |
| Transfers from (to) General Fund | - | - | 3,619,487 | 2,052,943 | - | 5,672,430 |
| Transfers from (to) Nonmajor Capital Projects Funds | - | 4,836,353 | - | 3,794 | - | 4,840,147 |
| Transfers from (to) Nonmajor Special Revenue |  |  |  |  |  |  |
| Funds, net . . . . . . . . . . . . . . . . . . . . . . . . | - | - | - | 19,564 | - | 19,564 |
| Principal amount of bonds issued | 159,154 | - | - | 4,400,000 | - | 4,559,154 |
| Bond premium | - | - | 430,131 | 477,302 | - | 907,433 |
| Capitalized leases | - | 47,998 | - | - | - | 47,998 |
| Issuance of refunding debt | - | - | 2,351,450 | 399,660 | - | 2,751,110 |
| Transfers from (to) Capital Projects Fund | (3,619, | - | - | $(4,836,353)$ | - | $(4,836,353)$ |
| Transfers from (to) General Debt Service Fund | $(3,619,487)$ | - | - | - | - | $(3,619,487)$ |
| Transfers from (to) Nonmajor Debt Service Funds, net | $(2,233,233)$ | - | (2,771,388) | $(23,358)$ | 180,290 | $(2,076,301)$ |
| Payments to refunded bond escrow holder | - | - | $(2,771,338)$ | $(467,266)$ | - | $(3,238,604)$ |
| Total other financing sources (uses) | $(5,693,566)$ | 4,884,351 | 3,629,730 | 2,026,286 | 180,290 | 5,027,091 |
| Net change in fund balances | 5,198 | $(1,198,806)$ | $(195,103)$ | 16,515 | - | $(1,372,196)$ |
| Fund Balances (Deficit) at Beginning of Year | 467,621 | $(1,779,591)$ | 1,970,220 | 4,378,186 | - | 5,036,436 |
| Restatement of beginning fund balance (deficit) . . | - | - | - | $(120,417)$ | - | $(120,417)$ |
| Fund Balances (Deficit) at End of Year | \$ 472,819 | \$(2,978,397) | \$ 1,775,117 | \$ 4,274,284 | \$ | \$ 3,543,823 |

The reconciliation of the net change in fund balances of governmental funds to the change in net position of governmental activities in the Statement of Net Position is presented in an accompanying schedule.

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES 

FOR THE YEAR ENDED JUNE 30, 2017<br>(in thousands)

| Net change in fund balances - governmental funds |  | \$ | 525,684 |
| :---: | :---: | :---: | :---: |
| Amounts reported for governmental activities in the Statement of Activities are differ |  |  |  |
| Governmental funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlays exceeded depreciation in the current period. |  |  |  |
| Purchases of capital assets | \$ 6,075,034 |  |  |
| Depreciation expense | $(3,485,994)$ |  | 2,589,040 |
| The net effect of various miscellaneous transactions involving capital assets and other (i.e., sales, trade-ins, and donations) is to decrease net position ..... |  |  | 43,073 |
| The issuance of long-term debt (i.e., bonds, capital leases) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report, premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the Statement of Activities. |  |  |  |
| This amount is the net effect of these differences in the treatment of long-term debt and related items. |  |  |  |
| Proceeds from sales of bonds | $(11,209,490)$ |  |  |
| Principal payments of bonds | 7,332,755 |  |  |
| Other | 484,432 |  | $(3,392,303)$ |
| Some expenses reported in the Statement of Activities do not require the use of current financial resources and therefore, are not reported as expenditures in governmental funds |  |  | $(196,727)$ |
| Some revenues in the Statement of Activities that do not provide current financial resources are not reported as revenues in the funds . |  |  | $(15,171,696)$ |
| Change in net pension liability |  |  | 8,605,624 |
| Change in OPEB liability |  |  | 6,079,684 |
| Change in pollution remediation obligations |  |  | 6,296 |
| Change in net position - governmental activities |  |  | $\underline{(911,325)}$ |

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES 

FOR THE YEAR ENDED JUNE 30, 2016<br>(in thousands)

Net change in fund balances - governmental funds
\$ $(1,492,613)$
Amounts reported for governmental activities in the Statement of Activities are different because:
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlays exceeded depreciation in the current period.
Purchases of capital assets . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ 5,193,139
Depreciation expense
$(3,353,181)$
The net effect of various miscellaneous transactions involving capital assets and other (i.e., sales, trade-ins, and donations) is to decrease net position
The issuance of long-term debt (i.e., bonds, capital leases) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report, premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the Statement of Activities. This amount is the net effect of these differences in the treatment of long-term debt and related items.
Proceeds from sales of bonds . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad(7,310,264)$
Principal payments of bonds
5,602,082
Other
421,587
$(1,286,595)$
Some expenses reported in the Statement of Activities do not require the use of current financial resources and therefore, are not reported as expenditures in governmental funds
Some revenues in the Statement of Activities that do not provide current financial resources are not reported as revenues in the funds

11,831,060
Change in net pension liability
Change in OPEB liability
Change in pollution remediation obligations
Restatement of beginning net position
$(4,405,436)$
Change in net position - governmental activities \$(10,443,003)

See accompanying notes to financial statements.

## THE CITY OF NEW YORK

GENERAL FUND STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE BUDGET AND ACTUAL
FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

|  | Budget |  | Actual | Better <br> (Worse) <br> Than <br> Modified <br> Budget |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Adopted | Modified |  |  |  |
| Revenues: |  |  |  |  |  |
| Real estate taxes | \$24,228,997 | \$24,650,915 | \$24,679,411 |  | 28,496 |
| Sales and use taxes | 8,328,000 | 8,259,800 | 8,296,436 |  | 36,636 |
| Personal income tax | 11,577,000 | 11,255,500 | 11,257,809 |  | 2,309 |
| Income taxes, other | 6,546,000 | 7,190,485 | 7,120,621 |  | $(69,864)$ |
| Other taxes | 3,963,309 | 3,244,032 | 3,308,127 |  | 64,095 |
| Federal, State and other categorical aid | 21,986,184 | 24,253,925 | 23,344,456 |  | $(909,469)$ |
| Unrestricted Federal and State aid | - | 56,792 | 59,058 |  | 2,266 |
| Charges for services | 2,615,487 | 2,657,330 | 2,711,428 |  | 54,098 |
| Investment income | 61,210 | 80,540 | 73,125 |  | $(7,415)$ |
| Other revenues | 1,843,112 | 2,688,823 | 2,179,254 |  | $(509,569)$ |
| Total revenues | 81,149,299 | 84,338,142 | 83,029,725 |  | (1,308,417) |
| Expenditures: |  |  |  |  |  |
| General government | 3,398,426 | 3,471,098 | 3,246,561 |  | 224,537 |
| Public safety and judicial | 9,232,682 | 9,830,800 | 9,694,083 |  | 136,717 |
| Education | 23,179,313 | 23,464,954 | 23,317,602 |  | 147,352 |
| City University | 1,041,364 | 1,114,615 | 1,067,117 |  | 47,498 |
| Social services | 14,281,008 | 14,817,052 | 14,485,139 |  | 331,913 |
| Environmental protection | 3,044,111 | 2,967,308 | 2,923,418 |  | 43,890 |
| Transportation services | 1,728,818 | 1,799,662 | 1,753,637 |  | 46,025 |
| Parks, recreation and cultural activities | 586,846 | 610,040 | 598,776 |  | 11,264 |
| Housing | 1,488,005 | 1,328,137 | 1,220,133 |  | 108,004 |
| Health (including payments to HHC) | 1,812,929 | 2,270,873 | 2,233,288 |  | 37,585 |
| Libraries | 365,104 | 370,512 | 369,871 |  | 641 |
| Pensions | 9,309,981 | 9,282,808 | 9,280,651 |  | 2,157 |
| Judgments and claims | 676,389 | 750,763 | 750,349 |  | 414 |
| Fringe benefits and other benefit payments | 5,654,258 | 5,962,914 | 5,909,908 |  | 53,006 |
| Lease payments for debt service | 58,841 | 30,360 | 30,360 |  |  |
| Other... | 2,086,913 | 268,755 | 147,036 |  | 121,719 |
| Total expenditures | 77,944,988 | 78,340,651 | 77,027,929 |  | 1,312,722 |
| Excess of revenues over expenditures | 3,204,311 | 5,997,491 | 6,001,796 |  | 4,305 |
| Other Financing Sources (Uses): |  |  |  |  |  |
| Principal amount of bonds issued | - | 139,513 | 139,513 |  | - |
| Transfers to Nonmajor Debt Service Fund | $(1,146,434)$ | $(2,852,687)$ | $(2,852,319)$ |  | (368) |
| Transfers from Nonmajor Debt Service Fund | 239,183 | 217,011 | 217,050 |  | (39) |
| Transfers and other payments for debt service, net | (2,297,060) | $(3,501,328)$ | $(3,500,830)$ |  | (498) |
| Total other financing uses | (3,204,311) | (5,997,491) | (5,996,586) |  | (905) |
| Excess of Revenues Over Expenditures and Other |  |  |  |  |  |
| Financing Uses | \$ - | \$ | 5,210 | \$ | 5,210 |
| Fund Balance at Beginning of Year |  |  | 472,819 |  |  |
| Fund Balance At End Of Year |  |  | \$ 478,029 |  |  |

See accompanying notes to financial statements.

## THE CITY OF NEW YORK

GENERAL FUND STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE BUDGET AND ACTUAL
FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | Budget |  | Actual | Better <br> (Worse) <br> Than <br> Modified <br> Budget |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Adopted | Modified |  |  |  |
| Revenues: |  |  |  |  |  |
| Real estate taxes | \$22,589,192 | \$23,120,192 | \$23,180,583 |  | 60,391 |
| Sales and use taxes | 8,068,000 | 8,560,220 | 8,540,154 |  | $(20,066)$ |
| Personal income tax | 11,154,000 | 11,454,000 | 11,392,473 |  | $(61,527)$ |
| Income taxes, other | 6,662,000 | 7,170,791 | 6,947,614 |  | $(223,177)$ |
| Other taxes | 3,745,583 | 3,483,519 | 3,559,825 |  | 76,306 |
| Federal, State and other categorical aid | 20,765,775 | 21,963,335 | 20,897,592 |  | $(1,065,743)$ |
| Unrestricted Federal and State aid | - | 6,155 | 6,168 |  | 13 |
| Charges for services | 2,735,296 | 2,734,077 | 2,624,357 |  | $(109,720)$ |
| Investment income | 29,400 | 64,430 | 78,791 |  | 14,361 |
| Other revenues | 1,881,683 | 2,690,983 | 2,171,950 |  | $(519,033)$ |
| Total revenues | 77,630,929 | 81,247,702 | 79,399,507 |  | (1,848,195) |
| Expenditures: |  |  |  |  |  |
| General government | 3,267,424 | 3,200,819 | 2,985,013 |  | 215,806 |
| Public safety and judicial | 8,777,557 | 9,483,114 | 9,325,708 |  | 157,406 |
| Education | 21,894,475 | 22,373,621 | 21,973,688 |  | 399,933 |
| City University | 977,677 | 1,003,118 | 955,775 |  | 47,343 |
| Social services | 14,026,800 | 13,980,252 | 13,800,868 |  | 179,384 |
| Environmental protection | 2,747,907 | 2,795,819 | 2,569,229 |  | 226,590 |
| Transportation services | 1,658,820 | 1,754,285 | 1,707,930 |  | 46,355 |
| Parks, recreation and cultural activities | 525,196 | 549,319 | 533,855 |  | 15,464 |
| Housing | 939,324 | 1,118,137 | 1,023,213 |  | 94,924 |
| Health (including payments to HHC) | 1,673,106 | 2,711,950 | 2,666,511 |  | 45,439 |
| Libraries | 357,731 | 360,295 | 359,548 |  | 747 |
| Pensions | 8,643,115 | 9,172,968 | 9,170,963 |  | 2,005 |
| Judgments and claims | 709,890 | 719,966 | 719,968 |  | (2) |
| Fringe benefits and other benefit payments | 5,309,527 | 5,691,328 | 5,511,572 |  | 179,756 |
| Lease payments for debt service | 169,678 | 199,255 | 199,253 |  | 2 |
| Other | 2,904,342 | 434,813 | 197,649 |  | 237,164 |
| Total expenditures | 74,582,569 | 75,549,059 | 73,700,743 |  | 1,848,316 |
| Excess of revenues over expenditures | 3,048,360 | 5,698,643 | 5,698,764 |  | 121 |
| Other Financing Sources (Uses): |  |  |  |  |  |
| Principal amount of bonds issued | - | 159,154 | 159,154 |  | - |
| Transfers to Nonmajor Debt Service Fund | $(1,024,767)$ | $(2,578,096)$ | $(2,579,009)$ |  | 913 |
| Transfers from Nonmajor Debt Service Fund | 239,768 | 345,879 | 345,776 |  | 103 |
| Transfers and other payments for debt service, net | $(2,263,361)$ | $(3,625,580)$ | $(3,619,487)$ |  | $(6,093)$ |
| Total other financing uses | $(3,048,360)$ | (5,698,643) | $(5,693,566)$ |  | $(5,077)$ |
| Excess of Revenues Over Expenditures and Other |  |  |  |  |  |
| Fund Balance at Beginning of Year |  |  |  |  |  |
| Fund Balance at Beginning of Year |  |  | 467,621 |  |  |
| Fund Balance at End of Year |  |  | \$ 472,819 |  |  |

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> PROPRIETARY FUNDS STATEMENT OF NET POSITION 

JUNE 30, 2017
(in thousands)


# THE CITY OF NEW YORK <br> PROPRIETARY FUNDS STATEMENT OF NET POSITION 

JUNE 30, 2016
(in thousands)


## THE CITY OF NEW YORK

PROPRIETARY FUNDS
STATEMENT OF REVENUES, EXPENSES AND CHANGE IN NET POSITION
FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

|  |  | Brooklyn Bridge Park Corporation |  | The Trust for Governors Island Corporation |  | WTC Captive Insurance Company, Inc. |  | $\begin{gathered} \text { NYCTL } \\ \text { 1998-2 } \\ \text { TRUST } \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2015-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2016-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2017-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | Total Proprietary Funds |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Operating Revenues: Investment income | \$ |  | \$ | - | \$ | $(2,155)$ | \$ | 105,758 | \$ | 4,715 | \$ | 7,241 | \$ | 588 | \$ | 116,147 |
|  | Permits and other fees |  | 1,862 |  | 2,380 |  | - |  | - |  | - |  | - |  | - |  | 4,242 |
|  | Tax liens received from the City of New York |  | - |  | - |  | - |  | 52,572 |  | - |  | 31,396 |  | 48,309 |  | 132,277 |
|  | Payments in lieu of taxes and ground leases rent |  | 35,566 |  |  |  | - |  | - |  | - |  | - |  | - |  | 35,566 |
|  | Operating grants and contributions |  |  |  | 17,399 |  | - |  | - |  | - |  | - |  | - |  | 17,399 |
|  | Total operating revenues |  | 37,428 |  | 19,779 |  | $(2,155)$ |  | 158,330 |  | 4,715 |  | 38,637 |  | 48,897 |  | 305,631 |
|  | Operating Expenses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | General and administrative expense |  | - |  | - |  | 530 |  | 11,950 |  | 1,141 |  | 1,542 |  | - |  | 15,163 |
|  | Personnel costs . . . . . . . . . . . . . |  | 4,403 |  | 2,846 |  | 657 |  | - |  | - |  | - |  | - |  | 7,906 |
|  | Utilities |  | 428 |  | 615 |  |  |  | - |  | - |  | - |  | - |  | 1,043 |
|  | Professional fees |  | 1,816 |  | - |  | 781 |  | - |  | - |  | - |  | - |  | 2,597 |
|  | Repairs and maintenance |  | 2,891 |  | - |  | - |  | - |  | - |  | - |  | - |  | 2,891 |
|  | Security |  | 1,135 |  | - |  | - |  |  |  | - |  |  |  | - |  | 1,135 |
| $\square$ | Distributions to the City of New York |  | , |  | - |  | - |  | 53,793 |  | - |  | 43,055 |  | - |  | 96,848 |
|  | Increase (decrease) in allowance for doubtful accounts |  | - |  | - |  | - |  | 30,787 |  | (647) |  | 1,315 |  | 55 |  | 31,510 |
|  | Addition to residual liability due to Water Board |  | - |  | - |  | - |  | 3,096 |  | 939 |  | 6,677 |  | 13,090 |  | 23,802 |
|  | Write-offs of uncollectible liens, net of recoveries |  | 7,165 |  | , - |  | - |  | 96,419 |  | 173 |  | 66 |  | - |  | 96,658 |
|  | Depreciation and amortization |  | 7,165 |  | 17,644 |  | - |  | 9, |  | - |  | - |  | - |  | 24,809 |
|  | OPEB expense |  | (85) |  | - |  | - |  | - |  | - |  | - |  | - |  | (85) |
|  | Other general, administrative and project expenses |  | 887 |  | 14,072 |  | - |  | - |  | - |  | - |  | - |  | 14,959 |
|  | Other |  |  |  |  |  | - |  | - |  | 260 |  | 2,707 |  | - |  | 2,967 |
|  | Total operating expenses |  | 18,640 |  | 35,177 |  | 1,968 |  | 196,045 |  | 1,866 |  | 55,362 |  | 13,145 |  | 322,203 |
|  | Operating income (loss) |  | 18,788 |  | $(15,398)$ |  | $(4,123)$ |  | $(37,715)$ |  | 2,849 |  | $(16,725)$ |  | 35,752 |  | $(16,572)$ |
|  | Nonoperating Revenues (Expenses): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Capital contributions from government sources |  | 20,625 |  | 19,793 |  | - |  | - |  | - |  | - |  | - |  | 40,418 |
|  | Capital contributions from private sources |  | - |  | 4,880 |  | - |  | - |  | - |  | - |  | - |  | 4,880 |
|  | Investment income |  | 95 |  | - |  | - |  | 58 |  | 28 |  | 44 |  | - |  | 225 |
|  | Interest income |  | 12 |  | 7 |  | - |  |  |  |  |  | - |  | - |  | 19 |
|  | Transfer from residual liability |  | - |  | - |  | 4,123 |  | - |  | - |  | - |  | - |  | 4,123 |
|  | Other income . . . . . . . . . . |  | - |  | 387 |  | - |  | - |  | - |  | - |  | - |  | 387 |
|  | Total nonoperating revenues (expenses) |  | 20,732 |  | 25,067 |  | 4,123 |  | 58 |  | 28 |  | 44 |  | - |  | 50,052 |
|  | Income before capital contribution and transfers |  | 39,520 |  | 9,669 |  | - |  | $(37,657)$ |  | 2,877 |  | $(16,681)$ |  | 35,752 |  | 33,480 |
|  | Change in net position |  | 39,520 |  | 9,669 |  | - |  | $(37,657)$ |  | 2,877 |  | $(16,681)$ |  | 35,752 |  | 33,480 |
|  | Net position-beginning |  | 247,053 |  | 333,980 |  | - |  | 202,122 |  | 15,924 |  | 35,738 |  | - |  | 834,817 |
|  | Net position-ending | \$ | 286,573 | \$ | 343,649 | \$ | - | \$ | 164,465 | \$ | 18,801 | \$ | 19,057 | \$ | 35,752 | \$ | 868,297 |

## THE CITY OF NEW YORK

## PROPRIETARY FUNDS

STATEMENT OF REVENUES, EXPENSES AND CHANGE IN NET POSITION

## FOR THE YEAR ENDED JUNE 30, 2016

(in thousands)

|  |  | Brooklyn Bridge Park Corporation |  | The Trust for Governors Island Corporation |  | WTC Captive Insurance Company, Inc. |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 1998-2 } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2014-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2015-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2016-A } \\ & \text { TRUST } \end{aligned}$ |  | $\begin{gathered} \text { Total } \\ \text { Proprietary } \\ \text { Funds } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Operating Revenues: | \$ | - | \$ | - | \$ | $(2,193)$ | \$ | 94,171 | \$ | - | \$ | 7,217 | \$ | 744 | \$ | 99.939 |
|  | Permits and other fees |  | 1,785 |  | 2,460 |  | $(2,103)$ |  | 94, |  | - |  | 7,217 |  | - |  | 4,245 |
|  | Tax liens received from the City of New York |  | - |  | - |  | - |  | 9,789 |  | - |  | 29,359 |  | 46,109 |  | 85,257 |
|  | Transfers from other New York City Tax Lien Trust |  | - |  | - |  | - |  | 30,435 |  | - |  | - |  | - |  | 30,435 |
|  | Payments in lieu of taxes and ground leases rent |  | 8,238 |  | - |  | - |  | - |  | - |  | - |  | - |  | 8,238 |
|  | Operating grants and contributions |  | - |  | 13,765 |  | 二 |  | - |  | - |  | - |  | - |  | 13,765 |
|  | Total operating revenues |  | 10,023 |  | 16,225 |  | $(2,193)$ |  | 134,395 |  | - |  | 36,576 |  | 46,853 |  | 241,879 |
|  | Operating Expenses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | General and administrative expense |  | $\bar{\square}$ |  | $\overline{55}$ |  | 548 |  | 9,705 |  | 888 |  | 1,500 |  | - |  | 12,641 |
|  | Personnel costs . . . . . . . . . . . . . . . |  | 4,397 |  | 2,555 |  | 676 |  | , |  |  |  | 1,500 |  | - |  | 7,628 |
|  | Utilities |  | 296 |  | 54 |  |  |  | - |  | - |  | - |  | - |  | 350 |
|  | Professional fees |  | 1,060 |  | - |  | 1,984 |  | - |  | - |  | - |  | - |  | 3,044 |
|  | Repairs and maintenance |  | 1,497 |  | - |  | - |  | - |  | - |  | - |  | - |  | 1,497 |
|  | Security . . . . |  | 881 |  | - |  | - |  |  |  | - |  | - $\overline{6}$ |  | - |  | 881 |
|  | Distributions to the City of New York |  | - |  | - |  | - |  | 41,242 |  | - |  | 41,650 |  | - |  | 82,892 |
|  | Increase (decrease) in allowance for doubtful accounts |  | - |  | - |  | - |  | 27,279 |  | - |  | 1,694 |  | 76 |  | 29,049 |
| $\underset{y}{ }$ | Addition to residual liability due to Water Board |  | - |  | - |  | - |  | 4,754 |  | - |  | 7,527 |  | 11,039 |  | 23,320 |
|  | Write-offs of uncollectible liens, net of recoveries |  | - |  | - |  | - |  | 40,723 |  | - |  | 21 |  | - |  | 40,744 |
|  | Depreciation and amortization . |  | 6,684 |  | 13,585 |  | - |  | , |  | - |  | - |  | - |  | 20,269 |
|  | OPEB expense . . . . . . . . |  | 22 |  |  |  | - |  | - |  | - |  | - |  | - |  | 22 |
|  | Other general, administrative and project expenses |  | 992 |  | 14,153 |  | - |  | - |  | 1,113 |  | -771 |  | - |  | 16,258 |
|  | Other . ........................... |  |  |  |  |  | - |  | - |  |  |  | 2,771 |  | - |  | 2,771 |
|  | Total operating expenses |  | 15,829 |  | 30,347 |  | 3,208 |  | 123,703 |  | 2,001 |  | 55,163 |  | 11,115 |  | 241,366 |
|  | Operating income (loss) |  | $(5,806)$ |  | $(14,122)$ |  | $(5,401)$ |  | 10,692 |  | $(2,001)$ |  | $(18,587)$ |  | 35,738 |  | 513 |
|  | Nonoperating Revenues (Expenses): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Capital contributions from government sources |  | 12,928 |  | 29,582 |  | - |  | - |  | - |  | - |  | - |  | 42,510 |
|  | Capital contributions from private sources |  | - |  | 8,381 |  | - |  | - |  | - |  | - |  | - |  | 8,381 |
|  | Gain on disposal of capital assets . . . . . . |  | - - |  | 86 |  | - |  | - |  | - |  | - |  | - |  | 86 |
|  | Other contributions from government sources . |  | 1,043 |  | - |  | - |  | - |  | - |  | 7 |  | - |  | 1,043 |
|  | Investment income . . . . . . . . . . . . . . . . . . |  | 8 |  | - |  | - |  | 13 |  | 19 |  | 7 |  | - |  | 47 |
|  | Interest income |  | 19 |  | 9 |  | 5, |  | - |  | 4,836 |  | - |  | - |  | 4,864 |
|  | Transfer from residual liability |  | - |  | - |  | 5,401 |  | - |  | - |  | - |  | - |  | 5,401 |
|  | Other income ....... |  | - |  | 4 |  | - |  | - |  | - |  | - |  | - |  | 4 |
|  | Total nonoperating revenues (expenses). |  | 13,998 |  | 38,062 |  | 5,401 |  | 13 |  | 4,855 |  | 7 |  | - |  | 62,336 |
|  | Income before capital contribution and transfers |  | 8,192 |  | 23,940 |  | - |  | 10,705 |  | 2,854 |  | $(18,580)$ |  | 35,738 |  | 62,849 |
|  | Transfers out |  |  |  |  |  | - |  | - |  | $(30,435)$ |  |  |  | - |  | $(30,435)$ |
|  | Change in net position |  | 8,192 |  | 23,940 |  | - |  | 10,705 |  | $(27,581)$ |  | (18,580) |  | 35,738 |  | 32,414 |
|  | Restatement of beginning net position |  | 238,861 |  | 310,040 |  | - |  | 191,417 |  | 27,581 |  | 34,504 |  | - |  | 802,403 |
|  | Net position-ending | \$ | 247,053 | \$ | 333,980 | \$ | - | \$ | 202,122 | \$ | - | \$ | 15,924 | \$ | 35,738 | \$ | 834,817 |



|  |  | Brooklyn Bridge Park Corporation |  | The Trust for Governors Island Corporation |  | WTC Captive Insurance Company, Inc. |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 1998-2 } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2015-A } \\ & \text { TRUST } \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2016-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2017-A } \\ & \text { TRUST } \end{aligned}$ |  | $\begin{gathered} \text { Total } \\ \text { Proprietary } \\ \text { Funds } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used for) Operating Activities: Operating income (loss) | \$ | 18,788 | - | $(15,398)$ |  | (4,123) | \$ | $(37,715)$ | \$ | 2,849 | \$ | $(16,725)$ | \$ | 35,752 | \$ | $(16,572)$ |
|  | Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Depreciation expense ............... |  | 7,165 |  | 17,643 |  |  |  |  |  |  |  |  |  |  |  | 24,808 |
|  | Accounts receivable . |  | $(14,839)$ |  | (492) |  | - |  | 5,731 |  | 16,579 |  | 853 |  | $(48,022)$ |  | $(40,190)$ |
|  | Change in allowance for doubtful accounts |  | - |  |  |  |  |  | 30,787 |  | (647) |  | 1,315 |  | 55 |  | 31,510 |
|  | Prepaid expenses ................... |  |  |  | (4) |  | 25 |  |  |  |  |  |  |  |  |  | 21 |
|  | Accounts payable and accrued expenses .. |  | $(1,374)$ |  | 1,240 |  | $(1,676)$ |  | $(10,141)$ |  | (227) |  | $(1,335)$ |  | 13,090 |  | (423) |
|  | Unearned revenue ................... |  | 12,500 |  | 172 |  | - |  | - |  | - |  | - |  |  |  | 12,672 |
|  | Other postemployment benefits obligation . |  | (85) |  |  |  |  |  |  |  |  |  |  |  |  |  | (85) |
|  | Realized losses on sales of investments |  |  |  | - |  | 3,151 |  | - |  | - |  | - |  | - |  | 3,151 |
|  | Change in unrealized losses on investments |  |  |  |  |  | 405 |  |  |  |  |  |  |  |  |  | 405 |
|  | Accrued investment income |  | - |  |  |  | 49 |  | - |  |  |  |  |  |  |  | 49 |
| $\stackrel{+}{+}$ | Bond interest .... |  | - |  |  |  | - |  | - |  | (47) |  |  |  |  |  | (47) |
| ${ }_{0}$ | Total adjustments |  | 3,367 |  | 18,559 |  | 1,954 |  | 26,377 |  | 15,658 |  | 833 |  | (34,877) |  | 31,871 |
|  | Net cash provided by (used for) operating activities |  | 22,155 |  | 3,161 |  | $(2,169)$ |  | $(11,338)$ |  | 18,507 |  | $(15,892)$ |  | 875 |  | 15,299 |
|  | Reconciliation to Cash and Cash Equivalents, End Of Year: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Unrestricted cash and cash equivalents |  | 25,658 |  | 6,102 |  | 11,296 |  | 437 |  | 91 |  | 364 |  | 166 |  | 44,114 |
|  | Restricted cash and cash equivalents ....... |  | 29,815 |  | 8,215 |  |  |  |  |  |  |  |  |  |  |  | 38,030 |
|  | Cash and Cash Equivalents-End of Year: | \$ | 55,473 | \$ | 14,317 | \$ | 11,296 | \$ | 437 | \$ | 91 | \$ | 364 | \$ | 166 | \$ | 82,144 |

# THE CITY OF NEW YORK <br> PROPRIETARY FUNDS <br> STATEMENT OF CASH FLOW 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)


# THE CITY OF NEW YORK <br> PROPRIETARY FUNDS <br> STATEMENT OF CASH FLOW 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  |  | Brooklyn Bridge Park Corporation |  | The Trust for Governors Island Corporation |  | WTC Captive Insurance Company, Inc. |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 1998-2 } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2014-A } \\ & \text { TRUST } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { NYCTL } \\ & \text { 2015-A } \\ & \text { TRUST } \end{aligned}$ |  | $\underset{\text { 2016-A }}{\text { NYCTL }}$ TRUST |  | $\begin{gathered} \text { Total } \\ \text { Proprietary } \\ \text { Funds } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reconciliation of Operating Income (Loss) <br> to Net Cash Provided by (Used For) <br> Operating Activities: <br> Operating income (loss) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Depreciation expense |  | 6,684 |  | 13,585 |  | - |  |  |  | - |  |  |  |  |  | 20,269 |
|  | Accounts receivable |  | 159 |  | (93) |  | - |  | $(29,240)$ |  | - |  | $(3,274)$ |  | $(45,353)$ |  | $(77,801)$ |
|  | Increase in allowance for doubtful accounts . |  |  |  |  |  |  |  | 27,279 |  | - |  | 1,694 |  | 77 |  | 29,050 |
|  | Gain on disposal of capital assets |  | - |  | (87) |  |  |  |  |  | - |  | - |  | - |  | (87) |
|  | Prepaid expenses ............. |  | ) |  | 3 |  | 10 |  |  |  |  |  |  |  |  |  | 18 |
|  | Accounts payable and accrued expenses . . |  | (61) |  | 209 |  | $(26,263)$ |  | 7,297 |  | - |  | $(3,984)$ |  | 11,051 |  | $(11,751)$ |
|  | Unearned revenue . ................. |  | $(1,558)$ |  | (26) |  | - |  | - |  | - |  |  |  | - |  | $(1,584)$ |
|  | Other postemployment benefits obligation |  | 22 |  | (192) |  |  |  |  |  |  |  |  |  |  |  | (170) |
|  | Realized losses on sales of investments .. |  | - |  |  |  | 2,218 |  | - |  | - |  | - |  | - |  | 2,218 |
|  | Change in unrealized losses on investments . |  | - |  | - |  | 1,544 |  | - |  | - |  | - |  |  |  | 1,544 |
| $\square$ | Accrued investment income ...... |  |  |  |  |  | 123 |  |  |  |  |  |  |  |  |  | 123 |
| $\bigcirc$ | Bond interest . . . . . . . . . . . . . . . . . . |  | - |  | - |  |  |  | - |  |  |  | 71 |  | - |  | 71 |
|  | Noncash transfers, net |  |  |  |  |  |  |  |  |  | 2,001 |  |  |  |  |  | 2,001 |
|  | Total adjustments |  | 5,251 |  | 13,399 |  | $(22,368)$ |  | 5,336 |  | 2,001 |  | $(5,493)$ |  | $(34,225)$ |  | $(36,099)$ |
|  | Net cash provided by (used for) operating activities ........ | \$ | (555) | \$ | (723) | \$ | $(27,769)$ | \$ | 16,028 | \$ | - | \$ | $(24,080)$ | \$ | 1,513 | \$ | $(35,586)$ |
|  | Reconciliation to Cash and Cash Equivalents, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Unrestricted cash and cash equivalents | \$ | 16,453 | \$ | 1,513 | \$ | 6,087 | \$ | 1,222 | \$ | - | \$ | 89 | \$ | 303 | \$ | 25,667 |
|  | Restricted cash and cash equivalents |  | 29,338 |  | 10,704 |  | 114 |  |  |  | - |  |  |  |  |  | 40,156 |
|  | Cash and Cash Equivalents-End of Year | \$ | 45,791 | \$ | 12,217 | \$ | 6,201 | \$ | 1,222 | \$ | - | \$ | 89 | \$ | 303 | \$ | 65,823 |

# THE CITY OF NEW YORK <br> FIDUCIARY FUNDS STATEMENT OF FIDUCIARY NET POSITION 

JUNE 30, 2017
(in thousands)

|  | Pension and Other Employee Benefit Trust Funds | Agency Funds |
| :---: | :---: | :---: |
| Assets: |  |  |
| Cash and cash equivalents | \$ 1,496,348 | \$ 1,278,843 |
| Receivables: |  |  |
| Member loans | 2,363,266 | - |
| Investment securities sold. | 2,809,613 | - |
| Accrued interest and dividends | 521,861 | - |
| Other receivables | 2,306 | - |
| Total receivables. | 5,697,046 | - |
| Investments: |  |  |
| Short-term investments | 3,153,337 | - |
| Debt securities | 44,811,213 | 2,793,532 |
| Equity securities | 63,428,113 | - |
| Alternative investments | 26,996,866 | - |
| Mutual funds | 11,484,251 | - |
| Collective trust funds | 65,840,204 | - |
| Collateral from securities lending transactions | 14,160,766 | - |
| Guaranteed investment contracts. | 5,789,053 | - |
| Total investments | 235,663,803 | 2,793,532 |
| Other assets | 178,084 | - |
| Total assets | 243,035,281 | 4,072,375 |
| Liabilities: |  |  |
| Accounts payable and accrued liabilities. | 1,779,147 | 912,412 |
| Payable for investment securities purchased | 3,326,760 | - |
| Accrued benefits payable | 802,943 | - |
| Securities lending transactions. | 14,160,766 | - |
| Other liabilities. | 1,088 | 3,159,963 |
| Total liabilities | 20,070,704 | 4,072,375 |
| Net Position: |  |  |
| Restricted for benefits to be provided by QPPs | 163,025,497 | - |
| Restricted for benefits to be provided by VSFs | 4,911,873 | - |
| Restricted for benefits to be provided by TDA program | 32,851,781 | - |
| Restricted for other employee benefits | 22,175,426 | - |
| Total net position. | \$222,964,577 | \$ |

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> FIDUCIARY FUNDS STATEMENT OF FIDUCIARY NET POSITION 

JUNE 30, 2016
(in thousands)

|  | Pension and Other Employee Benefit Trust Funds | Agency Funds |
| :---: | :---: | :---: |
| Assets: |  |  |
| Cash and cash equivalents | \$ 1,862,743 | \$ 1,299,970 |
| Receivables: |  |  |
| Member loans | 2,319,160 | - |
| Investment securities sold | 4,181,594 | - |
| Accrued interest and dividends | 540,835 | - |
| Other receivables . | 379 | - |
| Total receivables | 7,041,968 | - |
| Investments: |  |  |
| Short-term investments | 5,117,216 | - |
| Debt securities | 40,119,759 | 3,172,406 |
| Equity securities | 59,731,778 | - |
| Alternative investments | 25,752,930 | - |
| Mutual funds | 10,352,595 | - |
| Collective trust funds | 51,716,410 | - |
| Collateral from securities lending transactions | 11,902,353 | - |
| Guaranteed investment contracts | 5,303,762 | - |
| Total investments | 209,996,803 | 3,172,406 |
| Other assets | 275,809 | - |
| Total assets | 219,177,323 | 4,472,376 |
| Liabilities: |  |  |
| Accounts payable and accrued liabilities | 1,389,479 | 1,010,008 |
| Payable for investment securities purchased | 5,432,381 | - |
| Accrued benefits payable | 787,009 | - |
| Securities lending transactions | 11,902,353 | - |
| Other liabilities | 97,746 | 3,462,368 |
| Total liabilities | 19,608,968 | 4,472,376 |
| Net Position: |  |  |
| Restricted for benefits to be provided by QPPs | 146,917,855 | - |
| Restricted for benefits to be provided by VSFs | 2,642,245 | - |
| Restricted for benefits to be provided by TDA program | 30,074,416 | - |
| Restricted for other employee benefits . . . . . . . . . . . . | 19,933,839 | - |
| Total net position | \$199,568,355 | \$ |

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> FIDUCIARY FUNDS STATEMENT OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2017

(in thousands)

|  |  |
| :---: | :---: |
| Additions: |  |
| Contributions: |  |
| Member contributions | \$ 2,867,586 |
| Employer contributions | 13,880,778 |
| Other employer contributions | 57,369 |
| Total contributions | 16,805,733 |
| Investment income: |  |
| Interest income. | 2,485,621 |
| Dividend income. | 2,823,560 |
| Net appreciation in fair value of investments. | 19,993,839 |
| Investment expenses. | $(925,395)$ |
| Investment income, net | 24,377,625 |
| Securities lending transactions: |  |
| Securities lending income. | 90,516 |
| Securities lending fees | $(6,263)$ |
| Securities lending income, net | 84,253 |
| Other | $(110,010)$ |
| Total additions | 41,157,601 |
| Deductions: |  |
| Benefit payments and withdrawals | 17,548,262 |
| Administrative expenses | 202,739 |
| Other | 10,378 |
| Total deductions | 17,761,379 |
| Net increase in net position | 23,396,222 |
| Net Position: |  |
| Restricted for Benefits: |  |
| Beginning of year | 199,568,355 |
| End of year | \$222,964,577 |

See accompanying notes to financial statements.

# THE CITY OF NEW YORK <br> FIDUCIARY FUNDS STATEMENT OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | Pension and Other Employee Benefit Trust Funds |
| :---: | :---: |
| Additions: |  |
| Contributions: |  |
| Member contributions | \$ 2,739,214 |
| Employer contributions | 13,679,102 |
| Other employer contributions | 58,145 |
| Total contributions | 16,476,461 |
| Investment income: |  |
| Interest income | 2,356,503 |
| Dividend income | 2,561,066 |
| Net depreciation in fair value of investments | $(1,399,849)$ |
| Investment expenses | $(673,517)$ |
| Investment income, net | 2,844,203 |
| Securities lending transactions: |  |
| Securities lending income | 88,389 |
| Securities lending fees | $(6,057)$ |
| Securities lending income, net | 82,332 |
| Other | $(106,450)$ |
| Total additions | 19,296,546 |
| Deductions: |  |
| Benefit payments and withdrawals | 16,917,534 |
| Administrative expenses | 195,331 |
| Other | 7,440 |
| Total deductions | 17,120,305 |
| Net increase in net position | 2,176,241 |
| Net Position: |  |
| Restricted for Benefits: |  |
| Beginning of year | 197,392,114 |
| End of year | \$199,568,355 |

See accompanying notes to financial statements.

THE CITY OF NEW YORK
COMPONENT UNITS STATEMENT OF NET POSITION


See accompanying notes to financial statements.

JUNE 30, 2017
(in thousands)

| Housing Authority December 31, 2016 | Housing Development Corporation October 31, 2016 | Health and Hospitals Corporation |  | Economic Development Corporation |  | Nonmajor Component Units |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 476,432 | \$ 732,710 | \$ | 1,184,043 | \$ | 83,968 |  | 52,531 |  | 2,529,684 |
| 694,327 | 258,255 |  | 423,590 |  | 181,876 |  | 106,360 |  | 1,669,863 |
|  |  |  |  |  |  |  | 1,677,674 |  | 1,677,674 |
| 416,481 | 1,298,804 |  | 1,509,395 |  | 217,650 |  | 22,683 |  | 4,196,913 |
| 178,921 | 9,845,275 |  | 1,509,35 |  | 22,670 |  | - |  | 10,046,866 |
| 13,061 |  |  | - |  | - |  |  |  | 13,061 |
| - | - |  | - |  | - |  | 23,116 |  | 57,631 |
| 523,981 | 2,551,324 |  | 315,181 |  | 329,804 |  | 272,108 |  | 6,717,607 |
| 103,584 | 5,576 |  | - |  | 70,784 |  | 17,254 |  | 272,805 |
| 1,740,279 | - |  | 444,773 |  | 132,387 |  | 2,421 |  | 7,795,167 |
| 13,323,639 | 8,240 |  | 7,999,243 |  | 45,842 |  | 790,282 |  | 60,060,624 |
| (8,777,344) | $(5,767)$ |  | $(5,041,764)$ |  | $(11,520)$ |  | $(216,582)$ |  | $(27,885,390)$ |
| 8,693,361 | 14,694,417 |  | 6,834,461 |  | 1,073,461 |  | 2,747,847 |  | 67,152,505 |
| 242,849 | 3,608 |  | 14,133 |  | - |  | - |  | 260,406 |
| 4,767 | 8,105 |  | 10,537 |  | 167 |  | 12,404 |  | 136,418 |
| 247,616 | 11,713 |  | 24,670 |  | 167 |  | 12,404 |  | 396,824 |
| 446,685 | 781,683 |  | 1,552,953 |  | 178,849 |  | 40,653 |  | 3,020,630 |
| 14,694 | 97,531 |  | 11,154 |  |  |  |  |  | 175,085 |
| 206,038 | 79,962 |  |  |  | 36,053 |  | 9,354 |  | 470,984 |
|  | 1,234,722 |  | 617,154 |  | 139,146 |  |  |  | 2,516,160 |
| 45,293 | - |  | - |  | 24,763 |  | 153,250 |  | 223,306 |
|  | - |  | - |  | - |  | 12,404 |  | 112,842 |
| 210,864 | 327,642 |  | 688,905 |  | - |  | 27,105 |  | 1,887,437 |
| 700,197 | 9,529,494 |  | 776,783 |  | - |  | 1,665,076 |  | 43,305,379 |
| 1,214,112 | 12,877 |  | 2,576,239 |  | - |  | 9,775 |  | 3,813,831 |
| 2,833,465 | 11,051 |  | 4,663,684 |  | 22,291 |  |  |  | 7,531,903 |
| 759,513 | 254,850 |  | 284,312 |  | 240,157 |  | 222,548 |  | 1,791,989 |
| 6,430,861 | 12,329,812 |  | 11,171,184 |  | 641,259 |  | 2,140,165 |  | 64,849,546 |
| 46,073 | 1,631 |  |  |  | - |  | - |  | 47,715 |
|  | - |  | 694,459 |  | - |  | - |  | 694,750 |
| 83,317 | - |  | - |  | - |  | - |  | 99,710 |
| 129,390 | 1,631 |  | 694,459 |  | - |  | - |  | 842,175 |
| 5,692,787 | 2,473 |  | 2,559,689 |  | 34,322 |  | 416,997 |  | 8,501,865 |
| - |  |  | - |  | 42,627 |  | 41,258 |  | 83,885 |
| - | 1,395,994 |  | 138,854 |  | - - |  | - |  | 3,316,842 |
| - |  |  |  |  | 54,742 |  | , $\overline{39}$ |  | 54,742 |
| - |  |  | 361,807 |  | - |  | 34,939 |  | 396,746 |
|  | 68,293 |  |  |  |  |  | 1,118 |  | 307,157 |
| (3,312,061) | 907,927 |  | $(8,066,862)$ |  | 300,678 |  | 125,774 |  | $(10,803,629)$ |
| \$2,380,726 | \$ 2,374,687 |  | (5,006,512) | \$ | 432,369 | \$ | 620,086 | \$ | \$ 1,857,608 |

THE CITY OF NEW YORK

## COMPONENT UNITS

STATEMENT OF NET POSITION
JUNE 30, 2016
(in thousands)


## THE CITY OF NEW YORK <br> COMPONENT UNITS <br> STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)


## THE CITY OF NEW YORK <br> COMPONENT UNITS <br> STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | Restated |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Water and Sewer System | $\begin{gathered} \text { Housing } \\ \text { Authority } \\ \text { December 31, } \\ 2015 \\ \hline \end{gathered}$ | Housing <br> Development <br> Corporation <br> October 31, <br> 2015 | Health and Hospitals Corporation | Economic Development Corporation |  | Nonmajor omponent Units | Total |
| Expenses | \$3,509,935 | \$3,274,759 | \$ 271,479 | \$ 9,778,661 | \$813,588 | \$ | 430,754 | \$18,079,176 |
| Program Revenues: |  |  |  |  |  |  |  |  |
| Charges for services | 3,892,465 | 990,524 | 357,318 | 7,773,121 | 342,219 |  | 44,847 | 13,400,494 |
| Operating grants and contributions | - | 2,213,763 | - | 362,409 | 72,162 |  | 240,144 | 2,888,478 |
| Capital grants, contributions and other | 4,060 | 433,505 | - | 151,403 | 453,384 |  | 99,952 | 1,142,304 |
| Total program revenues | 3,896,525 | 3,637,792 | 357,318 | 8,286,933 | 867,765 |  | 384,943 | 17,431,276 |
| Net (expenses) program revenues | 386,590 | 363,033 | 85,839 | $(1,491,728)$ | 54,177 |  | $(45,811)$ | $(647,900)$ |
| General Revenues: |  |  |  |  |  |  |  |  |
| Investment income | 53,322 | 10,249 | 32,324 | 12,389 | 1,929 |  | 1,742 | 111,955 |
| Unrestricted Federal and State aid | - | - | - | - | 3,374 |  | 5,592 | 8,966 |
| O Other | 164,502 | 99,655 | 39,841 | 1,509,417 | 41,009 |  | 103,601 | 1,958,025 |
| Total general revenue. | 217,824 | 109,904 | 72,165 | 1,521,806 | 46,312 |  | 110,935 | 2,078,946 |
| Change in net position. | 604,414 | 472,937 | 158,004 | 30,078 | 100,489 |  | 65,124 | 1,431,046 |
| Net position (deficit)-beginning | 129,793 | 1,678,153 | 2,083,576 | $(4,622,133)$ | 325,750 |  | 1,037,763 | 632,902 |
| Restatement of beginning net position | (459) | - | - | $(220,888)$ | - |  | $(545,102)$ | $(766,449)$ |
| Net position (deficit)—ending | \$ 733,748 | \$2,151,090 | \$2,241,580 | \$(4,812,943) | \$426,239 | \$ | 557,785 | \$ 1,297,499 |

See accompanying notes to financial statements.
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## THE CITY OF NEW YORK

## NOTES TO FINANCIAL STATEMENTS JUNE 30, 2017 and 2016

## A. Summary of Significant Accounting Policies

The accompanying basic financial statements of The City of New York (City or primary government) are presented in conformity with Generally Accepted Accounting Principles (GAAP) for state and local governments in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB). The amounts shown in the "City" and "component units" columns of the accompanying government-wide financial statements are only presented to facilitate financial analysis and are not the equivalent of consolidated financial statements.

The following is a summary of the significant accounting policies and reporting practices of the City:

## 1. Reporting Entity

The City is a municipal corporation governed by the Mayor and the City Council. The City's operations also include those normally performed at the county level and, accordingly, transactions applicable to the operations of the five counties that comprise the City are included in these financial statements.

The financial reporting entity consists of the City and its component units, which are legally separate organizations for which the City is financially accountable.

The City is financially accountable for the organizations that make up its legal entity. It is also financially accountable for legally separate organizations if City officials appoint a voting majority of an organization's governing body and, either the City is able to impose its will on that organization, or there is a potential for the organization to provide specific financial benefits to, or to impose specific financial burdens on, the City. The City may also be financially accountable for organizations that are fiscally dependent on the City if there is a potential for the organizations to provide specific financial benefits to the City or impose specific financial burdens on the City, regardless of whether the organizations have separate elected governing boards, governing boards appointed by higher levels of government, or jointly appointed boards. The City is financially accountable for all of its component units.

Some component units are included in the financial reporting entity by discrete presentation. Other component units, despite being legally separate from the City, are so integrated with the City that they are in substance part of the City. These component units are blended with the City.

The New York City Transit Authority is an affiliated agency of the Metropolitan Transportation Authority (MTA) of the State of New York (State), which is a component unit of the State and is thus excluded from the City's financial reporting entity.

All of the component units publish separate annual financial statements, which are available at: Office of the Comptroller, Bureau of Accountancy-Room 200 South, 1 Centre Street, New York, New York 10007, or at www.comptroller.nyc.gov.

## Blended Component Units

Component Units that provide service exclusively to the City, whose governing bodies are substantially the same as that of the City, whose total debts outstanding are expected to be repaid with resources of the City, or who are organized as not-for-profits and the City is the sole corporate member (business-type activities), are reported as if they were part of the City, or blended into the City's financial statements. They include the following:

New York City Transitional Finance Authority (TFA). TFA, a corporate governmental agency constituting a public benefit corporation and instrumentality of the State, was created in 1997 to issue and sell bonds and notes to fund a portion of the capital program of the City, the purpose of which is to maintain, rebuild, and expand the infrastructure of the City and to pay TFA's administrative expenses.

TFA's authorizing legislation, which was amended several times, authorizes TFA to have outstanding $\$ 13.5$ billion of Future Tax Secured (FTS) Bonds. TFA FTS Bonds are secured by the City's collections of personal income tax and, if necessary, sales tax. In addition, TFA is authorized to issue additional FTS Bonds provided that the amount of such additional bonds, together with the amount of indebtedness contracted by the City, does not exceed the debt limit of the City. TFA is also authorized to have outstanding Recovery Bonds up to $\$ 2.5$ billion to fund the City's costs related to, and arising from, events on September 11, 2001 at the World Trade Center, notwithstanding the limits discussed above. Further, legislation enacted in April 2006 enables TFA to have outstanding up to $\$ 9.4$ billion of Building Aid Revenue Bonds (BARBs), notes, or other obligations for purposes of funding costs of the fiveyear educational facilities capital plan for the City school system and TFA's administrative expenditures.

TFA is administered by five directors, who serve ex-officio, consisting of the Director of Management and Budget of the City, the Comptroller of the City, the Speaker of the City Council, the Commissioner of Finance of the City, and the Commissioner of the Department of Design and Construction of the City. TFA does not have any employees; its affairs are administered by employees of the City and of another component unit of the City, for which TFA pays a management fee and overhead, based on its allocated share of personnel and overhead costs.

TSASC, Inc. (TSASC). TSASC is a special-purpose, local development corporation organized under the Not-for-Profit Corporation Law of the State. TSASC was created as a financing entity to issue and sell bonds and notes to fund a portion of the City's capital program.

Pursuant to a purchase and sale agreement with the City, the City sold to TSASC all of its future rights, titles, and interest in the tobacco settlement revenues (TSRs) under the Master Settlement Agreement and the Decree and Final Judgment. The proportion of these revenues pledged to debt service was $37.40 \%$.

TSASC is a non-stock, membership corporation governed by a Board of Directors, a majority of whom are officials of the City. TSASC does not have any employees; its affairs are administered by employees of the City and of another component unit of the City, for which TSASC pays a management fee, rent, and overhead based on its allocated share of personnel and overhead costs.

New York City Educational Construction Fund (ECF). ECF is a public benefit corporation established to construct mixed-use real estate projects which feature new school facilities, thereby increasing the number of seats for the New York City Department of Education. The ECF builds combined-occupancy structures on City-owned land conveyed to the ECF by the City. The City is required to make rental payments on the school portions of the ECF projects sufficient to make debt service payments as they come due on ECF Bonds, less the revenue received by the ECF from the non-school portions of the ECF projects.

The ECF has a board of trustees consisting of the Chancellor of the City's Department of Education and two trustees appointed by the Mayor.

New York City School Construction Authority (SCA). SCA is a public benefit corporation created by the State Legislature in 1988. SCA's responsibilities, as defined in the enabling legislation, are the design, construction, reconstruction, improvement, rehabilitation, and repair of the City's public schools. SCA is governed by a three-member Board of Trustees, all of whom are appointed by the Mayor, including the City's Department of Education (DOE) Chancellor, who serves as the Chairperson.

SCA's operations are funded by appropriations made by the City, which are based on a five-year capital plan developed by the DOE. The City's appropriation for the five-year capital plan for the fiscal years 2015 through 2019 is $\$ 15.25$ billion.

SCA also carries out certain projects funded by the City Council and Borough Presidents, pursuant to the City Charter.
As SCA is a pass-through entity, in existence for the sole purpose of constructing capital projects, all costs incurred are capitalized into construction-in-progress. Upon completion of projects, the assets are transferred to DOE.

Fiscal Year 2005 Securitization Corporation (FSC). FSC was established in 2004 as a special-purpose, bankruptcy-remote, local development corporation organized under the Not-for-Profit Corporation Law of the State. FSC was formed for the purpose of issuing bonds to acquire securities held in an escrow account securing City General Obligation Bonds of the City. The securities, which are held in a trust by the trustee for FSC are scheduled to generate sufficient cash flow to fund the debt service and operational expenditures of FSC for the life of FSC's bonds.

FSC does not have any employees; its affairs are administered by employees of the City and of another component unit of the City, for which FSC pays a management fee and overhead based on its allocated share of personnel and overhead costs. FSC is governed by a Board of Directors elected by its three members, all of whom are officials of the City.

Sales Tax Asset Receivable Corporation (STAR). STAR is a special-purpose, bankruptcy-remote, local development corporation organized under the Not-for-Profit Corporation Law of the State.

Section 3238-a of the New York State Public Authorities Law, which terminates on July 1, 2034, requires that $\$ 170$ million be paid annually by the State Local Government Assistance Corporation to the City or its assignee. STAR bonds, backed by these revenues, retired all outstanding bonds of the Municipal Assistance Corporation for The City of New York (MAC). Retirement of the outstanding MAC bonds resulted in the receipt by the City of tax revenues that would otherwise have been paid to MAC for the payment of debt service on MAC's bonds.

STAR does not have any employees; its affairs are administered by employees of the City and of another component unit of the City, for which STAR pays a management and overhead fee based on its allocated share of personnel and overhead costs. STAR is governed by a Board of Directors elected by its six members, all of whom are officials of the City.

Hudson Yards Development Corporation (HYDC). HYDC, a local development corporation organized by the City under the Not-for-Profit Corporation Law of the State of New York, was created to manage and implement the development and redevelopment activities (Project) of the Hudson Yards area on the West Side of Manhattan (Project Area). HYDC is governed by a Board of thirteen Directors, a majority of whom serve as officials or employees of The City at the pleasure of the Mayor. HYDC works with various City and State agencies and authorities, and with private developers, on the design, construction, and implementation of the various elements of the Project, and to further private development and redevelopment of the Project Area.

Hudson Yards Infrastructure Corporation (HYIC). HYIC, a local development corporation organized by the City under the Not-for-Profit Corporation Law of the State of New York, was created for the purpose of financing certain infrastructure improvements in the Hudson Yards area on the West Side of Manhattan (Project). HYIC does not engage in development directly, but finances development spearheaded by HYDC and carried out by existing public entities. HYIC fulfills its purpose through the issuance of bonds to finance the Project, including the operations of HYDC, and the collection of revenues, including payments in lieu of taxes and district improvement bonuses from private developers and appropriations from the City, to support its operations and pay principal and interest on its outstanding bonds. HYIC is governed by a Board of Directors elected by its five Members, all of whom are officials of the City.

HYIC does not have any employees; its affairs are administered by employees of the City and of another component unit of the City, for which HYIC pays a management fee and overhead based on its allocated share of personnel and overhead costs.

NYC Technology Development Corporation (TDC). TDC is a type C not-for-profit corporation organized under the Not-for-Profit Corporation Law of the State of New York. TDC began operations on January 1, 2013. TDC receives quarterly payments from the City that cover its projected expenses for the forthcoming quarter and those contractual payments are TDC's sole source of revenue.

TDC was incorporated for the purpose of enhancing the City's ability to effectively manage and deploy information technology (IT) projects. TDC is governed by a Board of Directors appointed by the Mayor. The Board may have up to seven members and is required to have a minimum of three members.

TDC's sole source of income is its contract with the City, which was registered on December 24, 2012, and extended to fiscal years 2016 and 2017. However, the City decided not to renew TDC's contract for the periods thereafter, which resulted in TDC ceasing its operations on June 30, 2017. As of that date, TDC has no assets or liabilities.

New York City School Support Services (NYCSSS). NYCSSS is a Type C not-for-profit corporation organized under the Not-for-Profit Corporation Law of the State of New York. NYCSSS was incorporated for the purpose of providing staffing of custodial helpers for the DOE. NYCSSS' contract with the City was registered on April 28, 2016. Pursuant to this contract, NYCSSS receives monthly payments that cover its projected expenses for the forthcoming month and these contractual payments are NYCSSS' sole source of revenue. NYCSSS is governed by a Board of Directors consisting of five members, two of whom serve ex-officio.

As a result of an analysis performed by the City of GASB 14, The Financial Reporting Entity, as amended, it was determined that NYCSSS met the criteria of a component unit of the City because the City is financially accountable for NYCSSS and therefore, NYCSSS is blended into the financial statements of the City because NYCSSS provides services entirely to the City.

## Business-type Activities

WTC Captive Insurance Company, Inc. (WTC Captive). WTC Captive is a not-for-profit corporation incorporated under the Not-for-Profit Corporation Law of the State of New York in 2004 in response to the events of September 11, 2001. WTC Captive was funded with $\$ 999.9$ million in funds by the Federal Emergency Management Agency (FEMA) and used this funding to support a liability insurance contract (Contract) that provides specified coverage (including general liability, environmental liability, professional liability, and marine liability) against certain third-party claims made against the City and approximately 145 contractors and subcontractors working on the City's FEMA-funded debris removal project. Coverage is provided on both an excess of loss and first dollar basis, depending on the line of coverage. WTC Captive uses deposit accounting, which is applicable when no insurance risk is transferred in an insurance contract. Additionally, as all of WTC Captive's resources must be used to satisfy obligations under the Contract or returned, it reports only changes to its liabilities and no net position. See also Judgements and Claims in Note D5. WTC Captive is governed by a five-member Board of Directors appointed by the Mayor and includes a contractor representative.

Brooklyn Bridge Park Corporation (BBPC). BBPC is a not-for-profit corporation incorporated under the Not-for-Profit Corporation Law of the State of New York in 2010. BBPC was formed for the purpose of lessening the burdens of government by further developing and enhancing the economic vitality of the Brooklyn waterfront through the development, operation, and maintenance of a renovated waterfront area. BBPC is responsible for the planning, construction, maintenance, and operation of Brooklyn Bridge Park, an 85 -acre sustainable waterfront park, stretching 1.3 miles along Brooklyn's East River shoreline. The majority of BBPC's funding comes from a limited number of revenue-generating development sites within the project's footprint. BBPC is governed by a 17-member Board of Directors appointed by the Mayor, the Governor of New York State, and local elected officials.

Governors Island Corporation, doing business as The Trust for Governors Island (TGI), is a not-for-profit corporation incorporated under the Not-for-Profit Corporation Law of the State of New York in 2010. TGI was formed for the purpose of lessening the burdens of government by providing the planning, preservation, redevelopment, and ongoing operations and maintenance of approximately 150 acres of Governors Island plus surrounding lands underwater. TGI receives funding from the City, and previously from the State of New York. TGI is governed by a 13-member Board of Directors appointed by the Mayor and nominated by the Mayor, the Governor of the State of New York, and local officials.

New York City Tax Lien Trusts (NYCTLTs). The NYCTLTs are Delaware statutory trusts, which were created to acquire certain tax liens from the City in exchange for the proceeds from bonds issued by the NYCTLTs, net of reserves funded by the bond proceeds and bond issuance costs. The City is the sole beneficiary to the NYCTLTs and is entitled to receive distributions from the NYCTLTs after payments to the bondholders and certain reserve requirements have been satisfied. The NYCTLTs do not have any employees. The NYCTLTs' affairs are administered by the owner trustee, its program manager, tax lien servicer, paying agent, and investment custodian.

The NYCTLTs are:

- NYCTLT 1998-2
- NYCTLT 2014-A
- NYCTLT 2015-A
- NYCTLT 2016-A
- NYCTLT 2017-A


## Discretely Presented Component Units

Component units that do not meet the criteria for blending are presented discretely, separate from the financial data of the City. The component units' column in the government-wide financial statements includes the financial data of these entities, which are reported in a separate column to emphasize that they are legally separate from the City. They include the following:

New York City Health and Hospitals Corporation (HHC). HHC, a public benefit corporation, assumed responsibility for the operation of the City's municipal hospital system in 1970. HHC provides a full continuum of care, including primary and specialty care, inpatient acute, outpatient, long-term care, and home health services.

HHC's financial statements include the accounts of HHC and its blended component units, HHC Insurance Company, Inc., HHC Capital Corporation, HHC Physicians Purchasing Group, Inc., HHC Risk Services Corporation, HHC ACO Inc. and HHC Assistance Corporation. HHC's Financial Statements also include MetroPlus, a discretely presented component unit of HHC.

HHC mainly provides, on behalf of the City, comprehensive medical and mental health services to City residents regardless of ability to pay. Funds appropriated from the City are direct or indirect payments made by the City on behalf of HHC for patient care rendered to prisoners, uniformed City employees, and various discretely-funded facility-specific programs; for interest on City General Obligation debt which funded HHC capital acquisitions; for funding for collective bargaining agreements; and for settlements of claims for medical malpractice, negligence, other torts, and alleged breach of contracts and payments by the City. Reimbursement by HHC is negotiated annually with the City.
HHC is governed by a Board of Directors consisting of 16 members, five of whom are ex-officio members by virtue of their positions as heads of certain City agencies, appointed by the Mayor; five appointed solely by the Mayor; five appointed by the Mayor upon their designation by the City Council; and the Corporation's President and the Chief Executive Officer, who is appointed by the other directors and serves ex-officio.

New York City Housing Development Corporation (HDC). HDC, a corporate governmental agency constituting a public benefit corporation of the State of New York, was established in 1971 to encourage the investment of private capital through low-interest
mortgage loans in order to increase the supply of safe and sanitary dwelling accommodations for families and persons whose need for housing accommodations cannot be provided by unassisted private enterprise. To accomplish its objectives, HDC is empowered to finance housing through new construction or rehabilitation and to provide permanent financing for multi-family residential housing. HDC finances significant amounts of its activities through the issuance of bonds, notes and debt obligations. The bonds, notes and debt obligations of HDC are not debts of either the State or the City. The combined financial statements include: (i) the accounts of HDC, and (ii) two active, blended component units: the New York City Housing Assistance Corporation and the New York City Residential Mortgage Insurance Corporation. HDC also includes the Housing New York Corporation, which became an inactive subsidiary of HDC on November 3, 2003 and is not expected to be dissolved, and the NYC HDC Real Estate Owned Corporation, a blended component of HDC that has not been active in recent years.

HDC is governed by a board consisting of the Commissioner of Housing Preservation and Development, the Commissioner of Finance of the City, the Director of Management and Budget of the City, and four public members, two appointed by the Mayor and two appointed by the Governor of the State.

New York City Housing Authority (HA). HA is a public benefit corporation created in 1934 under the New York State Public Housing Law. HA develops, constructs, manages, and maintains affordable housing for eligible low-income families in the City. HA also maintains a leased housing program, which provides housing assistance payments to families.

Substantial operating losses result from the essential services that HA provides exceeding revenues. To meet the funding requirements of these operating losses, HA receives subsidies from: (i) the Federal government, primarily the U.S. Department of Housing and Urban Development, in the form of annual grants for operating assistance, debt service payments, contributions for capital, and reimbursement of expenditures incurred for certain Federal housing programs; (ii) New York State in the form of debt service and capital payments; and (iii) the City in the form of debt service and capital payments. Subsidies are established through budgetary procedures, which establish amounts to be funded by the grantor agencies.
The HA Board is comprised of seven members appointed by the Mayor, including three HA resident members. The Chair of the Board is the Chief Executive Officer of HA and is responsible for the supervision of the business and affairs of HA.

New York City Industrial Development Agency (IDA). IDA is a public benefit corporation established in 1974 to actively promote, retain, attract, encourage, and develop an economically-sound commerce and industry base to prevent unemployment and economic deterioration in the City. Under its programs, IDA may provide one or more of the following tax benefits: exemption from mortgage recording tax; payments in lieu of real property taxes (PILOTs) that are less than full taxes; and exemption from City and State sales and use taxes as applied to construction materials and machinery and equipment. IDA is governed by a Board of Directors, which establishes official policies and reviews and approves requests for financial assistance. Its membership is prescribed by statute and includes a public official and Mayoral appointees.

New York City Economic Development Corporation (EDC). EDC was organized under the Not-for-Profit Corporation Law of the State of New York. EDC's primary activities consist of rendering a variety of services and administering certain economic development programs on behalf of the City relating to the attraction, retention and expansion of commerce in the City. These programs and services include encouragement of construction, acquisition, rehabilitation and improvement of commercial and industrial enterprises within the City and the provision of grants to qualifying business enterprises as a means of helping to create and retain employment therein.

EDC is governed by a Board of Directors, who are also the members of the corporation. The 27 members are appointed by the Mayor, including appointments upon nomination by each Borough President of the City, the Speaker of the City Council, and one in consultation with the Partnership for New York City, Inc.

New York City Business Assistance Corporation (NYBAC). NYBAC is a non-profit organization incorporated pursuant to section 1411 of the Not-for-Profit Corporation Law of the State of New York in December of 1988. NYCBAC was created for the purpose of relieving and reducing unemployment; promoting and providing for additional and maximum employment in New York City; encouraging the development and/or retention of business in the City; instructing or training individuals to improve or develop their capabilities for jobs in business; carrying on scientific research for the purpose of aiding the City by attracting new business or by encouraging economic development; lessening the burdens of government; and acting in the public interest, including, but not limited to, promoting the general welfare of the people of the City.

NYCBAC is governed by a Board of Directors consisting of five directors. NYBAC members elect directors who are employees of the City's Office for Economic Development, who serve ex-officio.

Brooklyn Navy Yard Development Corporation (BNYDC). BNYDC was organized in 1966 as a not-for-profit corporation according to the Not-for-Profit Corporation Law of the State of New York. In 1971, BNYDC leased the Brooklyn Navy Yard from the City for the purpose of rehabilitating it and attracting new businesses and industry to the area. That lease was amended, restated and the term extended by a lease commencing July 1, 2012, for a period of 49 years with five ten-year extension periods. The members of the Board of Directors serve at the pleasure of the Mayor.

New York City Water and Sewer System (the System). The System provides water supply, treatment, and distribution and sewage collection, treatment, and disposal for the City and began operations in July, 1985. The System is a joint operation consisting of two legally-separate and independent entities. The New York City Municipal Water Finance Authority (Water Authority) is a public benefit corporation created in accordance with the New York City Municipal Water Finance Act in 1984. The New York City Water Board (Water Board) was created by Chapter 515 of the laws of 1984 of the State of New York. The Water Authority issues debt to finance the cost of capital improvements to the system. The Water Board leases the System from the City and fixes and collects rates, fees, rents, and other charges for the use of, or for services furnished, rendered, or made available by, the System to produce cash sufficient to pay debt service on the Water Authority's bonds and to put the System on a self-sustaining basis. The physical operation and capital improvements of the System are performed by the City's Department of Environmental Protection subject to contractual agreements with the Water Authority and the Water Board. The Water Authority board has several members, four of whom serve exofficio, including the Commissioner of Environmental Protection, Commissioner of Finance, and Director of Management and Budget of the City; Commissioner of the Department of Environmental Conservation of the State; and three public members, two appointed by the Mayor and one by the Governor. The Water Board has seven members, all appointed by the Mayor.

Build NYC Resource Corporation (Build NYC). Build NYC is a local development corporation organized under the Not-forProfit Corporation Law of the State of New York to assist entities eligible under the Federal tax laws in obtaining tax-exempt bond and taxable bond financing; it began operating in 2011. Build NYC's primary goal is to facilitate access to private activity taxexempt bond financing for eligible entities to acquire, construct, renovate, and/or equip their facilities as well as refinance previous financing transactions. Build NYC is governed by a Board of Directors.

New York City Land Development Corporation (LDC). LDC was formed in 2012, as a local development corporation organized under the Not-for- Profit Corporation Law of the State of New York. LDC assists the City with leasing and selling certain properties for the purpose of economic development. The mission of LDC is to encourage economic growth throughout the five boroughs of the City by acquiring City-owned property and disposing of it to strengthen the City's competitive position and facilitate investments that build capacity, generate economic opportunity, and improve the quality of life. LDC is governed by a five-member Board appointed by the Mayor.

New York City Neighborhood Capital Corporation (NYCNCC). NYCNCC was incorporated in 2014 under Section 402 of the Not-for-Profit Corporation Law of the State of New York. NYCNCC was formed for the following purposes: (i) to make qualified lowincome community investments in the service area of the City; (ii) to operate as a qualified Community Development Entity (CDE) under the Federal New Markets Tax Credit Program; (iii) to form and manage subsidiary limited liability companies which are certified as CDEs to receive equity contributions, which will be utilized primarily to make qualified low-income community investments; and (iv) to engage in all activities consistent with the business of NYCNCC. The NYCNCC is governed by an 11-member Board, consisting of employees of NYCEDC, who are appointed by the Deputy Mayor for Economic Development on behalf of the City.
Brooklyn Public Library (BPL). BPL is a not-for-profit corporation, incorporated by the New York State Legislature in 1902. BPL serves more than 2.5 million Brooklynites with a Central Library, a Business Library, and 58 branch locations. BPL receives significant support through governmental appropriations, primarily from the State and the City. Its continuing operations are dependent upon such government support. The BPL is governed by a Board of Trustees consisting of 38 members, comprised of appointees by the Mayor, the Brooklyn Borough President, and elected trustees. The Mayor, City Comptroller, Speaker of the City Council, and Brooklyn Borough President are ex-officio members.

The Queens Borough Public Library Affiliate (QBPL). QBPL is a not-for-profit corporation, incorporated by the State Legislature in 1907. QBPL is a free association library and provides free public library service in the Borough of Queens. QBPL receives a substantial amount of support from the City, in addition to support from other governmental entities, and private sources. A significant reduction in the level of support provided by the City may have an effect on QBPL's programs and activities. The operations of QBPL also include its affiliate, Queens Library Foundation, Inc., which supports QBPL. The QBPL is governed by a Board of Trustees consisting of 19 members, comprised of appointees by the Mayor and Queens Borough President and elected trustees. The Mayor, City Comptroller, Speaker of the City Council, and Brooklyn Borough President are ex-officio members.

## 2. Basis of Presentation

Government-Wide Statements: The government-wide financial statements (the Statement of Net Position and the Statement of Activities) display information about the City and its component units. These statements include the financial activities of the overall government except for fiduciary activities. Eliminations of internal activity have been made in these statements. The City is reported separately from certain legally separate component units, for which the City is financially accountable. All of the activities of the City are either governmental or business-type activities.

The Statement of Activities presents a comparison between program expenses, which include allocated indirect expenses, and program revenues for each function of the City's governmental activities. Direct expenses are those that are clearly identifiable with a specific function. Program revenues include: (i) charges for services such as rental revenue from operating leases on markets, ports, and terminals and (ii) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or program. Taxes and other revenues, not properly included among program revenues, are reported as general revenues.

Fund Financial Statements: The fund financial statements provide information about the City's funds, including blended component units. The emphasis of fund financial statements is on major governmental funds, each displayed in a separate column. All remaining governmental funds are aggregated and reported as nonmajor funds.

The City uses funds to report on its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities. A fund is a separate accounting entity with a self-balancing set of accounts.

The City's funds are classified into three categories: governmental, proprietary and fiduciary; each category, in turn, is divided into separate "fund types."

Governmental Funds
The City reports the following governmental funds:
General Fund. This is the general operating fund of the City. Substantially all tax revenues, Federal and State aid (except aid for capital projects), and other operating revenues are accounted for in the General Fund. This fund also accounts for expenditures and transfers as appropriated in the expenditures budget, which provides for the City's day-to-day operations, including transfers to Debt Service Funds for payment of long-term liabilities. The fund balance in the General Fund is reported as nonspendable.

Capital Projects Fund. This fund is used to account for and report financial resources that are restricted, committed, or assigned to expenditures for capital outlays, including the acquisition or construction of capital facilities and other capital assets. Capital Projects Funds exclude capital-related outflows financed by component unit proprietary funds or for assets that will be held in trust for individuals, private organizations, or other governments. Resources of the Capital Projects Fund are derived principally from proceeds of City and TFA bond issues, payments from the Water Authority, and from Federal, State, and other aid.

General Debt Service Fund. This fund is used to account for and report financial resources that are restricted, committed, or assigned to expenditures for principal and interest. This fund, into which payments of real estate taxes and other revenues are deposited in advance of debt service payment dates, is required by State legislation and is administered and maintained by the State Comptroller. Debt service on all City notes and bonds is paid from this fund.

Nonmajor Governmental Funds. The City reports the following blended component units within the Nonmajor Governmental Funds: TFA, TSASC, ECF, SCA, FSC, STAR, HYDC, HYIC, TDC and NYCSSS. If a component unit is blended, the governmental fund types of the component unit are blended with those of the City by including them in the appropriate combining statements of the City. Although the City's General Fund is usually the main operating fund of the reporting entity, the General Fund of a blended component is reported as a Special Revenue Fund. The City does not have other Special Revenue Funds.

## Proprietary Funds

Proprietary funds focus on the determination of operating income, changes in net position, financial position and cash flows. There are two types of proprietary funds, enterprise funds and internal service funds. Enterprise funds are used to report an activity for which a fee is charged to external users for goods or services. The City reports the following blended component units as enterprise funds: BBPC, TGI, WTC Captive and the NYCTLT's. The City does not have any internal service funds.

## Fiduciary Funds

The fiduciary funds are used to account for assets and activities when a governmental unit is functioning either as a trustee or an agent for another party. The City's fiduciary funds are divided into two separate fund types: Pension and Other Employee Benefit Trust Funds and Agency Funds.

The Pension and Other Employee Benefit Trust Funds account for the operations of:

- Pension Trusts
- New York City Employees' Retirement System (NYCERS)
- Teachers' Retirement System of The City of New York (TRS)
- New York City Board of Education Retirement System (BERS)
- New York City Police Pension Funds (POLICE)
- New York City Fire Pension Funds (FIRE)
- Deferred Compensation Plans (DCP)
- The New York City Other Postemployment Benefits Plan (the OPEB Plan)

Each of the pension trusts report all jointly administered plans including primary pension (QPPs), and variable supplements funds (VSFs) and/or tax deferred annuity plans (TDAs), as appropriate. While the VSFs are included with QPPs for financial reporting purposes, in accordance with the Administrative Code of The City of New York (ACNY), VSFs are not pension funds or retirement systems. Instead, they provide scheduled supplemental payments, in accordance with applicable statutory provisions. Although a portion of these payments are guaranteed by the City, the State has the right and power to amend, modify, or repeal VSFs and the payments they provide. However, any assets transferred to the VSFs are held in trust solely for the benefit of its members. More information is available in note E. 5 .

The Deferred Compensation Plans report the various jointly administered Deferred Compensation Plans of The City of New York and related agencies and Instrumentalities and the New York City Employee Individual Retirement Account (NYCEIRA).

Note: These fiduciary funds publish separate annual financial statements, which are available at: Office of the Comptroller, Bureau of Accountancy-Room 200 South, 1 Centre Street, New York, New York 10007, or at www.comptroller.nyc.gov.
These funds use the accrual basis of accounting and a measurement focus on the periodic determination of additions, deductions, and net position restricted for benefits.

The Agency Funds account for miscellaneous assets held by the City for other funds, governmental units, and individuals. School fundraiser monies for scholarships, federal asset forfeiture for investigative purposes, and cash bail for use by the surety/assignee, are the major miscellaneous assets accounted for in these funds. The Agency Funds are custodial in nature and do not involve measurement of results of operations.

## Discretely Presented Component Units

The discretely presented major component units consist of HHC, HDC, HA, EDC, and the System. The discretely presented nonmajor components units are IDA, BRAC, BNYDC, NYBAC, Build NYC, LDC, NYCNCC, QBPL, and BPL. Their activities are accounted for in a manner similar to private business enterprises, in which the focus is on the periodic determination of revenues, expenses, and net income.

## New Accounting Standards Adopted

In Fiscal Year 2017, the City adopted four new statements of financial accounting standards issued by the Governmental Accounting Standards Board:

- Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans.
- Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.
- Statement No. 80, Blending Requirement for Certain Component Units-an amendment of GASB Statement No. 14.
- Statement No. 82, Pension Issues-an amendment of GASB Statements No. 67, No. 68 and No. 73.

Statement No. 74 establishes accounting and financial reporting standards, but not funding or budgetary standards, for state and local governmental other postemployment benefit ("OPEB") plans. The statement replaces Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, and No. 57, OPEB Measurement by Agent Employers and Agent Multiple-Employer Plans.

The adoption of Statement No. 74 had no impact on the City's governmental fund financial statements. The adoption also resulted in no changes to the presentation of the financial statements of the City's Pension and Other Employee Benefit Trust Funds. In the separate annual financial statements of these funds, certain changes in Note disclosures and Required Supplementary Information (RSI) were incorporated to comply with Statement No. 74.

Statement No. 75 establishes standards of accounting and financial reporting, but not funding or budgetary standards, for OPEB that is provided to the employees of state and local governmental employers through OPEB Plans that are administered through trusts or equivalent arrangements meeting certain criteria. This statement also establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/ expenditure. It replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended, and No. 57, OPEB Measurement by Agent Employers and Agent Multiple-Employer Plans.

For defined benefit OPEB plans the statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information are addressed.

The adoption of Statement No. 75 had no impact on the City's governmental fund financial statements. However, the adoption has resulted in the restatement of the City's Fiscal Year 2016 government-wide financial statements to reflect the reporting of net OPEB liabilities, deferred inflows of resources, deferred outflows of resources and the recognition of OPEB expense in accordance with the provisions of the Statement. Refer to Note E. 4 for more information regarding the City's OPEB.

Statement No. 80 amends the blending requirements for the financial statement presentation of component units of all state and local governments by providing an additional criterion. A component unit should be included in the reporting entity financial statements using the blending method if the component unit is organized as a not-for-profit corporations in which the primary government is the sole corporate member as identified in the component unit's articles of incorporation or bylaws.

As a result of The City's implementation of Statement No. 80, BBP, TGI and WTC Captive are blended into the City's financial statements as business-type entities. In the past these component units were presented discretely. Also in the course of implementing Statement No. 80, NYCTLT's activities are now presented as business-type activities rather than as blended within the Nonmajor Governmental Fund.

Consequently, the Governmental Funds fund balance for fiscal year 2016 decreased from $\$ 3.67$ million to $\$ 3.54$ million due to the reclassification of NYCTLT's. The change in governmental activities net position outlined below, incorporates the restatement of fund balance.

|  | $2016$ Original | GASB: 75 | GASB: 80 | $\begin{gathered} 2016 \\ \text { Restated } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Change in net position | \$ (5,089,385) | $(827,483)$ | (282) | \$ (5,917, 150 ) |
| Net position (deficit)-beginning | $(183,081,913)$ | - | - | $(183,081,913)$ |
| Restatement of Beginning net Position | - | (4,272,352) | $(253,501)$ | $(4,525,853)$ |
| Net position (deficit)-ending | \$(188,171,298) |  |  | \$(193,524,916) |

Statement No. 82 addresses certain issues raised with respect to GASB Statement No. 67, Financial Reporting for Pension Plansan amendment of GASB Statement No. 25; GASB No. 68, Accounting and Financial Reporting for Pensions-an amendment of GASB Statement No. 27 and GASB Statement No. 73 Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68. This Statement specifically addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. There was no material impact on the City's financial statements as a result of the implementation of Statement No. 82.

## Pronouncements Issued But Not Yet Effective

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

| GASB <br> Statement No. | GASB Accounting Standard |
| :---: | :--- | :---: | :---: |$\quad$| Effective |
| :---: |
| Fiscal Year |

## 3. Basis of Accounting

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting in which revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place. Nonexchange transactions include: sales and income taxes, property taxes, grants, entitlements and donations, and are recorded on the accrual basis of accounting. Revenues from sales and income taxes are recognized when the underlying exchange transaction takes place.

Revenues from property tax are recognized in the fiscal year for which the taxes are levied. Revenues from grants, entitlements, and donations are recognized in the fiscal year in which all eligibility requirements have been satisfied.

Governmental funds use the flow of current financial resources measurement focus. This focus is on the determination of and changes in financial position, and generally only current financial resources and current liabilities are included on the balance sheet although certain receivable amounts may not be currently available. These funds use the modified accrual basis of accounting, whereby revenues are recognized in the accounting period in which they become both measurable and available to finance expenditures of the fiscal period. Revenues from taxes are generally considered available if received within two months after the fiscal year-end. Revenues from categorical and other grants are generally considered available if expected to be received within one year after the fiscal year-end. Expenditures are recorded when the related liability is incurred and payment is due, except for principal and interest on long-term debt, pensions, post employment benefits other than pensions and certain other estimated liabilities, which are recorded only when payment is due.

The measurement focus of the Pension and Other Employee Benefit Trust Funds and Other Trust Funds is on the flow of economic resources. This focus emphasizes the determination of and changes in net position. With this measurement focus, all assets and liabilities associated with the operation of these funds are included on the Statement of Fiduciary Net Position. These funds use the accrual basis of accounting whereby revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred.

The Agency Funds use the accrual basis of accounting and do not measure the results of operations.

## 4. Encumbrances

Encumbrance accounting, under which purchase orders, contracts, and other commitments for expenditures are recorded to reflect the use of the applicable spending appropriations, is used by the General Fund during the fiscal year to control expenditures. The cost of those goods received and services rendered on or before June 30 are recognized as expenditures. Encumbrances that do not result in expenditures by year-end lapse.

## 5. Cash and Investments

The City considers all highly liquid investments (including restricted assets), with a maturity of three months or less when purchased, to be cash equivalents. Cash equivalents are carried at amortized cost which approximates fair value.

The annual average collected bank balances maintained during Fiscal Years 2017 and 2016 were approximately $\$ 1.85$ billion and $\$ 1.59$ billion, respectively.

Investments are reported in the balance sheet at fair value. Investment income, including changes in the fair value of investments, is reported in operations.

Investments in fixed income securities are recorded at fair value. Securities purchased pursuant to agreements to resell are carried at the contract price, exclusive of interest, at which the securities will be resold.

Investments of the Pension and Other Employee Benefit Trust Funds and Other Trust Funds are reported at fair value. Investments are stated at the last reported sales price on a national securities exchange or as priced by a nationally recognized securities pricing service as on the last business day of the fiscal year, except for securities held as alternative investments where fair value is determined by the general partners or other experts of the partnerships.

A description of the City's fiduciary funds securities lending activities in Fiscal Years 2017 and 2016 is included in Deposits and Investments (see Note D.1).

## 6. Inventories

Inventories on hand at June 30, 2017 and 2016, estimated based on average cost at $\$ 465$ million and $\$ 402$ million, respectively, have been reported on the government-wide Statement of Net Position. Inventories are recorded as expenditures in governmental funds at the time of purchase, and accordingly have not been reported on the governmental funds balance sheet.

## 7. Restricted Cash and Investments

Certain proceeds of the City and component unit bonds, as well as certain resources set aside for payments to bond holders, are classified as restricted cash and investments on the balance sheet, because their use is limited by applicable bond covenants.

## 8. Capital Assets

Capital assets include all land, buildings, equipment (including software), and other elements of the City's infrastructure having an initial minimum useful life of five years, having a cost of more than $\$ 35$ thousand, and having been appropriated in the Capital Budget (see Note C.1). Capital assets, which are used for general governmental purposes and are not available for expenditure, are accounted for and reported in the government-wide financial statements. Infrastructure elements include the roads, bridges, curbs and gutters, streets and sidewalks, park land and improvements, piers, bulkheads and tunnels. The capital assets of the water distribution and sewage collection system are recorded in the System component unit financial statements under a lease agreement between the City and the Water Board.

Capital assets are generally stated at historical cost, or at estimated historical cost, based on appraisals or on other acceptable methods, when historical cost is not available. Donated capital assets are reported at their acquisition value. 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 (see Note D.3).

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 generally 25 to 50 years for new construction, 10 to 25 for betterments and/or reconstruction, 5 to 15 years for equipment (including software), and 15 to 40 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.

## 9. Vacation and Sick Leave

Earned vacation and sick leave is recorded as an expenditure in the period when it is payable from current financial resources in the fund financial statements. The estimated value of vacation leave earned by employees, which may be used in subsequent years, and earned vacation and sick leave to be paid upon termination or retirement from future resources, is recorded as a liability in the government-wide financial statements.

## 10. Judgments and Claims

The City is generally uninsured with respect to risks including, but not limited to, property damage, personal injury, and workers' compensation. However, as required by the Stafford Act, the City insures certain assets, which have been restored with grant funds from the Federal Emergency Management Agency, through the National Flood Insurance Program. In the fund financial statements,
expenditures for judgments and claims (other than workers' compensation and condemnation proceedings) are recorded on the basis of settlements reached or judgments entered within the current fiscal year. Expenditures for workers' compensation are recorded when paid. Settlements relating to condemnation proceedings are reported when the liability is estimable. In the government-wide financial statements, the estimated liability for all judgments and claims incurred but not yet expended is recorded as a noncurrent liability.

## 11. Long-Term Liabilities

For long-term liabilities, only that portion expected to be financed from expendable available financial resources is reported as a fund liability of a governmental fund. All long-term liabilities are reported in the government-wide Statement of Net Position. Long-term liabilities expected to be financed from discretely presented component units' operations are accounted for in those component units' financial statements.

## 12. Derivative Instruments

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2017, classified by type, and the changes in fair value of such derivative instruments for the fiscal year then ended, as reported in the 2017 financial statements are as follows:

## Governmental Activities

| Item | Changes in Fair Value from June 30, 2016 |  | Fair Value at June 30, 2017 | Notional |
| :---: | :---: | :---: | :---: | :---: |
|  | Classification | Amount | Classification Amount |  |
|  |  |  | (in thousands) |  |
| Cashflow Hedges: |  |  |  |  |
| H Pay-Fixed interest rate swap | Deferred Outflow | \$17,464 | Debt $\quad \$(38,730)$ | \$250,000 |
| L Pay-Fixed interest rate swap | Deferred Outflow | 331 | Debt (29) | 18,040 |
| Investment derivative instruments: |  |  |  |  |
| A Pay-Fixed interest rate swap | Investment Revenue | 6,478 | Investment (7,751) | 156,103 |
| B Pay-Fixed interest rate swap | Investment Revenue | 2,159 | Investment ( 2,584 ) | 52,034 |
| C Pay-Fixed interest rate swap | Investment Revenue | 2,159 | Investment ( 2,584 ) | 52,034 |
| D Pay-Fixed interest rate swap | Investment Revenue | 2,160 | Investment (2,583) | 52,034 |
| E Pay-Fixed interest rate swap | Investment Revenue | 5,440 | Investment (10,637) | 100,600 |
| H Pay-Fixed interest rate swap | Investment Revenue | 6,986 | Investment (15,492) | 100,000 |
| K Basis Swap | Investment Revenue | 192 | Investment (7,527) | 500,000 |

On August 4, 2016 the City terminated Investment Derivative G. The total Notional Amount Terminated was $\$ 364.10$ million and the City received a $\$ 2.41$ million termination payment from the swap counterparty.

On August 1, 2016, $\$ 14.25$ million of Hedging Derivative L matured as scheduled.
On October 5, 2016 the City novated Investment Derivatives D and E from UBS AG to U.S. Bank, N.A.
On August 1, 2017 \$18.04 million of Hedging Derivative L matured as scheduled.
Fair Value for the derivate instruments is the estimated exit price that assumes a transaction takes place in the City's principal market, or in the City's most advantageous market in the absence of a principal market. These inputs include the mid-market valuation and then incorporates the credit risk of either the City or its counterparty and the bid/offer spread that would be charged to the City in order to transact. The mid-market values of the derivate instruments were estimated using the income approach. 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 date. The derivate instruments are classified in Level 2 as their valuation relies primarily on observable inputs.

## Hedging Derivative Instruments

The following table displays the objective and terms of the City's hedging derivative instruments outstanding at June 30, 2017, along with the credit rating of the associated counterparty. Regarding derivative instruments where the counterparty is unrated, the rating provided is that of the counterparty's guarantor.

| Item | Type | Objective | Notional <br> Amount | Effective <br> Date | Maturity Date | Terms | Counterparty Rating |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (in thousands) |  |  |  |  |
| H | Pay-Fixed interest rate swap | Hedge of changes in cash flows on the 2004 Series A bonds | \$250,000 | 7/14/2003 | 8/1/2031 | Pay $2.964 \%$; receive $61.85 \%$ of USD-LIBOR-BBA | Aa2/AA- |
| L | Pay-Fixed interest rate swap | Hedge of changes in cash flows on the 2005 Series J, K, and L Bonds | 18,040 | 3/3/2005 | 8/1/2017 | Pay $4.55 \% / 4.63 \% / 4.71 \%$; receive CPI $+1.50 \%$ for 2015 maturity/CPI $+1.55 \%$ for 2016 maturity/CPI + 1.60\% for 2017 maturity | Aa3/A+ |

## LIBOR: London Interbank Offered Rate Index <br> CPI: Consumer Price Index

## Risks

Credit risk: The City is exposed to credit risk on hedging derivative instruments. To minimize its exposure to loss related to credit risk, it is the City's policy to require counterparty collateral posting provisions in its hedging derivative instruments. These terms require full collateralization of the fair value of hedging derivative instruments (net of the effect of applicable threshold requirements and netting arrangements) should the counterparty's credit rating fall, as follows:

- The counterparty with respect to derivative instrument H is required to post collateral if its credit ratings goes below A2/A. Collateral posted is to be in the form of U.S. Treasury securities held by a third-party custodian. The City has never been required to access collateral.
- The counterparty with respect to derivative instruments $L$ is required to post collateral if it has at least one rating below the double-A category.

It is the City's policy to enter into netting arrangements whenever it has entered into more than one derivative instrument transaction with a counterparty. Under the terms of these arrangements, should one party become insolvent or otherwise default on its obligations, closeout netting provisions permit the non-defaulting party to accelerate and terminate all outstanding transactions and net the transactions' fair values so that a single sum will be owed by, or owed to, the non-defaulting party.

The aggregate fair value of hedging derivative instruments requiring collateralization at June 30, 2017 was $\$(38.76)$ million.
Interest rate risk: The City is exposed to interest rate risk on its swaps. On its pay-fixed, receive-variable interest rate swaps, as LIBOR or the Consumer Price Index decreases, the City's net payment on the swaps increases.

Basis risk: The City is exposed to basis risk on its pay-fixed interest rate swaps, because the variable-rate payments received by the City on these hedging derivative instruments are based on a rate or index other than interest rates the City pays on its hedged variable-rate debt, which is remarketed either daily or weekly. Under the terms of its synthetic fixed rate swap transactions, the City pays a variable rate on its bonds based on the Securities Industry and Financial Markets Association (SIFMA), but receives a variable rate on the swaps based on a percentage of LIBOR.

Tax risk: The City is at risk that a change in Federal tax rates will alter the fundamental relationship between the SIFMA and LIBOR Indices. A reduction in Federal tax rates, for example, will likely increase the City's payment on its underlying variable rate bonds in the synthetic fixed rate transactions and its variable payer rate in the basis swaps.

Termination risk: The City or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. The City is at risk that a counterparty will terminate a swap at a time when the City owes it a termination payment. The City has mitigated this risk by specifying that the counterparty has the right to terminate only as a result of certain events, including: a payment default by the City; other City defaults which remain uncured for 30 days after notice; City bankruptcy; insolvency of the City (or similar events); or a downgrade of the City's credit rating below investment grade (i.e., BBB-/Baa3). If at the time of termination, a hedging derivative instrument is in a liability position, the City would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements, if applicable.

Counterparty risk: The City is at risk that a counterparty will not meet its obligations under the swap. If a counterparty were to default under its agreement when the counterparty would owe a termination payment to the City, the City may have to pay another entity to assume the position of the defaulting counterparty. The City has sought to limit its counterparty risk by contracting only with highly rated entities or requiring guarantees of the counterparty's obligations under the swap documents.

Rollover risk: The City is exposed to rollover risk on hedging derivative instruments that are hedges of debt that mature or may be terminated prior to the maturity of the hedged debt. When these hedging derivative instruments terminate, the City will be reexposed to the risks being hedged by the hedging derivative instrument.

## Contingencies

All of the City's derivative instruments include provisions that require the City to post collateral in the event its credit rating falls below Baa1 (Moody's) or BBB+ (Standard \& Poor's) for derivative instruments A, B, D, E, K, and L, or below Baa3 (Moody's) or BBB- (Standard \& Poor's) for derivative instruments C and H. The collateral posted is to be in the form of cash, U.S. Treasury securities, or specified U.S. Government Agency securities in the amount equal to (when in the form of cash) or greater than (when in the form of securities) the fair value of derivative instruments in liability positions, net of the effect of applicable netting arrangements and applicable thresholds. If the City does not post collateral when required, the derivative instrument may be terminated by the counterparty. At June 30, 2017, the aggregate fair value of all derivative instruments with these collateral posting provisions is $\$(87.92$ million). If the collateral posting requirements had been triggered at June 30, 2017, the City would have been required to post $\$ 12.30$ million in collateral to its counterparties (assuming cash collateral). The collateral requirements would be $\$ 87.88$ million for ratings below Baa3 or BBB- based on posting cash. The City's credit rating as of June 30, 2017 was Aa2 (Moody's) and AA (Standard \& Poor's); therefore, no collateral was posted as of that date.

Swap Collateral Requirements upon a Rating Downgrade of the City ${ }^{(1)}$

| Swap/Counterparty | Fair Value as of June 30, 2017 ${ }^{(2)}$ | Collateral Threshold at Baa2/BBB to Baa3/BBB- ${ }^{(3)}$ | Collateral <br> Amount ${ }^{(4)}$ | Collateral <br> Threshold below Baa3/BBB | Collateral Amount ${ }^{(5)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (in thousands) |  | (in thousands) |  | (in thousands) |
| Bank of New York Mellon | \$ | Infinity | \$ | - | \$ |
| JP Morgan Chase Bank, N.A. | $(15,307)$ | 3,000 | 12,300 | - | 15,300 |
| Merrill Lynch Capital Services, Inc. | $(2,584)$ | 3,000 | - | - | 2,584 |
| US Bank National Association. | $(15,804)$ | Infinity | - | - | 15,800 |
| Wells Fargo Bank, NA | $(54,222)$ | Infinity | - | - | 54,200 |
| Total Fair Value | $\underline{\text { (87,917) }}$ |  | \$12,300 |  | \$87,884 |

(1) All of the City's swap counterparties have agreements that collateral is to be posted by the City if the City were to owe a termination payment and its ratings fall below a certain level. Based on the credit rating level, the amount of collateral required can range from zero to the amount of the counterparty's exposure based on the market value of the swap.
(2) A negative value means the City would owe a termination payment.
(3) A downgrade of the City to either Baa2 (Moody's) or BBB (S\&P) is the highest rating level at which the City would be required to post collateral.
(4) The swap counterparties, other than Merrill Lynch Capital Services Inc., round the collateral amount up or down to the nearest $\$ 100,000$. Merrill Lynch does not round the amount.
(5) Represents the total amount of required collateral for ratings below Baa3/BBB-. The amount of collateral required to be posted would be the amount shown below less any collateral previously posted.

## 13. Real Estate Tax

Real estate tax payments for the Fiscal Year ended June 30, 2017, were due July 1, 2016 and January 1, 2017 except that payments by owners of real property assessed at $\$ 250,000$ or less and cooperatives whose individual units, on average, are valued at $\$ 250,000$ or less, which were due in quarterly installments on the first day of each quarter beginning on July 1.

The adopted levy date for Fiscal Year 2017 taxes was June 14, 2016. The lien date is the date taxes are due.

Real estate tax revenue represents payments received during the year and payments received against the current fiscal year and prior years' levies within the first two months of the following fiscal year reduced by tax refunds (for the fund financial statements). Real estate tax revenues not available are reported as deferred inflows of resources. The government-wide financial statements recognize real estate tax revenue (net of refunds) which are not available to the governmental fund type in the fiscal year for which the taxes are levied. Real estate taxes received or reported as receivables before the period for which the property taxes are levied, or the period when resources are required to be used, or when use is first permitted, are reported as deferred inflows of resources.

The City offered a $0.5 \%$ discount on the full amount of a taxpayer's yearly property tax if the entire amount shown on their bill is paid by the July due date (or grace period due date), a $0.25 \%$ discount on the last three quarters if the taxpayer waits until the October due date to pay the entire amount due, or a $0.125 \%$ discount on the last six months of taxes when the taxpayer pays the balance by the January due date for both Fiscal Years 2017 and 2016. Payment of real estate taxes before July 15, 2017, on properties with an assessed value of $\$ 250,000$ or less and before July 1,2017 , on properties with an assessed value over $\$ 250,000$ received the discount. Collections of these real estate taxes received on or before June 30, 2017 and 2016 were about $\$ 8.7$ billion and $\$ 8.1$ billion, respectively.

The City sold approximately $\$ 98.8$ million of real property tax liens, fully attributable to Fiscal Year 2017, at various dates in Fiscal Year 2017. As in prior years' lien sale agreements, the City will refund the value of liens later determined to be defective, plus interest and a $5 \%$ surcharge. It has been estimated that $\$ 4.3$ million worth of liens sold in Fiscal Year 2017 will require refunding. The estimated refund accrual amount of $\$ 5.0$ million, including the surcharge and interest, resulted in Fiscal Year 2017 net sale proceeds of $\$ 93.8$ million.

The City sold approximately $\$ 82.0$ million of real property tax liens, fully attributable to Fiscal Year 2016, at various dates in Fiscal Year 2016. As in prior years' lien sale agreements, the City will refund the value of liens later determined to be defective, plus interest and a $5 \%$ surcharge. It has been estimated that $\$ 4.0$ million worth of liens sold in Fiscal Year 2016 will require refunding. The estimated refund accrual amount of $\$ 6.0$ million, including the surcharge and interest, resulted in Fiscal Year 2016 net sale proceeds of $\$ 76.0$ million.

In Fiscal Years 2017 and 2016, $\$ 221$ million and $\$ 223$ million respectively, were provided as allowances for uncollectible real estate taxes against the balance of the receivable. Delinquent real estate taxes receivable that are estimated to be collectible but which are not collected in the first two months of the next fiscal year are recorded as deferred inflows of resources in the governmental funds balance sheet but included in general revenues on the government-wide Statement of Activities.

The City is permitted to levy real estate taxes for general operating purposes in an amount up to $2.5 \%$ of the average full value of taxable real estate in the City for the last five years and in unlimited amounts for the payment of principal and interest on longterm City debt. Amounts collected for payment of principal and interest on long-term debt in excess of that required for that purpose in the year of the levy must be applied toward future years' debt service. For the Fiscal Years ended June 30, 2017 and 2016, excess amounts of $\$ 239$ million and $\$ 382$ million, respectively, were transferred to the General Debt Service Fund.

## 14. Other Taxes and Other Revenues

Taxpayer-assessed taxes, such as sales and income taxes, net of refunds, are recognized in the accounting period in which they become susceptible to accrual for the fund financial statements. Assets recorded in the governmental fund financial statements, but the revenue is not available, are reported as deferred inflows of resources. Additionally, the government-wide financial statements recognize sales and income taxes (net of refunds), which are not available to the governmental fund type in the accounting period for which the taxes are assessed.

## 15. Federal, State, and Other Aid

For the government-wide and fund financial statements, categorical aid, net of a provision for estimated disallowances, is reported as receivable when the related eligibility requirements are met. Unrestricted aid is reported as revenue in the fiscal year of entitlement. Resources received before the time requirements are met, but after all other eligibility requirements are met, are reported as deferred inflows of resources.

## 16. Bond Discounts, Premiums and Issuance Costs

In the fund financial statements, bond premiums, discounts and issuance costs are recognized as revenues/expenditures in the period incurred. In the government-wide financial statements, bond premiums and discounts are deferred and amortized over the term of the bonds payable using the straight-line method. Bond premiums and discounts are presented as additions/reductions to the face amount of the bonds payable. Bond issuance costs are recognized as an expense in the period incurred.

## 17. Intra-Entity Activity

Payments from a fund receiving revenue to a fund through which the revenue is to be expended are reported as transfers. Such payments include transfers for debt service and capital construction. In the government-wide financial statements, resource flows between the City and the discretely presented component units are reported as if external transactions.

## 18. Subsidies

The City makes various payments to subsidize a number of organizations which provide services to City residents including but not limited to Art and Cultural institutions. These payments are recorded as expenditures in the fiscal year paid.

## 19. Deferred Outflows and Inflows of Resources

In accordance with Government Accounting Standards Board Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position, the City reports deferred outflows of resources in the Statement of Financial Position in a separate section following Assets. Similarly, the City reports deferred inflows of resources in the Statement of Net Position in a separate section following Liabilities.
The Components of the deferred outflows of resources and deferred inflows of resources are as follows:

|  | FY 2017 |  |  | FY 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary Government | Component units |  | Primary Government | Component units |  |
|  | (in thousands) |  |  |  |  |  |
| Deferred Outflows of Resources |  |  |  |  |  |  |
| Deferred Outflows From Pension Activities | \$ 3,885,847 |  | 260,406 | \$12,814,357 | \$ | 577,146 |
| Deferred Outflows from OPEB activities | 640,932 |  | - | 102,045 |  | - |
| Accumulated decrease in fair value of hedging derivatives | 38,759 |  | 114,075 | 56,554 |  | 176,706 |
| Unamortized deferred bond refunding costs | 532,905 |  | 22,343 | 516,235 |  | 13,969 |
| Other | 100 |  | - | 305 |  | - |
| Total Deferred Outflows of Resources | \$ 5,098,543 |  | 396,824 | \$13,489,496 | \$ | 767,821 |
| Deferred Inflows of Resources: |  |  |  |  |  |  |
| Deferred Inflows from pension activities | \$ 5,386,509 |  | \$ 47,715 | \$ 7,210,537 | \$ | 95,935 |
| Deferred Inflows from OPEB activities | 9,451,365 |  | 694,750 | 102,531 |  | 36,843 |
| Service concession arrangements | 114,880 |  | - | 122,432 |  | - |
| Real estate taxes. | 8,748,771 |  | - | 8,105,167 |  | - |
| Grant advances | 18,124 |  | - | 30,613 |  | - |
| Unamortized deferred refunding costs | - |  | 16,393 | - |  | 16,647 |
| Deferred housing assistance payments | - |  | 83,317 | - |  | - |
| Other | 89,808 |  | - | 59,931 |  | - |
| Total Deferred Inflows of Resources | \$23,809,457 | \$ | 842,175 | \$15,631,211 | \$ | 149,425 |

## 20. Fund Balance

In accordance with Government Accounting Standards Board Statement No. 54, Fund Balance Reporting and Governmental Fund Type Definitions, the classification of Fund Balance is based on the extent to which the City is bound to observe constraints imposed upon the use of the resources in the governmental funds. The classifications are as follows:

Nonspendable-includes fund balance amounts that cannot be spent, either because they are not in spendable form, or because of legal or contractual constraints requiring such amounts to remain intact. As required by the New York State Financial Emergency Act, the City must prepare its budget covering all expenditures, other than capital items, balanced so that the results do not show
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a deficit when reported in accordance with GAAP. Therefore, the General Fund's fund balance must legally remain intact and is classified as nonspendable. Additionally, certain receivable amounts are not anticipated to be collected in the current period.
Restricted-includes fund balance amounts that are constrained for specific purposes when such constraints are externally imposed by creditors, laws or regulations of other governments, or by constitutional provisions or enabling legislation.
Committed-includes fund balance amounts that are constrained for specific purposes when such constraints are internally imposed by the government's formal action at the highest level of decision making authority and do not lapse at year-end. In accordance with the New York City Charter, the City Council is the City's highest level of decision-making authority and can, by legal resolution prior to the end of a fiscal year, approve to establish, modify or rescind a fund balance commitment. For the blended component units reported as Nonmajor Funds, the respective Boards of Directors (Boards) constitute the highest level of decision-making authority. When resolutions are adopted by the Boards that constrain fund balances for a specific purpose, such resources are accounted for and reported as committed for such purpose, unless and until a subsequent resolution altering the commitment is adopted by a Board.

Assigned-includes fund balance amounts that are intended to be used for specific purposes that are neither considered restricted or committed. The City does not have any assigned amounts in its major funds. For the blended component units reported as Nonmajor Funds, the fund balances which are constrained for use for a specific purpose based on the direction of the President of the component unit to direct the movement of such funds are accounted for and reported as assigned for such purpose unless and until a subsequent authorized action by the same, or another duly authorized officer, or by a Board, is taken which removes or changes the assignment.

Unassigned-The City's Capital Projects Fund's deficit is classified as unassigned.
The City uses restricted amounts first when both restricted and unrestricted resources are available. Additionally, the City first uses committed, then assigned, and lastly unassigned resources when expenditures are made.

The City does not have a formal minimum fund balance policy. Below is the detail included in the fund balance classifications for the governmental funds at June 30, 2017 and 2016:

|  | Fiscal Year 2017 |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |


|  | Fiscal Year 2016 |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |

[^13]
## 21. Pensions

In government-wide financial statements, pensions are recognized and disclosed using the accrual basis of accounting (see Notes E. 5 and the RSI section immediately following the notes to financial statements), regardless of the amount recognized as pension expenditures on the modified accrual basis of accounting. The City 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, measured as of the City's fiscal year-end or the City's proportionate share thereof in the case of a cost-sharing multiple-employer plan. Changes in the net pension liability during the period 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 period 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 including retirees, in the respective qualified pension plan and recorded as a component of pension expense beginning with the period in which they arose. 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 period in which the difference occurred.

## 22. Other Postemployment Benefits

Other Postemployment Benefits (OPEB) cost for retiree healthcare and similar, non-pension retiree benefits, is required to be measured and disclosed using the accrual basis of accounting (see Note E.4), regardless of the amount recognized as OPEB expense on the modified accrual basis of accounting. Annual OPEB cost is calculated in accordance with GASB Statement No. 75.

## 23. Estimates and Assumptions

A number of estimates and assumptions relating to the reporting of revenues, expenditures, assets and liabilities, and the disclosure of contingent liabilities were used to prepare these financial statements in conformity with GAAP. Actual results could differ from those estimates.

## B. Reconciliation of Government-Wide and Fund Financial Statements

A summary reconciliation of the difference between total fund balances (deficit) as reflected on the governmental funds balance sheet and total net position (deficit) of governmental activities as shown on the government-wide Statement of Net Position is presented in an accompanying schedule to the governmental funds balance sheet. The asset and liability elements, that comprise the difference are related to the governmental funds using the current financial resources measurement focus and the modified accrual basis of accounting, while the government-wide financial statements use the economic resources measurement focus and the accrual basis of accounting.

Similarly, a summary reconciliation of the difference between net change in fund balances, as reflected on the governmental funds Statement of Revenues, Expenditures, and Changes in Fund Balances, and Change in Net Position of governmental activities, as shown on the government-wide Statement of Activities, is presented in an accompanying schedule to the governmental funds Statement of Revenues, Expenditures, and Changes in Fund Balances. The revenue and expense elements, that comprise the reconciliation difference stem from governmental funds using the current financial resources measurement focus and the modified accrual basis of accounting, while the government-wide financial statements use the economic resources measurement focus and the accrual basis of accounting.

## C. Stewardship, Compliance, and Accountability

## 1. Budgets and Financial Plans

## Budgets

Annual expense budget appropriations, which are prepared on the modified accrual basis, are adopted for the General Fund, and unused appropriations lapse at fiscal year-end. The City uses appropriations in the capital budget to authorize the expenditure of funds for various capital projects. Capital appropriations, unless modified or rescinded, remain in effect until the completion of each project.

The City is required by State Law to adopt and adhere to a budget, on a basis consistent with GAAP, that would not have General Fund expenditures and other financing uses in excess of revenues and other financing sources.

Expenditures made against the expense budget are controlled through the use of quarterly spending allotments and units of appropriation. A unit of appropriation represents a subdivision of an agency's budget and is the level of control at which expenditures may not legally exceed the appropriation. The number of units of appropriation, and the span of operating responsibility which each unit represents, differs from agency to agency depending on the size of the agency and the level of control required. Transfers between units of appropriation and supplementary appropriations may be made by the Mayor, subject to the approval provisions set forth in the City Charter. Supplementary appropriations increased the expense budget by $\$ 3.31$ and $\$ 3.88$ billion subsequent to its original adoption in Fiscal Years 2017 and 2016, respectively.

## Financial Plans

Additionally, the New York State Financial Emergency Act for The City of New York requires the City to operate under a "rolling" Four-Year Financial Plan (Plan). Revenues and expenditures, including transfers, of each year of the Plan are required to be balanced on a basis consistent with GAAP. The Plan is broader in scope than the expense budget; it comprises General Fund revenues and expenditures, Capital Projects Fund revenues and expenditures, and all short and long-term financing.

The expense budget is generally consistent with the first year of the Plan and operations under the expense budget must reflect the aggregate limitations contained in the approved Plan. The City reviews its Plan periodically during the year and, if necessary, makes modifications to incorporate actual results and revisions to assumptions.

## 2. Deficit Fund Balance

The Capital Projects Fund had deficits of \$2.52 and \$2.98 billion for the years ended June 30, 2017 and 2016, respectively. These deficits represent the amounts expected to be financed from future bond issues or intergovernmental reimbursements. To the extent the deficits will not be financed or reimbursed, a transfer from the General Fund will be required.

## D. Detailed Notes on All Funds

## 1. Deposits and Investments <br> Deposits

The City's bank depositories are designated by the New York City Banking Commission, which consists of representatives of the Comptroller, the Mayor, and the Finance Commissioner. The Banking Commission considers a list of requirements to approve banks for designation, including but not limited to independent bank rating agency reports, bank regulators' reports, the banks' quarterly financial statements reported to the SEC, independently audited public financial statements and the New York State Department of Financial Services and Federal supervisory agency Community Reinvestment Act (CRA) reports to determine the financial soundness of each bank. In addition, the City's banking relationships are under periodic operational, financial and credit reviews.

The City Charter limits the amount of deposits at any time in any one bank or trust company to a maximum of one-half of the amount of the capital and net surplus of such bank or trust company. The discretely presented component units included in the City's reporting entity maintain their own banking relationships, which generally conform with the City's.
The City's bank account balances in excess of the prevailing Federal Deposit Insurance Corporation (FDIC) insurance limits of $\$ 250$ thousand are fully collateralized in accordance with the New York State General Municipal Law (GML) and the New York City Department of Finance Collateral Policy, dated December 5, 2012. The FDIC insurance limit of $\$ 250$ thousand is only applied one time to each bank relationship with multiple bank accounts. Each NYC Designated Bank must pledge Eligible Securities and/or Letters of Credit (LOC) that satisfy the minimum GML collateral requirements. The Designated Banks are required to closely monitor daily City bank account balances and adjust the amount of collateral pledged when the City's bank account balance changes to ensure that City deposits are always fully collateralized. With the exception of banks pledging a LOC as collateral, the banks are required on a daily basis to aggregate the total balances of all bank accounts under the City's tax ID, deduct the FDIC insurance limit of $\$ 250$ thousand and pledge collateral which more than covers the remaining balances. The custodians provide collateral reports to the Department of Finance Collateral Committee on a regular basis; ranging from daily to monthly.

## Cash \& Cash Equivalents

The following is a summary of the cash and cash equivalents of the City's Governmental Activities as of June 30, 2017 and June 30, 2016:

|  | Governmental Activities |  |
| :---: | :---: | :---: |
|  | 2017 | 2016 (Restated) |
|  | (in thousands) |  |
| Restricted cash and cash equivalents: |  |  |
| Cash | \$ 1,582,865 | \$ 18,435 |
| Cash Equivalents | 2,292,211 | 2,443,183 |
| Total restricted cash and cash equivalents: | \$ 3,875,076 | \$2,461,618 |
| Unrestricted cash and cash equivalents: |  |  |
| Cash* | \$ 1,848,715 | \$2,103,912 |
| Cash Equivalents | 4,739,266 | 4,515,544 |
| Total unrestricted cash and cash equivalents: | \$ 6,587,981 | \$6,619,456 |
| Grand Total cash and cash equivalents | \$10,463,057 | $\underline{\underline{\$ 9,081,074}}$ |

* Unrestricted cash for Governmental Activities represents book balances that include items in transit.

At June 30, 2017 and 2016, the City's unrestricted Governmental Activities bank balances were $\$ 2.01$ billion and $\$ 2.33$ billion, respectively. Of those amounts, $\$ 472$ thousand was exposed to custodial credit risk at June 30, 2017 (this is the risk that in the event of a bank failure, the City's deposits may not be returned to it or the City will not be able to recover collateral securities that are in the possession of an outside party); there was no exposure to custodial credit risk at June 30, 2016. At June 30, 2017 and 2016, the City's restricted Governmental Activities cash balances were $\$ 1.58$ billion and $\$ 18.44$ million, respectively. Of those amounts $\$ 13$ thousand and $\$ 5$ thousand were exposed to custodial credit risk. Bank balances are exposed to custodial credit risk when they are uninsured and uncollateralized.

The following is a summary of the cash and cash equivalents of the City's Business-Type Activities as of June 30, 2017 and June 30, 2016:

|  | Business-type Activities |  |
| :---: | :---: | :---: |
|  | 2017 | 2016 |
|  | (in thousands) |  |
| Restricted cash and cash equivalents: |  |  |
| Cash | \$ 38,030 | \$ 40,041 |
| Cash Equivalents | - | 115 |
| Total restricted cash and cash equivalents: | \$ 38,030 | \$ 40,156 |
| Unrestricted cash and cash equivalents: |  |  |
| Cash | \$ 32,864 | \$ 19,610 |
| Cash Equivalents | 11,250 | 6,057 |
| Total unrestricted cash and cash equivalents: | \$ 44,114 | \$ 25,667 |
| Grand Total cash and cash equivalents | \$ 82,144 | \$ 65,823 |

At June 30, 2017 and 2016, the City's unrestricted Business-Type Activities bank balances were $\$ 32.86$ million and $\$ 19.61$ million, respectively. Of those amounts, there was no exposure to custodial credit risk at June 30, 2017 and 2016. At June 30, 2017 and 2016, the City's restricted Business-Type Activities cash balances were $\$ 38.03$ million and $\$ 40.04$ million, respectively. Of those amounts, there was no exposure to custodial credit risk at June 30, 2017 and 2016.

## Investments

The City's investment of cash in its primary government is currently limited to U.S. Government guaranteed securities and U.S. Government agency securities purchased directly and through repurchase agreements from primary dealers, as well as commercial paper rated A1 and P1 by Standard \& Poor's Corporation and Moody's Investors Service, Inc., respectively. The repurchase agreements must be collateralized by U.S. Government guaranteed securities, U.S. Government agency securities, or eligible commercial paper in a range of $100 \%$ to $102 \%$ of the matured value of the repurchase agreements.
The following is a summary of the fair value of investments of the City's primary government as of June 30, 2017 and 2016:

| Governmental Activities: | Investment Maturities |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | (in year | S) 2016 (Restated) |  |  |
|  |  |  |  |  |  |  |
| Investment Type | Less than 1 | 1 to 5 | More than 5 | Less than 1 | 1 to 5 | More than 5 |
|  | (in thousands) |  |  |  |  |  |
| Unrestricted |  |  |  |  |  |  |
| U.S. Government securities | \$2,292,591 | \$1,294,155 | \$ | \$1,038,024 | \$5,259,266 | \$ |
| U.S. Government agency obligations | 1,941,134 | 246,957 | - | 1,899,994 | 245,850 | - |
| Commercial paper | 2,313,304 | - | - | 1,482,615 | - | - |
| Time deposits | 27,555 | - | - | 27,976 | - | - |
| Investment derivative instruments | - | - | $(49,158){ }^{(1)}$ | - | - | $(74,732)^{(2)}$ |
| Total unrestricted | \$6,574,584 | \$1,541,112 | \$(49,158) | \$4,448,609 | \$5,505,116 | \$(74,732) |
| Restricted |  |  |  |  |  |  |
| U. S. Government securities | \$ 81,767 | \$ 131,454 | \$ 56,161 | \$ 506,460 | \$ 146,310 | \$ |
| U.S. Government agency obligations | 817,454 | - | - | 909,661 | 10,000 | - |
| Municipal securities | - | - | - | - | - | 17,389 |
| Time deposits | 6,929 | - | - | 9,333 | - | - |
| Total restricted | \$ 906,150 | \$ 131,454 | \$ 56,161 | \$1,425,454 | \$ 156,310 | \$ 17,389 |

[^14]

## Fair Value Hierarchy

The City 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 fair value of the assets. Level 1 inputs are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs (the City does not have any investments for which level 3 inputs are required).

The following is a summary of the fair value hierarchy of the fair value of investments of the City's primary government as of June 30, 2017 and June 30, 2016:

| Investments ${ }^{(1)}$ by Fair Value Level | 6/30/2017 |  |  | 6/30/2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fair Value Measurements Using |  | Total | Fair Value Measurements Using |  |
|  | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) |  | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) |
|  | (in thousands) |  |  |  |  |  |
| U.S. Government securities | \$ 3,999,706 | \$ 220,136 | \$ 3,779,570 | \$ 6,970,540 | \$ 369,073 | \$ 6,601,467 |
| U.S. Government agency obligations | 3,523,620 | 19,980 | 3,503,640 | 3,376,595 | - | 3,376,595 |
| Commercial paper | 3,673,599 | - | 3,673,599 | 1,613,102 | - | 1,613,102 |
| Money Market Funds (includes time deposits) | 482,157 | 42,129 | 440,028 | 359,399 | 45,495 | 313,904 |
| Municipal Securities | 6,968 | - | 6,968 | 18,638 | - | 18,638 |
| Mortgage Backed \& Asset Back |  |  |  |  |  |  |
| Securities | 113,918 | - | 113,918 | 85,423 | - | 85,423 |
| Investment derivative instruments | $(49,158)$ | - | $(49,158)$ | $(74,732)$ | - | $(74,732)$ |
| Total Investment \& Cash Equivalent by Fair Value Level | $\underline{\$ 11,750,810^{(2)}}$ | ( \$ 282,245 | \$11,468,565 | $\underline{\text { \$12,348,965 }}{ }^{(2)}$ | \$ 414,568 | \$11,934,397 |

${ }^{(1)}$ Includes cash equivalents carried at fair value by several blended components as presented within their financial statements.
${ }^{(2)}$ As of June 30, 2017 and June 30, 2016, all ECF investment maturities were less than one year and recorded at carrying value. For the year ended June 30, 2017 and June 30, 2016, ECF's listed investments totaled $\$ 68$ million and $\$ 68.57$ million, respectively.

Investments classified in Level 1 of the fair value hierarchy, valued at $\$ 282.25$ million and $\$ 414.57$ million in Fiscal Years 2017 and 2016 respectively, are valued using quoted prices in active markets.
U.S. Government securities totaling $\$ 3.64$ billion and $\$ 6.41$ billion, U.S. Government agency obligations totaling $\$ 3.50$ billion and $\$ 3.38$ billion, commercial paper totaling $\$ 3.67$ billion and $\$ 1.61$ billion, money market funds totaling $\$ 440.03$ million and $\$ 313.90$ million and municipal securities totaling $\$ 6.97$ million and $\$ 18.64$ million, mortgage backed and asset backed securities totaling $\$ 113.92$ million and $\$ 85.42$ million in fiscal years 2017 and 2016 respectively, classified in Level 2 of the fair value hierarchy are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.
U.S. Government securities, totaling $\$ 139.09$ million and $\$ 190.47$ million in Fiscal Years 2017 and 2016 respectively, under a forward supply contract classified in Level 2 of the fair value hierarchy are valued using present value and option pricing model techniques.

Investment derivative instruments, totaling ( $\$ 49.16$ million) and ( $\$ 74.73$ million) in Fiscal Years 2017 and 2016, respectively, are classified in Level 2 of the fair value hierarchy. Fair value is described as the exit price that assumes a transaction takes place in the City's most advantageous market in the absence of a principal market. These inputs include the mid-market valuation and then incorporates the credit risk of either the City or its counterparty and the bid/offer spread that would be charged to the City in order to transact. The mid-market values of the interest rate swaps were estimated using the income approach. 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 date.

Interest rate risk. As a means of limiting its exposure to fair value losses arising from rising interest rates, the City's investment policy limits the weighted average maturity to a period of less than 2 years. The City's current weighted average maturity is less than 201 days.

Credit risk. Investment guidelines and policies are designed to protect principal by limiting credit risk. This is accomplished through ratings, collateral, and diversification requirements that vary according to the type of investment. As of June 30, 2017 and 2016, investments in Fannie Mae or Freddie Mac and Federal Home Loan Bank (FHLB) were rated in the highest long-term or short-term ratings category (as applicable) by Standard \& Poor's and/or Moody's Investor Service. These ratings were AA+ and A-1+ by Standard \& Poor's and Aaa and P-1 by Moody's for long-term and short-term instruments, respectively.

Concentration of credit risk. The City's investment policy limits investments to no more than $\$ 250$ million invested at any time in either commercial paper of a single issuer or investment agreements with a single provider.

Custodial credit risk-investments. For investments, custodial credit risk is the risk that, in the event of the failure of the counterparty, the City will also not be able to recover the value of its investments or collateral securities that are in the possession of the custodian. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the City, and are held by either the counterparty or the counterparty's trust department or agent.

The City's investment policy related to custodial credit risk calls for limiting its investments to highly rated institutions and/or requiring high quality collateral be held by the counterparty or custodian in the name of the City.

## Investment Derivative Instruments

Note: More information on derivative instruments discussed herein can be found in Note A.12, by referencing the indicated derivative instrument's identifying letter.

Credit risk: The City is exposed to credit risk on investment derivative instruments. To minimize its exposure to loss related to credit risk, it is the City's policy to require counterparty collateral posting provisions in its investment derivative instruments. These terms require collateralization of the fair value of investment derivative instruments (net of the effect of applicable threshold requirements and netting arrangements) should the counterparty's credit rating fall below the following:

The counterparty (or its respective guarantor) with respect to derivative instruments $B, D$, and $E$ is required to post collateral if one of its credit ratings goes below A3/A-. The counterparty with respect to derivative instrument H is required to post collateral if one of its credit ratings goes below A2/A. The counterparty with respect to derivative instruments $\mathrm{A}, \mathrm{C}$ and K is required to post collateral if it has at least one rating below Aa3 or AA-. The City has never been required to access collateral.

As discussed in Note A.12, it is the City's policy to enter into netting arrangements whenever it has entered into more than one derivative instrument transaction with a counterparty.

The aggregate fair value of investment derivative instruments requiring collateralization at June 30, 2017 was $\$ 38.76$ million. A negative aggregate fair value means the City would have owed payments to the counterparties. The City had no counterparty credit exposure to any of the investment derivative instrument counterparties as of that date.

Interest rate risk: The City is exposed to interest rate risk on its swaps. In derivative instruments A, B, C, D, E and H, pay-fixed, receive-variable interest rate swaps, as LIBOR decreases, the City's net payment on the swap increases.

Basis risk: The City is exposed to basis risk on derivative instruments A, B, C, D, E and H because the variable-rate payment received by the City is based on a rate or index other than the interest rate the City pays on its variable-rate debt. Under the terms of its derivative instruments $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}$ and H , the City pays a variable rate on the outstanding underlying bonds based on SIFMA, but receives a variable rate on the swap based on a percentage of LIBOR. In derivative instrument K, the City's variable payer rate is based on SIFMA and its variable receiver rate is based on a percentage of LIBOR. However, the stepped percentages of LIBOR received by the City mitigate the risk that the City will be harmed in low interest rate environments by the compression of the SIFMA and LIBOR indices. As the overall level of interest rate decreases, the percentage of LIBOR received by the City increases.

Tax risk: The City is at risk that a change in Federal tax rates will alter the fundamental relationship between the SIFMA and LIBOR indices. A reduction in Federal tax rates, for example, will likely increase the City's payment on its underlying variable rate bonds in derivative instruments $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}$ and H and its variable payer rate in derivative instrument K .

Termination risk: The City or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. The City is at risk that a counterparty will terminate a swap at a time when the City owes it a termination payment. The City has mitigated this risk by specifying that the counterparty has the right to terminate only as a result of certain events, including: a payment default by the City; other City defaults which remain uncured for 30 days after notice; City bankruptcy; insolvency of the City (or similar events); or a downgrade of the City's credit rating below investment grade (i.e., BBB-/Baa3). If at the time of termination, an investment derivative instrument is in a liability position, the City would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Counterparty risk: The City is at a risk that a counterparty (or its guarantor) will not meet its obligations under the swap. If a counterparty were to default under its agreement when the counterparty would owe a payment to the City, the City may have to pay another entity to assume the position of the defaulting counterparty. The City has sought to limit its counterparty risk by contracting only with highly-rated entities or requiring guarantees of the counterparty's obligations under the swap documents.

The discretely presented component units included in the City's reporting entity maintain their own investment policies that generally conform to those of the City.

The criteria for the Pension and Other Employee Benefit Trust Funds' and Other Trust Funds' investments are as follows:

1. Fixed income investments may be made in U.S. Government guaranteed securities or securities of U.S. Government agencies, securities of entities rated BBB or better by both Standard and Poor's Corporation and Moody's Investors Service, Inc., securities below BBB up to $10 \%$ of the total asset allocation and any bond that meets the qualifications of the New York State Retirement and Social Security Law, the New York State Banking Law, and the New York City Administrative Code.
2. Equity investments may be made only in those stocks that meet the qualifications of the New York State Retirement and Social Security Law, the New York State Banking Law, and the New York City Administrative Code.
3. Short-term investments may be made in the following:
a. U.S. Government guaranteed securities or U.S. Government agency securities.
b. Commercial paper rated A1, P1, or F1 by Standard \& Poor's Corporation or Moody's Investors Service, Inc., or Fitch, respectively.
c. Repurchase agreements collateralized in a range of $100 \%$ to $102 \%$ of matured value, purchased from primary dealers of U.S. Government securities.
d. Investments in bankers' acceptances, certificates of deposit, and time deposits are limited to banks with worldwide assets in excess of $\$ 50$ billion that are rated within the highest categories of the leading bank rating services, and selected regional banks also rated within the highest categories.
e. Other top-rate securities maturing in less than 4 years.
4. Investments up to $25 \%$ of total pension fund assets in instruments not specifically covered by the New York State Retirement and Social Security Law.
5. No investment in any one corporation can be: (i) more than $2 \%$ of the pension plan net position; or (ii) more than $5 \%$ of the total outstanding issues of the corporation.

All investments are held by the City's custodial banks (in bearer or book-entry form) solely as an agent of the Comptroller of The City of New York on behalf of the various account owners. Payments for purchases are not released until evidence of ownership of the underlying investments are received by the City's custodial bank.

## Securities Lending

State statutes and Board policies permit the Pension and Certain Other Employee Benefit Trust Funds to lend its securities to broker-dealers and other entities for collateral, for the same securities in the future with a simultaneous agreement to return the collateral in the form of cash, treasury and U.S. Government securities. The Funds' agent lends the following types of securities: short term securities, common stocks, long-term corporate bonds, U.S. Government and U.S. Government agency bonds, assetbacked securities and international equities and bonds held in collective investment funds. In return, the Funds receive collateral in the form of cash, U.S. Treasury and US. Government agency securities at $100 \%$ to $108 \%$ of the principal plus accrued interest for reinvestment. At June 30, 2017 and 2016, management believes that the Funds had no credit risk exposure to borrowers because the amounts the Funds owed the borrowers equaled or exceeded the amounts the borrowers owed the Funds. The contracts with the Funds' custodians require the securities lending agent to indemnify the Funds. In the situation when a borrower goes into default, the Agent will liquidate the collateral to purchase replacement securities. Any shortfall before the replacement securities cost and the collateral value is covered by the Agent. All securities loans can be terminated on demand within a period specified in each agreement by either the Funds or the borrowers. Cash collateral is invested by the securities lending agent using approved lender's investment guidelines. The weighted average maturity is 55 days. The securities lending program in which the Funds participate only allows pledging or selling securities in the case of borrower default.

The City reports securities loaned as assets on the Statement of Fiduciary Net Position. Cash received as collateral on securities lending transactions, and investments made with that cash, are also recorded as assets. Liabilities resulting from these transactions are reported on the Statement of Fiduciary Net Position. Accordingly, the City records the investments purchased with the cash collateral as Investments; Collateral From Securities Lending Transactions with a corresponding liability are recorded as Securities Lending Transactions.

## 2. Capital Assets

The following is a summary of governmental activities capital assets for the Fiscal Years ended June 30, 2016 and 2017:

| Primary Government | Balance June 30, 2015 | Additions | Deletions | Balance June 30, 2016 | Additions | Deletions | Balance June 30, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (in thousands) |  |  |  |
| Governmental Activities: |  |  |  |  |  |  |  |
| Capital assets, not being depreciated/amortized: |  |  |  |  |  |  |  |
| Land | \$ 1,907,750 | \$ 39,728 | \$ 6,107 | \$ 1,941,371 | \$ 239,422 | \$ 332 | \$ 2,180,461 |
| Construction work-in-progress | 2,979,916 | 3,043,506 | 2,512,330 | 3,511,092 | 3,304,325 | 3,071,106 | 3,744,311 |
| Total capital assets, not being depreciated/amortized . . . | 4,887,666 | 3,083,234 | 2,518,437 | 5,452,463 | 3,543,747 | 3,071,438 | 5,924,772 |
| Capital assets, being depreciated/amortized: |  |  |  |  |  |  |  |
| Buildings | 56,042,693 | 2,512,330 | 161,618 | 58,393,405 | 3,071,106 | 325,690 | 61,138,821 |
| Equipment (including software) | 8,211,043 | 585,476 | 131,946 | 8,664,573 | 827,374 | 71,826 | 9,420,121 |
| Infrastructure | 20,273,661 | 1,525,297 | 241,546 | 21,557,412 | 1,721,572 | 335,778 | 22,943,206 |
| Total capital assets, being depreciated/amortized | 84,527,397 | 4,623,103 | 535,110 | 88,615,390 | 5,620,052 | 733,294 | 93,502,148 |
| Less accumulated depreciation/amortization: |  |  |  |  |  |  |  |
| Buildings | 22,961,688 | 1,859,409 | 161,094 | 24,660,003 | 1,942,777 | 290,093 | 26,312,687 |
| Equipment (including software) | 5,609,270 | 540,318 | 127,748 | 6,021,840 | 564,960 | 66,604 | 6,520,196 |
| Infrastructure | 7,721,868 | 953,454 | 241,546 | 8,433,776 | 978,257 | 334,788 | 9,077,245 |
| Total accumulated depreciation/amortization | 36,292,826 | 3,353,181 ${ }^{(1)}$ | 530,388 | 39,115,619 | 3,485,994 ${ }^{(1)}$ | 691,485 | 41,910,128 |
| Total capital assets, being depreciated/amortized, net | 48,234,571 | 1,269,922 | 4,722 | 49,499,771 | 2,134,058 | 41,809 | 51,592,020 |
| Governmental activities capital assets, net | \$53,122,237 | \$4,353,156 | \$2,523,159 | \$54,952,234 | \$5,677,805 | \$3,113,247 | $\underline{\text { \$57,516,792 }}$ |

${ }^{(1)}$ Depreciation expense was charged to functions/programs of the City for the Fiscal Years ended June 30, 2017 and 2016.

The following is a summary of the governmental activities depreciation expense by function/program for the Fiscal Years ended June 30, 2017 and 2016:

|  | 2017 | 2016 |
| :---: | :---: | :---: |
|  |  |  |
| Governmental activities: |  |  |
| General government | \$ 496,524 | \$ 488,144 |
| Public safety and judicial | 250,416 | 229,582 |
| Education | 1,407,273 | 1,343,771 |
| City University | 4,514 | 4,914 |
| Social services | 66,679 | 72,708 |
| Environmental protection | 152,114 | 133,938 |
| Transportation services | 639,225 | 642,043 |
| Parks, recreation and cultural activities | 390,307 | 352,453 |
| Housing | 4,034 | 3,471 |
| Health | 57,810 | 65,321 |
| Libraries | 17,098 | 16,836 |
| Total depreciation expense-governmental activities | \$3,485,994 | \$3,353,181 |

The following are the sources of funding for the governmental activities capital assets for the Fiscal Years ended June 30, 2017 and 2016. Sources of funding for capital assets are not available prior to Fiscal Year 1987.


At June 30, 2017 and 2016, the governmental activities capital assets include approximately $\$ 1.2$ billion of City-owned assets leased for $\$ 1$ per year to the New York City Transit Authority which operates and maintains the assets. In addition, assets leased to HHC and to the Water and Sewer System are excluded from governmental activities capital assets and are recorded in the respective component unit financial statements.

Included in buildings at June 30, 2017 and 2016, are leased properties that have elements of ownership. These assets are recorded as capital assets as follows:

| Governmental activities: | Capital Leases |  |
| :---: | :---: | :---: |
|  | 2017 | 2016 |
|  | (in thousands) |  |
| Capital asset: |  |  |
| Capitalized leases - buildings | \$2,469,685 | \$2,428,054 |
| Less accumulated amortization | 921,094 | 857,048 |
| Capitalized leases - buildings, net | \$1,548,591 | \$1,571,006 |

## Capital Commitments

At June 30, 2017, the outstanding commitments relating to projects of the New York City Capital Projects Fund amounted to approximately $\$ 18.0$ billion.

To address the need for significant infrastructure and public facility capital investments, the City has prepared a ten-year capital spending program which contemplates City Capital Projects Fund expenditures of $\$ 89.6$ billion over Fiscal Years 2017 through 2026. To help meet its capital spending program, the City and TFA borrowed $\$ 5.5$ billion in the public credit market in Fiscal Year 2017. The City and TFA plan to borrow $\$ 6.7$ billion in the public credit market in Fiscal Year 2018.

The following is a summary of business-type activities capital assets for the Fiscal Years ended June 30, 2016 and 2017:

| Primary Government | Balance June 30, 2015 |  | Additions |  | $\underline{\text { Deletions }}$ |  | Balance June 30, 2016 |  | Additions |  | Deletions |  | Balance June 30, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | housands) |  |  |  |  |  |  |
| Business-type Activities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital assets, not being depreciated/amortized: Land | \$ |  | \$ |  | \$ | - | \$ | - | \$ |  | \$ | - | \$ |  |
| Construction work-in-progress |  | 162,197 |  | 61,740 |  | 57,422 |  | 166,515 |  | 51,921 |  | 74,355 |  | 144,081 |
| Total capital assets, not being depreciated/amortized . . . |  | 162,197 |  | 61,740 |  | 57,422 |  | 166,515 |  | 51,921 |  | 74,355 |  | 144,081 |
| Capital assets, being depreciated/amortized: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Building |  | 24,160 |  | 4,884 |  | - |  | 29,044 |  | 3,089 |  | - |  | 32,133 |
| Equipment (including software) |  | 6,873 |  | 1,284 |  | 250 |  | 7,907 |  | 969 |  | - |  | 8,876 |
| Infrastructure |  | 335,488 |  | 48,035 |  | - |  | 383,523 |  | 73,957 |  | - |  | 457,480 |
| Total capital assets, being depreciated/amortized |  | 366,521 |  | 54,203 |  | 250 |  | 420,474 |  | 78,015 |  | - |  | 498,489 |
| Less accumulated depreciation/amortization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Building |  | 1,009 |  | 269 |  | - |  | 1,278 |  | 285 |  | - |  | 1,563 |
| Equipment (including software) |  | 2,993 |  | 628 |  | 82 |  | 3,539 |  | 836 |  | - |  | 4,375 |
| Infrastructure |  | 22,253 |  | 19,372 |  | - |  | 41,625 |  | 23,687 |  | - |  | 65,312 |
| Total accumulated depreciation/amortization |  | 26,255 |  | 20,269 |  | 82 |  | 46,442 |  | 24,808 |  | - |  | 71,250 |
| Total capital assets, being depreciated/amortized, net |  | 340,266 |  | 33,934 |  | 168 |  | 374,032 |  | 53,207 |  | - |  | 427,239 |
| Business-type Activities capital assets, net | \$ | 502,463 | \$ | 95,674 | \$ | 57,590 | \$ | 540,547 | \$ | 105,128 | \$ | 74,355 | \$ | 571,320 |

## 3. Leases

The City leases a significant amount of property and equipment from others. Leased property having elements of ownership is recorded in the government-wide financial statements. The related obligations, in amounts equal to the present value of minimum lease payments payable during the remaining term of the leases, are also recorded in the government-wide financial statements. Other leased property not having elements of ownership are classified as operating leases. Both capital and operating lease payments are recorded as expenditures when payable. Total expenditures on such leases for the Fiscal Years ended June 30, 2017 and 2016 were approximately $\$ 1,081.0$ million and $\$ 988.0$ million, respectively.

As of June 30, 2017, the City (excluding discretely presented component units) had future minimum payments under capital and operating leases with a remaining term in excess of one year as follows:

|  |  | Capital <br> Leases | Operating Leases | Total |
| :---: | :---: | :---: | :---: | :---: |
| Governmental activities: <br> (in thousands) |  |  |  |  |
|  |  |  |  |  |
| 2018 | \$ | 187,291 | \$ 698,907 | \$ 886,198 |
| 2019 |  | 179,084 | 637,660 | 816,744 |
| 2020 |  | 179,703 | 602,746 | 782,449 |
| 2021 |  | 171,907 | 559,944 | 731,851 |
| 2022 |  | 168,187 | 513,636 | 681,823 |
| 2023-2027 |  | 613,605 | 2,141,619 | 2,755,224 |
| 2028-2032 |  | 428,134 | 1,127,006 | 1,555,140 |
| 2033-2037 |  | 140,459 | 364,533 | 504,992 |
| 2038-2042 |  | 56,190 | 37,595 | 93,785 |
| 2043-2047 |  | 2,099 | 11,955 | 14,054 |
| 2048-2052 |  | - | 6,481 | 6,481 |
| Future minimum payments |  | 2,126,659 | \$6,702,082 | \$8,828,741 |
| Less: Interest |  | 578,068 |  |  |
| Present value of future minimum payments |  | 1,548,591 |  |  |

The present value of future minimum lease payments includes approximately $\$ 996.0$ million for leases with Public Benefit Corporations (PBC) where State law generally provides that in the event the City fails to make any required lease payment, the amount of such payment will be deducted from State aid otherwise payable to the City and paid to PBCs.

The City also leases City-owned property to others, primarily for markets, ports, and terminals. Total rental revenue on these capital and operating leases for the Fiscal Years ended June 30, 2017 and 2016 was approximately $\$ 253$ million and $\$ 279$ million, respectively. As of June 30, 2017, the following future minimum rentals are provided for by the leases:

|  | Capital <br> Leases | Operating Leases | Total |
| :---: | :---: | :---: | :---: |
| Governmental activities: |  | (in thousands) |  |
| Fiscal Year ending June 30: |  |  |  |
| 2018 | \$ 1,197 | \$ 221,224 | \$ 222,421 |
| 2019 | 1,197 | 216,983 | 218,180 |
| 2020 | 1,201 | 215,805 | 217,006 |
| 2021 | 1,201 | 212,947 | 214,148 |
| 2022 | 1,110 | 191,003 | 192,113 |
| 2023-2027 | 5,198 | 909,366 | 914,564 |
| 2028-2032 | 5,334 | 870,201 | 875,535 |
| 2033-2037 | 4,179 | 852,452 | 856,631 |
| 2038-2042 | 2,083 | 840,531 | 842,614 |
| 2043-2047 | 1,996 | 833,488 | 835,484 |
| 2048-2052 | 1,800 | 599,286 | 601,086 |
| 2053-2057 | 1,800 | 60,168 | 61,968 |
| 2058-2062 | 1,800 | 60,168 | 61,968 |
| 2063-2067 | 1,800 | 60,168 | 61,968 |
| 2068-2072 | 1,800 | 58,881 | 60,681 |
| 2073-2077 | 1,800 | 57,791 | 59,591 |
| 2078-2082 | 900 | 43,447 | 44,347 |
| 2083-2087 | - | 38,265 | 38,265 |
| Thereafter until 2111 | - | 2 | 2 |
| Future minimum lease rentals | 36,396 | \$6,342,176 | \$6,378,572 |
| Less interest | 22,898 |  |  |
| Present value of future minimu lease rentals | \$13,498 |  |  |

## 4. Service Concession Arrangements

The City is the transferor in 71 Service Concession Arrangements contracted at the Parks Department. The agreements convey to the operators the right, either through licenses or permits, to construct capital assets and operate and maintain all service concessions. The City has the right to approve the type of services the operators may provide and the fees that may be charged by the operators to the public. As per the agreements, the operators provide high-quality amenities and facilities to park users, which generate General Fund revenues for the City and also create valuable business and employment opportunities for the public. The Parks Department operators help preserve some of the City's unique park facilities and provide public amenities while creating and developing new park destinations with fewer public funds.

The Service Concession Agreements do not contain any upfront payments from the operators nor are there any guarantees or commitments by the City. By concession type, the value of the Capital Assets associated with the above Service Concession Arrangements and the deferred inflows resulting from such arrangements are as follows at June 30:

| Concession Type | $\begin{aligned} & \text { Number of } \\ & \text { concessions } \\ & \hline \end{aligned}$ | inflows |  | Capital AssetsValue |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (in thousands) |  |  |  |
| Restaurants | 29 | \$ | 44,463 | \$ | 93,755 |
| Sports Centers | 13 |  | 19,323 |  | 50,625 |
| Golf Courses | 14 |  | 21,604 |  | 45,042 |
| Gas Stations | 7 |  | 386 |  | 878 |
| Amusement Parks/Carousels | 3 |  | 28,624 |  | 74,394 |
| Stables | 3 |  | 353 |  | 977 |
| Other | 2 |  | 127 |  | 245 |
| Total | 71 | \$ | 114,880 | \$ | 265,917 |


| $\begin{array}{c}\text { Number of } \\ \text { concessions }\end{array}$ | $\begin{array}{c}\text { Ceferred } \\ \text { inflows }\end{array}$ |  | $\begin{array}{c}\text { Capital Assets } \\ \text { Value }\end{array}$ |  |
| :---: | :---: | :---: | ---: | :---: |
|  |  | (in thousands) |  |  |$)$

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## 5. Long-Term Liabilities

## Changes in Long-term liabilities

In Fiscal Years 2016 and 2017, the changes in long-term liabilities were as follows:

| Primary Government | Balance June 30, 2015 | Additions | Deletions | $\begin{gathered} \text { Balance } \\ \text { June 30, } \\ 2016 \\ \hline \end{gathered}$ | Additions | Deletions | Balance June 30, 2017 | Due Within One Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (in thousands) |  |  |  |  |
| Governmental activities: |  |  |  |  |  |  |  |  |
| Bonds and notes payable |  |  |  |  |  |  |  |  |
| General Obligation Bonds ${ }^{(1)}$ | \$ 40,459,947 | \$ 2,510,604 | \$ 4,896,980 | \$ 38,073,571 | \$ 3,181,065 | \$ 3,363,990 | \$ 37,890,646 | \$2,194,465 |
| TFA bonds | 33,850,105 | 4,799,660 | 1,292,285 | 37,357,480 | 5,233,595 | 1,895,430 | 40,695,645 | 1,202,690 |
| TSASC bonds | 1,222,035 | - | 77,510 | 1,144,525 | 653,070 | 708,055 | 1,089,540 | 18,625 |
| IDA bonds | 86,780 | - | 3,115 | 83,665 | - | 3,265 | 80,400 | 3,425 |
| STAR bonds | 2,035,330 | - | 73,935 | 1,961,395 | - | 76,895 | 1,884,500 | 79,755 |
| FSC bonds | 197,375 | - | 22,205 | 175,170 |  | 43,465 | 131,705 | 45,560 |
| HYIC bonds | 3,000,000 | - | - | 3,000,000 | 2,141,760 | 2,391,000 | 2,750,760 | 8,495 |
| ECF bond | 264,190 | - | 23,785 | 240,405 | - | 4,525 | 235,880 | 4,680 |
| Total before premiums/discounts(net) | 81,115,762 | 7,310,264 | 6,389,815 | 82,036,211 | 11,209,490 | 8,486,625 | 84,759,076 | 3,557,695 |
| Less premiums/(discounts)(net) . . . | 3,825,072 | 907,427 | 559,750 | 4,172,749 | 1,356,796 | 702,648 | 4,826,897 | - |
| Total governmental activities bonds and notes payable | 84,940,834 | 8,217,691 | 6,949,565 | 86,208,960 | 12,566,286 | 9,189,273 | 89,585,973 | 3,557,695 |
| Capital lease obligations | 1,639,243 | 47,998 | 116,235 | 1,571,006 | 94,331 | 116,746 | 1,548,591 | 77,640 |
| Other tax refunds | 2,101,192 | 10,913 | 254,192 | 1,857,913 | 1,110,-9 | 815,720 | 1,042,193 | 112,493 |
| Judgments and claims | 6,786,653 | 1,629,179 | 1,361,500 | 7,054,332 | 1,110,913 | 1,307,597 | 6,857,648 | 1,369,437 |
| Real estate tax certiorari | 938,622 | 224,981 | 181,556 | 982,047 | 252,560 | 161,226 | 1,073,381 | 165,137 |
| Vacation and sick leave | 3,980,729 | 576,845 | 294,876 | 4,262,698 | 693,399 | 307,917 | 4,648,180 | 385,482 |
| Pension liability | 53,124,067 | 11,722,928 | ,897,668 | 64,846,995 | 19,840,827 | 28,446,451 | 56,241,371 |  |
| OPEB liability $\ldots \ldots \ldots \ldots \ldots \ldots$ |  |  |  |  |  |  |  |  |
| Landfill closure and postclosure care costs | 1,508,360 | 2,928 | 45,599 | 1,465,689 | 91,369 | 49,049 | 1,508,009 | 78,960 |
| Pollution remediation obligation | 250,231 | 101,035 | 142,393 | 208,873 | 127,055 | 133,351 | 202,577 | 137,872 |
| Total changes in governmental activities |  |  |  |  |  |  |  |  |
| Business-type activities: |  |  |  |  |  |  |  |  |
| Bonds and notes payable |  |  |  |  |  |  |  |  |
| NYCTL 2014-A TRUST bonds | \$ 34,231 | \$ | \$ 34,231 | \$ | \$ | \$ | \$ | \$ - |
| NYCTL 2015-A TRUST bonds | - | 71,797 | 39,933 | 31,864 | - | 20,946 | 10,918 | 10,918 |
| NYCTL 2016-A TRUST bonds | - | - | - | - | 64,977 | 38,481 | 26,496 | 26,496 |
| Total before premiums/discounts(net) | 34,231 | 71,797 | 74,164 | 31,864 | 64,977 | 59,427 | 37,414 | 37,414 |
| Less premiums/(discounts)(net) | 4 | 3 | 6 | 1 | - | 4 | (3) | (3) |
| Total business-type activities bonds and notes payable | 34,235 | 71,800 | 74,170 | 31,865 | 64,977 | 59,431 | 37,411 | 37,411 |
| OPEB liability | 192,047 | 22 | 191,984 | 85 | 15,792 | 85 | - - | - - |
| Other liabilities . . . . . . . . . . . . . . . . . | 393,179 | 31,143 | 54,255 | 370,067 | 15,792 | 17,918 | 367,941 | 41,759 |
| Total changes in business-type activities long-term liabilities | $\underline{\$}$ | $\underline{\$(102,965}$ | $\underline{\$(320,409}$ | $\xlongequal{\$ \quad 402,017}$ | \$ 80,769 | $\xlongequal{\$ \quad 77,434}$ | $\xlongequal{\$ \quad 405,352}$ | $\underline{\text { \$ 79,170 }}$ |

${ }^{(1)}$ General Obligation Bonds are generally liquidated with resources of the General Debt Service Fund. Other long-term liabilities are generally liquidated with resources of the General Fund.

The bonds and notes payable at June 30, 2016 and 2017, summarized by type of issue are as follows:

| $\underline{\text { Primary Government }}$ | 2016 |  |  |  | 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City General Obligation ${ }^{(1)}$ | Other bonds and notes payable ${ }^{(2)}$ | Revenue ${ }^{(3)}$ | Total | City General Obligation ${ }^{(1)}$ | Other bonds and notes payable ${ }^{(2)}$ | Revenue ${ }^{(3)}$ | Total |
|  |  |  |  | (in thousands) |  |  |  |  |
| Governmental and Business-type activities: |  |  |  |  |  |  |  |  |
| Bonds and notes payable |  |  |  |  |  |  |  |  |
| General obligation bonds | \$38,073,571 | \$ - | \$ | \$38,073,571 | \$37,890,646 | \$ - | \$ | \$37,890,646 |
| TFA bonds | - | 29,313,725 | - | 29,313,725 | - | 32,814,010 | 7,881,635 | 32,814,010 |
| TFA bonds BARBs | - | - | 8,043,755 | 8,043,755 | - | - | 7,881,635 | 7,881,635 |
| TSASC bonds | - | - | 1,144,525 | 1,144,525 | - | - | 1,089,540 | 1,089,540 |
| IDA bonds | - | 83,665 | 1, - | 83,665 | - | 80,400 |  | 80,400 |
| STAR bonds | - | - | 1,961,395 | 1,961,395 | - | - | 1,884,500 | 1,884,500 |
| FSC bonds | - | - | 175,170 | 175,170 | - | - | 131,705 | 131,705 |
| HYIC bonds | - | - | 3,000,000 | 3,000,000 | - | - | 2,750,760 | 2,750,760 |
| ECF bonds | - | - | 240,405 | 240,405 | - | - | 235,880 | 235,880 |
| Tax lien collateralized bonds | - | - | 31,864 | 31,864 | - | - | 37,414 | 37,414 |
| Total before net of premium / discount | 38,073,571 | 29,397,390 | 14,597,114 | 82,068,075 | 37,890,646 | 32,894,410 | 14,011,434 | 84,796,490 |
| Premiums/(discounts)(net) | 430,131 | 477,299 | 3,265,320 | 4,172,750 | 1,727,359 | 2,480,127 | 619,408 | 4,826,894 |
| Total bonds payable | \$38,503,702 | \$29,874,689 | \$17,862,434 | \$86,240,825 | \$39,618,005 | \$35,374,537 | \$14,630,842 | \$89,623,384 |

${ }^{(1)}$ The City issues its General Obligation bonds for capital projects which include construction, acquisition, repair or life extending maintenance of the City's infrastructure.
${ }^{(2)}$ Other bonds and notes payable includes TFA (excluded BARBs) and IDA. They are general obligations of the respective issuers.
${ }^{(3)}$ Revenue bonds include ECF, FSC, HYIC, STAR, TFA (BARBs), NYCTLTs and TSASC.
The following table summarizes future debt service requirements as of June 30, 2017:

| Primary Government | Governmental and Business-type Activities |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City General Obligation Bonds |  |  | Other Bonds and Notes Payable |  |  | Revenue Bonds |  |  |  |
|  | Principal |  | Interest ${ }^{(1)}$ | Principal |  | Interest |  | Principal |  | Interest |
| Fiscal year ending June 30: |  |  |  | (in thousands) |  |  |  |  |  |  |
| 2018 | \$ 2,194,465 | \$ | 1,661,483 | \$ 1,014,995 |  | 1,309,012 | \$ | 348,235 | \$ | 658,894 |
| 2019 | 2,162,676 |  | 1,564,719 | 1,387,270 |  | 1,280,546 |  | 379,280 |  | 672,180 |
| 2020 | 2,292,575 |  | 1,465,078 | 1,367,130 |  | 1,230,792 |  | 363,585 |  | 654,337 |
| 2021 | 2,243,226 |  | 1,360,241 | 1,415,670 |  | 1,180,950 |  | 357,575 |  | 636,825 |
| 2022 | 2,242,145 |  | 1,256,495 | 1,445,525 |  | 1,129,435 |  | 414,335 |  | 619,384 |
| 2023-2027 | 10,709,329 |  | 4,739,362 | 6,962,345 |  | 4,872,423 |  | 2,421,185 |  | 2,765,094 |
| 2028-2032 | 7,545,372 |  | 2,624,742 | 6,708,895 |  | 3,452,560 |  | 3,064,564 |  | 2,079,567 |
| 2033-2037 | 5,311,912 |  | 1,166,411 | 6,114,350 |  | 2,066,920 |  | 3,049,540 |  | 1,297,928 |
| 2038-2042 | 2,624,573 |  | 315,152 | 5,316,105 |  | 645,675 |  | 2,015,485 |  | 618,401 |
| 2043-2047 | 564,328 |  | 27,167 | 1,162,125 |  | 28,676 |  | 1,322,650 |  | 227,630 |
| 2048-2052 | 4 |  | 153 | - |  | - |  | 275,000 |  | 13,750 |
| Thereafter until 2147. . | 41 |  | - | - |  | - |  | - |  |  |
| Total future debt service requirements | 37,890,646 |  | 16,181,003 | 32,894,410 |  | 17,196,989 |  | 14,011,434 |  | 10,243,990 |
| Less interest component | - |  | 16,181,003 | - |  | 17,196,989 |  | - |  | 10,243,990 |
| Total principal outstanding | \$37,890,646 | \$ | 三 | \$32,894,410 | \$ | 三 |  | $\underline{\text { 14,011,434 }}$ | \$ |  |

[^15]The average (weighted) interest rates for outstanding City General Obligation Bonds as of June 30, 2017 and 2016, were 4.51\% and $4.52 \%$, respectively, and both ranged from $0 \%$ to $8.6 \%$. The last maturity of the outstanding City debt is in the year 2147.
Since the City has variable rate debt outstanding, the terms by which interest rates change for variable rate debt are as follows: for Auction Rate Securities, an interest rate is established periodically by an auction agent at the lowest clearing rate based upon bids received from broker-dealers. Variable Rate Demand Bonds (VRDBs) are long-term bonds that have a daily or weekly "put" feature backed by a bank Letter of Credit or Stand By Bond Purchase Agreement. VRDBs are repriced daily or weekly and provide investors with the option to tender the bonds at each repricing. A broker, called a Remarketing Agent, is responsible for setting interest rates and reselling to new investors any securities that have been tendered. CPI Bonds pay the holder a floating interest rate tied to the consumer price index. The rate is a fixed spread plus a floating rate equal to the change in the Consumer Price Index-Urban (CPI-U) for a given period. LIBOR Bonds pay the holder a floating interest rate calculated as a percentage of the LIBOR. SIFMA Index Bonds pay the holder a floating index rate based on the Securities Industry and Financial Markets Association Municipal Swap Index plus spread.

In Fiscal Years 2017 and 2016, the City issued $\$ 900.07$ million and $\$ 2.35$ billion, respectively, of General Obligation Bonds to advance refund General Obligation Bonds of $\$ 999.44$ million and $\$ 2.67$ billion, respectively, aggregate principal amounts. The net proceeds from the sales of the refunding bonds, together with other funds of $\$ 10.65$ million and $\$ 44.43$ million, respectively, were irrevocably placed in escrow accounts and invested in United States Government securities. As a result of providing for the payment of the principal and interest to maturity, and any redemption premium, the advance refunded bonds are considered to be defeased and, accordingly, the liability is not reported in the government-wide financial statements. In Fiscal Year 2017, the refunding transactions will decrease the City's aggregate debt service payments by $\$ 133.68$ million and provide an economic gain of $\$ 118.81$ million. In Fiscal Year 2016, the refunding transactions decreased the City's aggregate debt service payments by $\$ 428.53$ million and provided an economic gain of $\$ 397.22$ million. At June 30, 2017 and 2016, $\$ 20.15$ billion and $\$ 21.1$ billion, respectively, of the City's outstanding General Obligation Bonds were considered defeased.

The State Constitution requires the City to pledge its full faith and credit for the payment of the principal and interest on City term and serial bonds and guaranteed debt. The GO debt-incurring power of the City is limited by the Constitution to $10 \%$ of the average of five years' full valuations of taxable real estate. Excluded from this debt limitation is certain indebtedness incurred for water supply, certain obligations for transit, sewage, and other specific obligations which exclusions are based on a relationship of debt service to net revenue. In July 2009, the State Assembly passed legislation stipulating that certain TFA debt would be included in the calculation of debt-incurring margin within the debt limit of the City.

As of June 30, 2017 and 2016, the $10 \%$ general limitation was approximately $\$ 90.24$ billion and $\$ 85.18$ billion, respectively. Also, as of June 30, 2017, the City's remaining GO debt-incurring power totaled $\$ 24.02$ billion, after providing for capital commitments. As of July 1, 2017, the debt incurring power was $\$ 34.21$ billion based on the change in the five-year full valuation average for fiscal year 2018.

Pursuant to State law, the City's General Debt Service Fund is administered and maintained by the State Comptroller. Payments of real estate taxes and other revenues are deposited in advance of debt service payment dates into the Fund. Debt service on all City notes and bonds is paid from this Fund. In Fiscal Year 2017, prepayment transfers of $\$ 1.56$ billion were made from the General Fund which included discretionary transfers of $\$ 239$ million to the General Debt Service Fund for Fiscal Year 2018 debt service. In Fiscal Year 2016, prepayment transfers of $\$ 1.76$ billion were made from the General Fund to the General Debt Service Fund for Fiscal Year 2017 debt service.

## Hedging derivative instrument payments and hedged debt

The table that follows represents debt service payments on certain general obligation variable-rate bonds and net receipts/payments on associated hedging derivative instruments (see Note A.12), as of June 30, 2017. Although interest rates on variable rate debt and the current reference rates of hedging derivative instruments change over time, the calculations included in the table below are based on the assumption that the variable rate and the current reference rates of hedging derivative instruments on June 30, 2017 will remain the same for their term.

|  | Governmental Activities |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General Obligation Bonds |  |  |  | Hedging Derivatives Instruments, Net |  | Total |  |
|  | Principal |  | Interest |  |  |  |  |  |
|  |  |  |  |  | sand |  |  |  |
| Fiscal year ending June 30: |  |  |  |  |  |  |  |  |
| 2018 | \$ | 18,040 | \$ | 2,590 | \$ | 5,715 | \$ | 26,345 |
| 2019 |  | - |  | 2,363 |  | 5,518 |  | 7,881 |
| 2020 |  | - |  | 2,363 |  | 5,518 |  | 7,881 |
| 2021 |  | - |  | 2,363 |  | 5,518 |  | 7,881 |
| 2022 |  | - |  | 2,363 |  | 5,518 |  | 7,881 |
| 2023-2025 |  | 19,950 |  | 6,993 |  | 16,333 |  | 43,276 |
| 2026-2032 |  | 230,050 |  | 7,167 |  | 16,738 |  | 253,955 |
| Total | \$ | 268,040 | \$ | 26,202 | \$ | 60,858 | \$ | 355,100 |

## Judgments and Claims

The City is a defendant in lawsuits pertaining to material matters, including claims asserted which are incidental to performing routine governmental and other functions. This litigation includes, but is not limited to: actions commenced and claims asserted against the City arising out of alleged constitutional violations; torts; breaches of contract; other violations of law; and condemnation proceedings.

As of June 30, 2017 and 2016, claims in excess of $\$ 1.26$ trillion and $\$ 1.09$ trillion, respectively, were outstanding against the City for which the City estimates its potential future liability to be $\$ 6.86$ billion and $\$ 7.05$ billion, respectively.

As explained in Note A.10, the estimate of the liability for all judgments and claims has been reported in the government-wide Statement of Net Position under noncurrent liabilities. The liability was estimated by using the probable exposure information provided by the New York City Law Department (Law Department), and supplemented by information provided by the Law Department with respect to certain large individual claims and proceedings. The recorded liability is the City's best estimate based on available information and application of the foregoing procedures.

Complaints on behalf of approximately 11,900 plaintiffs alleging respiratory or other injuries from alleged exposures to World Trade Center dust and debris at the World Trade Center site or the Fresh Kills landfill were commenced against the City and other entities involved in the post-September 11 rescue and recovery process. Plaintiffs include, among others, Department of Sanitation employees, firefighters, police officers, construction workers and building clean-up workers. The actions were consolidated in Federal District Court pursuant to the Air Transportation and System Stabilization Act, which grants exclusive Federal jurisdiction for all claims related to or resulting from the September 11 attack. A not-for-profit "captive" insurance company, WTC Captive was formed to cover claims against the City and its private contractors relating to debris removal work at the World Trade Center site and the Fresh Kills landfill. WTC Captive was funded by a grant from the Federal Emergency Management Agency in the amount of $\$ 999.9$ million. On June 10, 2010, the WTC Insurance Company announced that a settlement was reached with attorneys for the plaintiffs. On November 19, 2010, District Court Judge Hellerstein announced that more than the required $95 \%$ of plaintiffs agreed to the settlement, thus making it effective. Approximately $\$ 700$ million has been paid under the settlement, leaving residual funds of approximately $\$ 290$ million to insure and defend the City and its contractors against any new claims. Since the applicable statute of limitations runs from the time a person learns of his or her injury or should reasonably be aware of the injury, additional plaintiffs may bring lawsuits in the future for late emerging cancers, which could result in substantial damages. No assurance can be given that the remaining insurance will be sufficient to cover all liability that might arise from such claims.

In 1996, a class action was brought against the City Board of Education and the state under Title VII of the Civil Rights Act of 1964 alleging that the use by the Board of Education of two teacher certification examinations mandated by the state had a disparate impact on minority candidates. In 2006, the United States Court of Appeals for the Second Circuit dismissed the claims against the state. In December 2012, the District Court decided a controlling legal question against the City. On February 4, 2013, the Second Circuit affirmed the District Court's decision. The District Court has appointed a Special Master to oversee claimants’ individualized hearings both as to damages and eligibility for Board of Education employment. The hearings relate to members of the class that took the Liberal Arts and Science Test (LAST) from 1996 to 2004. Currently, 3,916 such individuals have submitted claim forms and may be eligible for damages. On June 5, 2015, the Court ruled that a second version of LAST, LAST-2, that was administered from 2004 to 2014, violated Title VII because it did not measure skills necessary to do the job. In August 2015, the Court found that the state's new teacher certification test, the Academic Literacy Skills Test (ALST), administered since Spring

2014, was not discriminatory and evaluated skills necessary to do the job. The plaintiffs could seek to expand the damages class with respect to LAST-2. If approved by the Court, the extent to which this would extend the class is not known at this time. The potential cost to the City is uncertain at this time but could be significant.

The Office of Inspector General of the United States Department of Health and Human Services (OIG) conducted a review of Medicaid Personal Care Services claims made by providers in the City from January 1, 2004 through December 31, 2006, and concluded that 18 out of 100 sampled claims by providers failed to comply with Federal and State requirements. The Medicaid Personal Care Services program in the City is administered by the City's Human Resources Administration. In its audit report issued in June 2009, the OIG, extrapolating from the case sample, estimated that the state improperly claimed $\$ 275.3$ million in federal Medicaid reimbursement during the audit period and recommended to the Center for Medicare and Medicaid Services (CMS) that it seek to recoup that amount from the state. To the City's knowledge, CMS has not taken any action to recover amounts from the State based on the findings in this audit, but no assurance can be given that it will not do so in the future.

Section 22 of Part B of Chapter 109 of the Laws of 2010 amended an earlier unconsolidated state law to set forth a process under which the State Department of Health may recover from a social services district, including the City, the amount of a Federal Medicaid disallowance or recovery that the State Commissioner of Health "determines was caused by a district's failure to properly administer, supervise or operate the Medicaid program." Such a determination would require a finding that the local agency had "violated a statute, regulation or clearly articulated written policy and that such violation was a direct cause of the Federal disallowance or recovery." It is not clear whether the recovery process set out in the amendment can be applied to a Federal disallowance against the state based upon a pre-existing audit; however, in the event that it does, and results in a final determination by the State Commissioner of Health against the City, such a determination could result in substantial liability for the City as a result of the audit.

On October 27, 2014, a lawsuit under the False Claims Act against the City and Computer Sciences Corporation, a contractor that participated in the submission of claims for Medicaid reimbursement, was unsealed in the United States District Court for the Southern District of New York. Plaintiffs, consisting of the Federal government and a relator, allege fraud in connection with the use of diagnosis and other codes in seeking Medicaid reimbursement in connection with the Early Intervention Program. Plaintiffs seek treble damages and penalties. If plaintiffs were to ultimately prevail the City could be subject to substantial liability.

In July 2014, disability rights advocate organizations and disabled individuals commenced a putative class action against the City in the United States District Court for the Southern District of New York. Plaintiffs allege, among other matters, that the City has not complied with certain requirements of the Americans with Disabilities Act with respect to the installation, configuration and maintenance of curb ramps on sidewalks and requirements for sidewalk walkways in general in Manhattan south of 14th Street. If plaintiffs were to prevail, the City could be subject to substantial compliance costs.

On December 21, 2015, the United States Attorney for the Southern District of New York (USAO-SDNY) sent a findings letter to the DOE indicating various areas in which he alleged that the City elementary schools were not accessible to students with disabilities in violation of the Americans with Disabilities Act of 1990. The City and USAO-SDNY are currently in discussion as to the matters raised in the letter. Alterations to City elementary schools to address concerns raised in the findings letter could result in substantial compliance costs to the City.

In late 2015, a putative class action was filed against the City and the New York City Taxi and Limousine Commission alleging numerous commercial claims in connection with the November 2013 and February 2014 auctions of wheelchair accessible taxi medallions. Plaintiffs allege that the New York City Taxi and Limousine Commission negligently posted false information about average medallion transfer prices in advance of the auction, falsely inducing plaintiffs to bid higher amounts for their medallions, as well as failed to inform prospective bidders that the New York City Taxi and Limousine Commission would allow black cars to utilize electronic apps to prearrange rides, which plaintiffs argue violates their street hail exclusivity. In June 2017, the City's motion for summary judgment was granted, due to plaintiffs' failure to file notices of claim with the Office of the City Comptroller. The plaintiffs have sought to appeal that ruling. On January 31, 2017 and on March 23, 2017, in State Supreme Court, Queens County, a second and a third putative class action were filed, alleging similar claims. The City intends to challenge these newly filed cases. If a class of plaintiffs who purchased medallions at the auctions were certified and were to prevail in any of the three described cases, damages of several hundred million dollars could be sought.

In an action filed in late November 2015, plaintiffs, which consist of owners of independent taxi medallions and an owneradvocacy group, challenged the constitutionality of the New York City Taxi and Limousine Commission's rule requiring taxi medallion owners to place wheelchair accessible taxis on the street by 2020. In August 2016, the City's motion for summary
judgment was granted. Plaintiffs filed a motion for reconsideration of that decision and that motion has been pending since November 2016. The potential cost to the City is uncertain at this time, but could be significant if plaintiffs were to prevail.

In an action filed in December 2015, plaintiffs that include owners of taxi medallions, taxi drivers, groups that finance taxi medallions, and taxi medallion interest groups, raised numerous constitutional claims challenging regulations on taxi medallions that allegedly are not applied to other for hire vehicle transportation that utilize apps for their service. In March 2017, the City was granted its motion to dismiss. The plaintiffs have appealed that ruling, and a briefing to the U.S. Court of Appeals for the Second Circuit is underway. If the plaintiffs were to ultimately prevail, the City could be subject to substantial liability.

In addition to the above claims and proceedings, numerous real estate tax certiorari proceedings alleging overvaluation, inequality, and illegality are pending against the City. Based on historical settlement activity, and including an estimated premium for inequality of assessment, the City estimates its potential future liability for outstanding certiorari proceedings to be $\$ 1,073$ million and $\$ 982$ million at June 30, 2017 and June 30, 2016 respectively. As reported in the government-wide financial statements.

## Landfill Closure and Postclosure Care Costs

The City's only active landfill after October 9, 1993 was the Fresh Kills landfill, which has been closed since 2002. Upon the landfill becoming inactive, the City is required by Federal and State law, and under Consent Order with the State Department of Environmental Conservation to complete the Final Closure Plan, and to provide postclosure care for a minimum period of 30 years following closure. The Final Closure Plan includes the construction of final cover, stormwater management, leachate mitigation and/or corrective measures, and landfill gas control systems. Postclosure care includes environmental monitoring, and the operation, maintenance, recordkeeping and reporting for the final closure systems.

The liability for these activities as of June 30, 2017, which equates to the total estimated current cost, is $\$ 1.51$ billion. There are no costs remaining to be recognized. Cost estimates are based on current data including contracts awarded by the City, contract bids, and engineering studies. These estimates are subject to adjustment for inflation and to account for any changes in landfill conditions, regulatory requirements, technologies, or cost estimates. For government-wide financial statements, the liability for closure and postclosure care is based on total estimated current cost. For fund financial statements, expenditures are recognized using the modified accrual basis of accounting when the related liability is incurred and the payment is due.

Resource Conservation and Recovery Act Subtitle D Part 258, which became effective April, 1997, requires financial assurance regarding closure and postclosure care. This assurance was most recently provided, on March 10, 2017, by the City's Chief Financial Officer placing in the Fresh Kills landfill operating record representations in satisfaction of the Local Government Financial Test. As of June 30, 2017, the financial assurance cost estimate for the Fresh Kills Landfill is $\$ 1.04$ billion.

The City has five inactive hazardous waste sites not covered by the EPA rule. The City has recorded the long-term liability for these postclosure care costs in the government-wide financial statements.

During Fiscal Year 2017, expenditures for landfill and inactive hazardous waste site closure and postclosure care costs totaled $\$ 51.1$ million.

The following represents the City's total landfill and hazardous waste sites liability which is recorded in the government-wide Statement of Net Position:

|  | Amount (in thousands) |
| :---: | :---: |
| Landfill | \$1,314,989 |
| Hazardous waste sites | 193,020 |
| Total landfill and hazardous waste sites liability | \$1,508,009 |

## Pollution Remediation Obligations

The pollution remediation obligations (PROs) at June 30, 2017 and June 30, 2016, summarized by obligating event and pollution type, respectively, are as follows:

| Obligating Event | Fiscal Year 2017 |  | Fiscal Year 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | Percentage | Amount | Percentage |
|  | (in thousands) |  | (in thousands) |  |
| Imminent endangerment | \$ - | -\% | \$ 111 | 0.1\% |
| Violation of Pollution prevention-related permit or license | - | - | 2,123 | 1.0 |
| Named by regulator as a potentially responsible party | 70,670 | 34.9 | 50,970 | 24.4 |
| Voluntary commencement . . . | 131,907 | 65.1 | 155,669 | 74.5 |
| Total | \$202,577 ${ }^{(1)}$ | 100.0\% | \$208,873 ${ }^{(1)}$ | 100.0\% |
| Pollution Type | Amount | Percentage | Amount | Percentage |
|  | (in thousands) |  | (in thousands) |  |
| Asbestos removal | \$ 86,417 | 42.7\% | \$ 97,802 | 46.8\% |
| Lead paint removal | 9,376 | 4.6 | 12,515 | 6.0 |
| Soil remediation | 47,097 | 23.2 | 39,075 | 18.7 |
| Water remediation | 57,872 | 28.6 | 57,784 | 27.7 |
| Other | 1,815 | 0.9 | 1,697 | 0.8 |
| Total | \$202,577 ${ }^{(1)}$ | 100.0\% | \$208,873 ${ }^{(1)}$ | 100.0\% |

${ }^{(1)}$ There are no expected recoveries to reduce the liability.
The PRO liability is derived from registered multi-year contracts which offsets cumulative expenditures (liquidated/unliquidated) against original encumbered contractual amounts. The potential for changes to existing PRO estimates is recognized due to such factors as: additional remediation work arising during the remediation of an existing pollution project; remediation activities may find unanticipated site conditions resulting in necessary modifications to work plans; changes in methodology during the course of a project may cause cost estimates to change, e.g., the new ambient air quality standard for lead considered a drastic change will trigger the adoption of new/revised technologies for compliance purposes; and changes in the quantity which is paid based on actual field measured quantity for unit price items measured in cubic meters, linear meters, etc. Consequently, changes to original estimates are processed as change orders. Further, regarding pollution remediation liabilities that are not yet recognized because they are not reasonably estimable, the Law Department relates that The City have approximately 14 cases involving hazardous substances, including spills from above and underground storage tanks, and other condemnation on, or caused by facilities on City-owned property. and there is also one case involving environmental review and land use. Due to the uncertainty of the legal proceedings we cannot estimate a future liability.

The City, in compliance with the State Department of Environmental Conservation Permit Number 2-6302-00007/00019 issued pursuant to 6 NYCRR Part 360, must provide financial assurance for the closure of the North Shore Marine Transfer Station. Such surety instrument must conform to the requirements of 6 NYCRR Part 260-1.12. The liability for closure as of June 30, 2017, which equates to the total current cost, is $\$ 987$ thousand. The cost estimate is based on current data and is representative of the cost that would be incurred by an independent party. The estimate is subject to adjustment for inflation and to account for changes in regulatory requirements or cost estimates. For government-wide financial statements, the liability for closure is based on total estimated current cost. For fund financial statements, expenditures are recognized using the modified accrual basis of accounting when the closure costs are incurred and the payment is due.

On Monday, October 29, 2012, Super Storm Sandy hit the Mid-Atlantic East Coast. The storm caused widespread damage to the coastal and other low lying areas of the City, and power failures in various parts of the City, including most of downtown Manhattan. On January 29, 2013, President Obama signed legislation providing for approximately $\$ 50.5$ billion in storm-related aid for the region affected by the storm. Although it is not possible for the City to quantify the full, long-term impact of the storm on the City and its economy, the current estimate of the direct costs to the City, NYCHH and NYCHA is approximately $\$ 10.4$ billion (comprised of approximately $\$ 2.1$ billion of expense funding and approximately $\$ 8.3$ billion of capital funding). Such direct costs represent funding for emergency response, debris removal, emergency protective measures, repair of damaged infrastructure and long-term hazard mitigation investments. In addition, the City is delivering Super Storm Sandy-related disaster recovery assistance services, benefiting impacted communities, businesses, homeowners and renters, which the City anticipates will be fully reimbursed by federal funds.

The Financial Plan assumes that the direct costs described above will largely be paid from non-City sources, primarily the federal government, and that the disaster assistance services costs described above will be fully reimbursed by federal funds. The City expects reimbursements to come from two separate federal sources of funding, FEMA and HUD. The maximum reimbursement rate from FEMA is $90 \%$ of total costs. Other funding sources may have larger local share percentages. The City expects to use $\$ 736$ million of Community Development Block Grant Disaster Recovery funding allocated by HUD to meet the local share requirements of the FEMA funding, as well as recovery work not funded by FEMA or other federal sources. This allocation would be available to fill gaps in such FEMA funding. As of early July 2017, the City, NYCHH and NYCHA have received $\$ 2.1$ billion in reimbursements from FEMA for the direct costs described above. In addition, HUD has made available over $\$ 4.2$ billion, of which over $\$ 1.7$ billion has been received through early July 2017 for the direct costs and disaster recovery assistance services described above. No assurance can be given that the City will be reimbursed for all of its costs or that such reimbursements will be received within the time periods assumed in the Financial Plan.

In June 2013, the City released a report, updated in April 2015, with the release of One New York: the Plan for a strong and just City, which analyzed the City's climate risks and outlined certain recommendations to address those risks (the "Report"). The Report is updated on an annual basis, with the last update released April 21, 2017. The Report, as updated, outlines a climate resiliency plan costing in excess of $\$ 20$ billion, covering over 1,000 individual projects citywide. The Report includes City and non-City assets and programs, and reflects both expense and capital funding from the City and from other sources. City capital funding for City infrastructure and coastal protection is included in the Ten Year Capital Strategy, and the City has secured significant federal relief for long-term recovery, largely from FEMA and HUD. However, there are currently approximately $\$ 5$ billion in unfunded climate resiliency proposals set forth in the Report, particularly for investments in the City's coastal protection plan and resiliency retrofits for buildings, which are not currently funded. These proposals would require increased federal or other funding and increased City capital or expense funding.

On March 2, 2010, the United States Environmental Protection Agency (EPA) listed the Gowanus Canal (the Canal), a waterway located in the City, as a Federal Superfund site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The EPA considers the City a potentially responsible party (PRP) under the CERCLA, based on contaminants from currently and formerly City-owned and operated properties, as well as from the City's combined sewer overflows (CSOs). On September 30, 2013, the EPA issued the Record of Decision (ROD) for the Canal, setting forth requirements for dredging contaminated sediment in the Canal and covering it with a cap as well as source control requirements. The ROD requires that two CSO retention tanks be constructed as part of the source control component of the remedy. The EPA estimates that the costs of the tanks will be approximately $\$ 85$ million and the overall cleanup costs (to be allocated among potentially responsible parties) will be $\$ 506$ million. The City anticipates that the actual cleanup costs could substantially exceed the EPA's cost estimate.

On May 28, 2014, the EPA issued a unilateral administrative order requiring the City to design major components of the remedy for the Canal, including the CSO retention tanks, remediation of the First Street basin (a currently filled-in portion of the Canal), and storm water controls. As required under the Unilateral Order, the City submitted its siting recommendations for the CSO tanks to the EPA on June 30, 2015. As set forth in a consent order which was fully executed on June 9, 2016, the EPA agrees with the City's preferred location for one of the tanks and, with respect to the other tank, the EPA has directed the City to site the tank at the City's preferred location subject to certain milestones. In addition, the City is participating in an ongoing arbitration process with approximately 20 other parties to determine each party's share of liability for the design of the in-canal (dredging and capping) portion of the remedy.

On September 27, 2010, the EPA listed Newtown Creek, the waterway on the border between Brooklyn and Queens, New York, as a Superfund site. On April 6, 2010, the EPA notified the City that the EPA considers the City a PRP under the CERCLA for hazardous substances in Newtown Creek. In its Newtown Creek PRP notice letter, the EPA identified historical City activities that filled former wetlands and low lying areas in and around Newtown Creek and releases from formerly City-owned and operated facilities, including municipal incinerators, as well as discharges from sewers and CSO outfalls, as potential sources of hazardous substances in Newtown Creek. In July, 2011, the City entered into an Administrative Settlement Agreement and Order on Consent with the EPA and five other PRPs to conduct an investigation of conditions in Newtown Creek and evaluate feasible remedies. The investigation and feasibility study is expected to take approximately seven years. Under the AOC, the City is required to establish and maintain financial security in the amount of $\$ 25$ million for the benefit of the EPA in order to secure the full and final completion of the work required to be performed under the AOC by the City and the Newtown Creek Group, the group of five companies that are respondents to the AOC, in addition to the City. The City has made its demonstration of financial assurance pursuant to the Resource Conservation and Recovery act, 40 CFR section 258.74(f). The City's share will be determined in a future allocation proceeding. The settlement does not cover any remedy that may ultimately be chosen by the EPA to address the contamination identified as a result of the investigation and evaluation.

On May 12, 2014, the EPA listed the former Wolff-Alport Chemical Company site (Wolff-Alport Site) in Ridgewood, Queens, as a Superfund site. The designation is based on radioactive contamination resulting from the operations of the Wolff-Alport Chemical Company during the 1920s to 1950s, which, among other things, disposed of radioactive material on-site and via the sewer system. In 2013, the EPA, in cooperation with City and State agencies, completed a response action to implement certain interim remedial measures at the Wolff-Alport Site to address the site's short-term public health risks. The Superfund process will include a remedial investigation that will assess, among other things, impacts to the sewer system from operations at the Wolff-Alport Site. The remedial investigation was recently commenced.

The National Park Service (NPS) is undertaking a CERCLA removal action at Great Kills Park on Staten Island to address radioactive contamination that has been detected at the site. Great Kills Park was owned by the City until roughly 1972, when it was transferred to NPS for inclusion in the Gateway National Recreation Area. While owned by the City, the site was used as a sanitary landfill, and the park was also expanded using urban fill. NPS believes that the radioactive contamination is the result of City activities and that the City is therefore liable for the investigation and remediation under the CERCLA. The City has negotiated a settlement with NPS to address a remedial investigation and feasibility study. No other PRPs have been identified at this time.

Under the CERCLA, a responsible party may be held responsible for monies expended for response actions at a Superfund site, including investigative, planning, removal, remedial and the EPA enforcement actions. A responsible party may also be ordered by the EPA to take response actions itself. Responsible parties include, among others, past or current owners or operators of a facility from which there is a release of a hazardous substance that causes the incurrence of response costs. The nature, extent, and cost of response actions at either the Canal, Newtown Creek, the Wolff-Alport site or Great Kills Park, the contribution, if any, of discharges from the City's sewer system or other municipal operations, and the extent of the City's liability, if any, for monies expended for such response actions, will likely not be determined for several years and could be material.

## 6. Interfund Receivables, Payables, and Transfers

At June 30, 2017 and 2016, City and discretely presented component units receivable and payable balances and interfund transfers were as follows:

## Governmental activities:

Due from/to other funds:

| Receivable Fund | Payable Fund | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| General Fund |  | (in thousands) |  |
|  | Capital Projects Fund | \$3,531,798 ${ }^{(1)}$ | \$3,167,180 |
|  | TDC-General Fund | - | 277 |
| Capital Projects Fund | TFA-Debt Service | 78,222 | 63,405 |
|  | TFA-Capital Projects Fund. | 1,050,020 | 6,321 |
|  | HYIC-Capital Projects Fund | 861 | 347 |
| HYDC-Capital Projects Fund | HYIC-Capital Projects Fund | 44 | 45 |
| HYIC-Debt Service Fund | HYIC-Capital Projects Fund | 214 | 94 |
| Total due from/to other funds |  | \$4,661,159 | \$3,237,669 |

## Component Units:

Due from/to City and Component Units:

| Receivable Entity | Payable Entity | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| City-General Fund |  | (in thousands) |  |
|  | Component units-HDC. | \$1,234,722 | \$1,022,190 |
|  | HHC. | 617,154 | 504,902 |
|  | Less:allowance for uncollectable amounts | $(61,690)$ | $(371,480)$ |
|  |  | 1,790,186 | 1,155,612 |
| City-Capital Projects Fund | Component units-Water Authority | 525,138 | 498,330 |
|  | EDC. | 139,146 | 127,243 |
|  |  | 664,284 | 625,573 |
| Total due from Component Units |  | \$2,454,470 | \$1,781,185 |
| Component Unit—Water Board | City-General Fund. | \$ 34,515 | \$ 194,362 |
| Component Unit-BPL | City-General Fund | 1,711 | 717 |
| Component Unit-QBPL | City-General Fund | 21,405 | 22,349 |
| Total due to Component Units |  | \$ 57,631 | \$ 217,428 |

${ }^{(1)}$ Net of eliminations within the same fund type.
Note: During Fiscal Years 2017 and 2016, the Capital Projects Fund reimbursed the General Fund for expenditures made on its behalf.

The outstanding balances between funds are the result of the time lag between the dates that the interfund goods and services are provided, the date the transactions are recorded in the accounting system and the date payments between funds are made. All interfund balances are expected to be settled during the subsequent year.

## Governmental activities:

Interfund transfers ${ }^{(1)}$

| Fiscal Year 2017 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund |  | Capital Projects Fund | Debt Service Fund | $\begin{aligned} & \text { Nonmajor } \\ & \text { Governmental } \\ & \text { Funds } \end{aligned}$ | Adjustments/ Eliminations | Total |
| (in thousands) |  |  |  |  |  |  |
| \$ | \$ | - | \$3,500,830 | \$ 2,338,018 | \$ | \$ 5,838,848 |
| $(3,500,830)$ |  | - | - | - | - | $(3,500,830)$ |
| - |  | - | - | $(4,721,999)$ | - | $(4,721,999)$ |
| $(2,635,269)$ |  | - | - | $(3,861)$ | 297,251 | $(2,341,879)$ |
| - |  | 4,721,999 | - | 4,804 | - | 4,726,803 |
| - |  | - | - | (943) | - | (943) |
| \$(6,136,099) | \$ | 4,721,999 | \$3,500,830 | \$(2,383,981) | \$ 297,251 | \$ |


| Fiscal Year 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund | Capital Projects Fund |  | Debt Service Fund | Nonmajor Governmental Funds | Adjustments/ Eliminations |  |  |
|  | (in thousands) |  |  |  |  |  |  |
| \$ | \$ | \$ - | \$3,619,487 | \$ 2,052,943 | \$ | \$ 5,672,430 |  |
| $(3,619,487)$ |  |  | - | - | - |  | 487) |
| - |  | - | - | $(4,836,353)$ | - |  | 353) |
| $(2,233,233)$ |  | - | - | $(23,358)$ | 180,290 |  | 301) |
| - | 4,836,353 |  | - | 3,794 | - |  | 147 |
|  | - |  | - | 19,564 | - |  | 564 |
| \$(5,852,720) | \$ | \$ 4,836,353 | $\underline{\text { \$3,619,487 }}$ | $\underline{\text { \$(2,783,410) }}$ | \$ 180,290 | \$ |  |

[^16]
## 7. Tax Abatements

| NYC Tax Abatement <br> Disclosure as required by <br> Statement No. 77 of the <br> Governmental Accounting <br> Standards Board | Programs Administered brogram NYC Housing Preservation \& Development (HPD) |
| :--- | :--- | :--- |

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Programs Administered by NYC Housing Preservation \& Development (HPD)

| Division of Alternative Management Programs <br> (DAMP) | Urban Development Action Area Programs <br> (UDAAP) | Low Income Housing Program 420-C |
| :--- | :--- | :--- |

B-B-113

| NYC Tax Abatement Disclosure as required by Statement No. 77 of the Governmental Accounting Standards Board | Programs Administered by NYC Department of Finance (DOF) |  |
| :---: | :---: | :---: |
|  | The Commercial Revitalization (CRP) and Commercial Expansion (CEP) Programs | Industrial and Commercial Incentive Program (ICIP) and Industrial and Commercial Abatement Program (ICAP) |
| 1) Purpose of Program | CRP provides a real property tax reduction in lower Manhattan by encouraging owners to invest in building improvements for offices, retail or elementary or secondary schools. The CEP provides a real property tax reduction for space that has been leased for commercial offices, industrial/manufacturing spaces, retail or elementary or secondary schools in the outer boroughs or Manhattan above 96th street and the Garment District. | ICAP replaced ICIP in 2008. Both programs encourage economic development for construction and rehabilitation of commercial, industrial or mixed-use structures. |
| 2) Tax being abated. | Real Property Tax | Real Property Tax |
| 3) Authority under which abatement agreements are entered into. | The CRP is governed by the NYS RPTL: Title 4; the CEP is governed by the NYS RPTL: Title 4a. | NYS RPTL: Article 4, Title 2F, Section 489; aaaaaa-kkkkkk the NYC Administrative Code: Title 11, Chapter 2, Subchapter 2, Part 5. |
| 4) Criteria to be eligible to receive abatement. | Both programs require commercial tenant occupancy in commercial offices and that the space leased out be located in a non-residential or mixed-use building. Both programs also have minimum requirements regarding expenditures for tenant improvement per square foot. In addition, the CEP requires a minimum aggregate floor area of 25,000 square feet. | The programs require industrial construction work where, after completion, at least 75 percent of the total net square footage is used or available for manufacturing activities. The buildings must also be located in an allowable zone within the City, which varies depending on whether the project is for a commercial new construction, a commercial renovation construction, or an industrial construction. Depending on the property's taxable assessed value, applicants must meet a minimum required expenditure amount in order to be eligible in the tax year, with a taxable status date immediately preceding the issuance of the first building permit or, if no permit is required, the start of construction. |
| 5) How recipients' taxes are reduced. | Through a reduction of the property's assessed value. | As a credit to the amount of taxes owed. |
| 6) How amount of abatement is determined. | The granted abatement is realized from a calculation formula base abatement (the lower of the tax liability/building sq. ft. or $\$ 2.50$ per sq. ft.) multiplied by square footage multiplied by abatement percentage. | The base abatement amount year is the amount that the post-completion tax liability exceeds $115 \%$ of the initial tax liability for each type of abatement, except for the additional industrial abatement. The calculated base abatement is then subjected to a corresponding timetable. |
| 7) Provisions for recapturing abated taxes. | N/A | N/A |
| 8) Types of commitments made by the City other than to reduce taxes. | N/A | N/A |
| 9) Gross dollar amount, on accrual basis, by which the City's tax revenues were reduced as a result of abatement agreement. | $\frac{2017}{}$ (in thousands) $\underline{2016}$ <br> $\$ 18,400$ $\$ 18,500$  | $\underline{2017}$ (in thousands) $\underline{2016}$ <br> $\$ 740,600$  $\$ 709,400$ |

## Programs Administered by NYC Department of Finance (DOF)

| Relocation and Assistance Programs-(REAP), Lower Manhattan Relocation and Employment Assistance Program for Eligible Benefits (LMREAP-EB) and Lower Manhattan Relocation and Employment Assistance Program for Special Eligible Benefits (LMREAP-SEB) | Sports Arena Used by the NHL and NBA | Major Capital Improvement (MCI) Program |
| :---: | :---: | :---: |
| Offers business income tax credits for relocating jobs outside of the City to designated locations within the City. | Ensure the viability of a major league sports facility in the City. | To help compensate landlords of rent-regulated buildings for economic losses resulting from the lengthening of the period for amortizing major capital improvement costs. |
| The credits may be taken against the City's general corporation tax, banking corporation tax, unincorporated business tax, and/or utility tax. | Real Property Tax | Real Property Tax |
| NYC Administrative Code: Title 11, Chapter 6, Subchapter 3, Part 4, Section 11-643.9, 11-1105.211-1105.3 | NYS RPTL: Section 429. | NYS RTPL Laws of 2015, Chapter 20 (Part A, §65) |
| For REAP, LMREAP-EB, and LMREAP-SEB, eligible businesses must have conducted substantial business operations outside of the City for at least 24 consecutive months before relocating; most retail and hotel services do not qualify. The eligibility requirements are that the premises must be nonresidential; have been improved by construction or renovation; the lease term must be at least three years; and expenditures for improvements must be more than $\$ 25$ per square foot. For LMREAP-SEB, eligible businesses must move at least 250 employees or increase its payroll by $25 \%$. | For Madison Square Garden | The benefits are provided to building owners of rent regulated class 2 properties (residential property with more than 3 units including cooperatives and condominiums). |
| As a credit to the amount of taxes owed. | Through a reduction of the property's assessed value. | As a credit to the amount of taxes owed. |
| For REAP, LMREAP-EB and LMREAP-SEB, eligible business receives a $\$ 3,000$ annual credit, per eligible employee, up to 12 years. REAP allows an additional credit of $\$ 1,000$ per share for relocating to parts of the eligible area that are not revitalization areas. | $100 \%$ reduction of the property tax. | The abatement equals $50 \%$ of the economic loss attributable to the extended amortization period. The economic loss is determined by multiplying the approved cost of the MCI by a fraction. The numerator is the increase in months in the new amortization period; the denominator is the total number of months in the new amortization period. |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| $\underline{2017}$ (in thousands) $\underline{2016}$ | $\frac{2017}{(\text { in thousands) }} \frac{2016}{}$ | $\underline{2017}$ (in thousands) $\underline{2016}$ |
| \$28,000 \$22,000 | \$42,000 \$41,500 | \$7,700 \$- |


| NYC Tax Abatement Disclosure as required by | Program Administered by NYC Department of Buildings (DOB) | Programs Administered by NYC Industrial Development Agency (IDA) | Program Administered by Build NYC Resource Corporation ${ }^{3}$ |
| :---: | :---: | :---: | :---: |
| Governmental Accounting Standards Board | Solar Electric Generating System (SEGS) Abatement Program | Commercial Growth and Industrial Incentive Programs | Build NYC Tax Abatement Program |
| 1) Purpose of Program | The program provides tax benefits to properties that use solar power. This process allows for a reliable alternative energy source to be available during peak hours and power outages. Additionally, less energy being produced by traditional combustion of fossil fuels means less air pollution and cleaner air, and solar energy does not emit greenhouse gas emissions. | Designed to encourage economic development in the City. The Commercial Growth ${ }^{1}$ and Industrial Incentive ${ }^{2}$ programs retain, expand, and attract commercial and industrial businesses, and the related economic benefits and job creation and retention associated with them. | As a conduit bond issuer, the primary goal is to facilitate access to private activity tax-exempt bond financing for qualified projects. |
| 2) Tax being abated. | Real Property Tax | a) Real Property Tax (via a PILOT); <br> b) State and Local Sales Tax (ST); and <br> c) Mortgage Recording Tax (MRT). | Mortgage Recording Tax (MRT) |
| 3) Authority under which abatement agreements are entered into. | RPTL: Title 4C (499 aaaa - 499 gggg) parcel. | Industrial Development Act of 1969 as governed by Article 18: A of the General Municipal Law ${ }^{3}$. | Section 411 of the New York Not-forprofit Law. |
| 4) Criteria to be eligible to receive abatement. | The abatement is applied to the property for a four-year period starting on July 1, following DOB approval. Class 1,2, and 4 properties are eligible; however, if you receive ICAP, 421-a, $421-\mathrm{b}, 421-\mathrm{g}$, or pay payments in-lieu-of-tax (PILOTs), your property is NOT eligible for the Solar Electric Generating System Tax Abatement. | All applicants must satisfy eligibility requirements and must demonstrate a need for assistance. Applicants are selected based on an analysis of the economic benefit of the proposed project in compliance with the uniform Tax Exemption Policy of IDA. Stores that benefit from the Fresh Project Program must be located in an eligible area. | The projects must have been undertaken by Build NYC, as mortgagee, who records a mortgage, for the creation or retention of jobs. Build NYC assists qualified projects in obtaining taxexempt bond financing as a conduit bond issuer. |
| 5) How recipients' taxes are reduced | Through both a reduction of the property's assessed value and as a credit to the amount of taxes owed. | The projects are tax exempt but businesses receiving such benefits typically make PILOTs. PILOT payments are a stepped-down percentage of full real estate tax rates. | Build NYC has authorization to exempt MRT due upon the recording of a mortgage associated with Build NYC sponsored bond transactions. |
| 6) How amount of abatement is determined. | Depending on the date the system was placed in service, the benefit is the lesser of $2.5 \%$ $8.75 \%$ of the installation costs limited to the property tax for the year, or $\$ 62,000$. | a) PILOT tax abatements are typically granted for a 20 year period followed by a 5 year "phase in" period during which the tax rates paid by the PILOT recipient are increased each year by $20 \%$ of the abated amount until the full rate is reached in year 25 ; <br> b) The MRT abatement is a singular benefit received at closing only for projects that are financed, and <br> c) The ST abatements apply for eligible purchases to be used at project facilities. The Yankee and Mets stadium projects coincide with the underlying debt service related to the construction of the stadiums and the length of the abatements cover a 36-40 year period. | One hundred percent reduction of the MRT. |
| 7) Provisions for recapturing abated taxes. | N/A | Program participants are required to adhere to various lease provisions as a prerequisite to receive abatement benefits. The lease provisions authorize benefit recapture in the case of non-compliance. | A change in the utilization of the facility that compromises the tax exempt status of the underlying tax exempt debt, the sale of the property, absent specific preauthorization, that includes the maintenance of the original tax exempt utilization of the property and/or the bankruptcy or cessation of operations of the facility/entity. Projects are subject to a benefit recapture period of ten years. |
| 8) Types of commitments made by the City other than to reduce taxes. | N/A | N/A | N/A |
| 9) Gross dollar amount, on accrual basis, by which the City's tax revenues were reduced as a result of abatement agreement. | $\underline{2017} \text { (in thousands) } \underline{2016}$ | $\frac{2017}{\text { (in thousands) }} \frac{2016}{}$ | $\underline{2017}_{\text {(in thousands) }} \frac{2016}{}$ |
|  | \$7,000 \$4,600 | Commercial   <br> a) Prowth Programs:   <br> a) PLOT $\$ 51,000$ $\$ 74,600$ <br> b) ST $\$ 3,600$ $\$ 5,000$ <br> Industrial Incentive Programs:   <br> a) PILOT $\$ 29,500$ $\$ 28,600$ <br> b) ST $\$ 1,800$ $\$ 2,000$ <br> c) MRT $\$ 568$ $\$ 8,800$ | \$1,600 \$11,700 |


| NYC Tax Abatement <br> Disclosure as required by Statement No. 77 of the Governmental Accounting Standards Board | Programs Administered by the State of New York |  |
| :---: | :---: | :---: |
|  | Battery Park City Authority (The Authority) | Urban Development Corporation (currently known as Empire State Development Corporation [ESDC]) |
| 1) Purpose of Program | The Authority was created for the benefit of the people of the State of New York, the county of New York, and the City, and is a public purpose, regarded as performing a governmental function in the exercise of the powers conferred upon it, and shall be required to pay no taxes upon any of the properties acquired by it or under its jurisdiction or control or supervision or upon its activities. | The acquisition, construction, reconstruction, rehabilitation, or improvement of such industrial, manufacturing, and commercial facilities, and of such cultural, educational, and recreational facilities including but not limited to facilities identified as projects are public uses and public purposes for which public money be loaned and private property may be acquired and tax exemption granted, and that the powers and duties of the Urban Development Corporation as hereinafter prescribed are necessary and proper for the purpose of achieving the ends here recited. |
| 2) Tax being abated. | Real Property Tax | Real Property Tax |
| 3) Authority under which abatement agreements are entered into. | Public Authority Law: Section 1981. | McKinney's Unconsolidated Laws of NY: Section 6252. |
| 4) Gross dollar amount, on accrual basis, by which the | $\underline{2017}$ (in thousands) $\underline{2016}$ | $\underline{2017} \quad \text { (in thousands) } \quad \underline{2016}$ |
| were reduced as a result of abatement agreement. | \$198,500 \$185,100 | \$317,700 \$315,700 |

[^17]
## 8. Superstorm Sandy

## Government Assistance

On October 29, 2012, Superstorm Sandy made landfall in the City. The storm surge and high winds caused significant damage in the City, as well as other states and cities along the U.S. mid-Atlantic seaboard. The City incurred costs for emergency response and storm related damages to City buildings and other assets. The City is eligible for recovery funding primarily through two federal programs: Federal Emergency Management Agency - Public Assistance (FEMA-PA) and the U.S. Department of Housing and Urban Development's Community Development Block Grant Disaster Recovery program (CDBG-DR).
As of June 30, 2017, the estimated value of emergency response and storm related damages, including mitigation, for FEMA and other smaller related federal programs was approximately $\$ 10.4$ billion-this includes $\$ 8.3$ billion for capital construction and $\$ 2.1$ billion for debris removal and emergency response activities. To the extent that eligible Superstorm Sandy related costs were incurred as of June 30, 2017, the FEMA reimbursement has been received or accrued as receivable in Fiscal Year 2017.

The City has also been awarded more than $\$ 4.2$ billion of CDBG-DR funding. The major portion of these funds is being used for housing recovery programs. The block grant also funds small business assistance, costs related to repairing infrastructure and delivering city services, and resiliency investments such coastal protection measures.

## E. Other Information

## 1. Audit Responsibility

In Fiscal Years 2017 and 2016, respectively, the separately administered organizations included in the financial statements of the City audited by auditors other than Grant Thornton, LLP are TSASC, Inc., New York City School Construction Authority, New York City Health and Hospitals Corporation, New York City Housing Development Corporation, New York City Industrial Development Agency, New York City Economic Development Corporation, New York City Business Assistance Corporation, Business Relocation Assistance Corporation, Brooklyn Navy Yard Development Corporation, The City of New York Deferred Compensation Plan, WTC Captive Insurance Company, Inc., New York City Educational Construction Fund, Sales Tax Asset Receivable Corporation, Fiscal Year 2005 Securitization Corporation, NYCTL Trusts, New York City Housing Authority, Hudson Yards Infrastructure Corporation, Hudson Yards Development Corporation, Brooklyn Bridge Park Corporation, The Trust for Governors Island, Build NYC, New York City Land Development Corporation, New York City Neighborhood Capital Corporation, New York City Transitional Finance Authority, New York City Technology Development Corporation, New York City Water and Sewer System, the Brooklyn Public Library, the Queens Borough Public Library and Affiliates, New York City School Support Services, New York City Employees' Retirement System, Teachers' Retirement System of The City of New York, New York City Board of Education Retirement System, New York City Police Pension Funds, New York City Fire Pension Funds, and the New York City Other Postemployment Benefits Plan.
Fund-based

## 2. Subsequent Events

The following events occurred subsequent to June 30, 2017:
Water Authority: On July 11, 2017, the New York City Municipal Water Finance Authority issued \$162,405,000 of Fiscal Series 2018 AA Second General Resolution Bonds to refund a portion of its outstanding bonds at lower interest rates.

On October 12, 2017 the New York City Municipal Water Finance Authority issued $\$ 383,975,000$ of Fiscal Series 2018 BB Bonds for capital purposes and to convert a portion of its outstanding variable rate bonds to fixed rate.

TFA Debt: $\quad$ On July 20, 2017, the New York City Transitional Finance Authority issued $\$ 1,007,545,000$ of Fiscal 2018 Series S Building Aid Revenue Bonds to refund a portion of its outstanding bonds at lower interest rates.
On August 17, 2017, the New York City Transitional Finance Authority issued \$1,350,000,000 of Fiscal 2018 Series A Future Tax Secured bonds for capital purposes and reoffered \$161,075,500 of Fiscal 2018 Series 1 Future Tax Secured Bonds to convert a portion of its outstanding variable rate bonds to fixed rate.
On October 26, 2017, the New York City Transitional Finance Authority issued \$990,000,000 of Fiscal 2018 Series B Future Tax Secured Bonds for capital purposes.
NYCTLT 2017-A: On July 27, 2017, NYCTLT 2017-A issued Tax Lien Collateralized Bonds, Series 2017-A of \$68,017,000 to fund the purchase of certain liens from the City.

## Interest Rate

Exchange Agreements:
City Debt: $\quad$ On August 10, 2017, the City of New York issued $\$ 898,965,000$ of Fiscal 2018 Series A General Obligation bonds to refund a portion of its outstanding bonds at lower interest rates and reoffered $\$ 59,970,000$ of Fiscal 2002 Subseries A-10 to convert a portion of its outstanding variable rate bonds to fixed rate.

On October 3, 2017, the City of New York issued $\$ 1,000,000,000$ of Fiscal 2018 Series B General Obligation bonds for capital purposes and $\$ 307,305,000$ of Fiscal 2018 Series 1 General Obligation bonds to convert a portion of its outstanding variable rate bonds to fixed rate.

## 3. Other Employee Benefit Trust Funds

Deferred Compensation Plans For Employees of The City of New York and Related Agencies and Instrumentalities (DCP) and the New York City Employee Individual Retirement Account (NYCE IRA)

DCP offers employees of The City and Related Agencies and Instrumentalities two defined contribution plans in accordance with Internal Revenue Code Sections 457 and $401(\mathrm{k})$. DCP permits employees to defer a portion of their salary on either a pre-tax (traditional) or after-tax (Roth) basis until future years. Funds may not be withdrawn until termination, retirement, death, Boardapproved unforeseen emergency or hardship (as defined by the Internal Revenue Code) or, if still working for the City, upon attainment of age $701 / 2$ in the 457 Plan or upon age $591 / 2$ for the $401(\mathrm{k})$. A 401(a) defined contribution plan is available to certain employees of the Lieutenant's Benevolent Association and the Captains Endowment Association of The City of New York Police Department.

The NYCE IRA is a deemed Individual Retirement Account (IRA) in accordance with Internal Revenue Code Section 408(q) and is available as both a traditional and Roth IRA to those employees eligible to participate in the 457 Plan and $401(\mathrm{k})$ Plan and their spouses along with former employees and their spouses. Funds may be withdrawn from the NYCE IRA at any time, subject to an early withdrawal penalty.

Amounts maintained under a deferred compensation plan and an IRA by a state or local government are held in trusts (or in a custodial accounts) for the exclusive benefit of participants and their beneficiaries. The DCP plans and IRA are presented together as an Other Employee Benefit Trust Fund in the City's financial statements.

Participants in DCP or NYCE IRA can choose among seven investment options, or one of twelve pre-arranged portfolios consisting of varying percentages of those investment options. Participants can also invest a portion of their assets in a self-directed brokerage option.

## The New York City Other Postemployment Benefits Plan (OPEB Plan)

The OPEB Plan is a fiduciary component unit of the City and is composed of: (1) the New York City Retiree Health Benefits Trust (RHBT) which is used to receive, hold, and disburse assets accumulated to pay for some of the OPEB provided by the City to its retired employees, and (2) OPEB paid for directly by the City out of its general resources rather than through RHBT. RHBT was established for the exclusive benefit of the City's retired employees and their eligible spouses and dependents, to fund some of the OPEB provided in accordance with the City's various collective bargaining agreements and the City's Administrative Code. Amounts contributed to RHBT by the City are held in an irrevocable trust and may not be used for any other purpose than to fund the costs of health and welfare benefits of its eligible participants. Consequently, the OPEB Plan is presented as an Other Employee Benefit Trust Fund in the City's financial statements. The separate annual financial statements of the OPEB Plan are available at: Office of the Comptroller, Bureau of Accountancy-Room 200 South, 1 Centre Street, New York, New York 10007, or at www.comptroller.nyc.gov.

## Summary of Significant Accounting Policies:

Basis of Accounting. The measurement focus of the OPEB Plan is on the flow of economic resources. This focus emphasizes the determination of changes in the OPEB Plan's net position. With this measurement focus, all assets and liabilities associated with the operation of this fiduciary fund are included on the Statement of Fiduciary Net Position. This fund uses the accrual basis of accounting whereby contributions from the employer are recognized when due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plans.

Method Used to Value Investments. Investments are reported on the Statement of Fiduciary Net Position at fair value based on quoted market prices.

## 4. Other Postemployment Benefits

Program Description. Postemployment benefits other than pensions (OPEB) provided to eligible retirees of the City and their eligible beneficiaries and dependents (hereafter referred to collectively as "Retiree Participants") include: health insurance, Medicare Part B Premium reimbursements and welfare fund contributions. OPEB are funded by the OPEB Plan, a single employer plan.

Funding Policy. The Administrative Code of The City of New York (ACNY) defines OPEB stemming from the City's various collective bargaining agreements. The City is not required by law or contractual agreement to provide funding for the OPEB other than the pay-as-you-go (PAYG) amounts necessary to provide current benefits to Retiree Participants and eligible beneficiaries/dependents. For the fiscal year ended June 30, 2017, the City paid $\$ 3.0$ billion on behalf of the Program. Based on current practice (the Substantive Plan which is derived from ACNY), the City pays the full cost of basic coverage for non-Medicare-eligible and Medicare-eligible Retiree Participants. The costs of these benchmark plans are reflected in the actuarial valuations by using age and gender adjusted premium amounts. Retiree Participants who opt for other basic or enhanced coverage must contribute $100 \%$ of the incremental costs above the premiums for the benchmark plans. The City also reimburses covered retirees and eligible spouses $100 \%$ of the Medicare Part B Premium rate applicable to a given year and there is no Retiree Participant contribution to the Welfare Funds. The City pays per capita contributions to the Welfare Funds, the amounts of which are based on negotiated contract provisions.

|  | Number of Participants |  |
| :--- | :---: | :---: |
|  | FY 2017 | FY2016 |
| Inactive plan members or <br> beneficiaries currently <br> receiving benefits | 229,725 | 225,989 |
| Inactive plan members <br> entitled to but not yet <br> receiving benefits | 15,372 | 14,860 |
| Active plan members | $\underline{287,699}$ | 281,734 |
| Active/Inactive plan <br> members who may <br> become eligible to receive <br> benefits <br> Total | $\underline{\underline{\mathbf{5 5 4 , 0 2 8}}}$ | $\underline{\underline{\mathbf{5 4 4 , 1 2 0}}}$ |

Net OPEB Liability. The Entry Age Actuarial Cost Method used in the current OPEB actuarial valuation is unchanged from the prior OPEB actuarial valuation.

Under this method, as used in the Fiscal Year 2017 OPEB valuation, the Actuarial Present Value (APV) of Benefits (APVB) of each individual included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The employer portion of this APVB allocated to a valuation year is the Employer Normal Cost. The portion of this APVB not provided for at a valuation date by the APV of Future Employer Normal Costs is the Total OPEB Liability.

The excess, if any, of the Total OPEB Liability over the Plan Fiduciary Net Position is the Net OPEB Liability. Under this method, actuarial gains (losses), as they occur, reduce (increase) the Net OPEB Liability and are explicitly identified and amortized in the annual expense.

Increases (decreases) in liabilities due to benefit changes, actuarial assumption changes and/or actuarial method changes are also explicitly identified and amortized in the annual expense.

Changes in Net OPEB Liability. Changes in the City's net OPEB liability for the Fiscal Years ended June 30, 2017 and June 30, 2016 are as follows:

## 1. Balances at June 30, 2015

| Total OPEB Liability (a) | Plan Fiduciary Net Position (b) | Net OPEB Liability (a) - (b) |
| :---: | :---: | :---: |
| \$ 93,153,427,270 | \$ 3,396,523,538 | \$ 89,756,903,732 |
| 5,113,884,783 | - | 5,113,884,783 |
| 2,669,589,440 | - | 2,669,589,440 |
| $(120,159,155)$ | - | $(120,159,155)$ |
| - | 2,897,668,434 | $(2,897,668,434)$ |
| - | - | - |
| - | 20,565,435 | $(20,565,435)$ |
| (2,278,055,136) | (2,278,055,136) | - |
| - | $(40,000)$ | 40,000 |
| - | $(331,067)$ | 331,067 |
| 5,385,259,932 | 639,807,666 | 4,745,452,266 |
| 98,538,687,202 | 4,036,331,204 | 94,502,355,998 |

4. Changes for the Year:
a. Service Cost

| $4,522,135,121$ | - |
| ---: | ---: |
| $2,899,170,607$ | - |
| $520,672,737$ | - |
| $(10,978,714,816)$ | - |
| - | $3,021,551,454$ |
| - | - |
| - | $21,515,588$ |
| $(2,425,375,364)$ | $(2,425,375,364)$ |
| - | $(41,100)$ |
| - | $(78,516)$ |
|  | $\mathbf{6 1 7 , 5 7 2 , 0 6 2}$ |


| $4,522,135,121$ |
| ---: |
| $2,899,170,607$ |
| $520,672,737$ |
| $(10,978,714,816)$ |
| $(3,021,551,454)$ |
| - |
| $(21,515,588)$ |
| - |
| 41,100 |
| 78,516 |
| $\mathbf{( 6 , 0 7 9 , 6 8 3 , 7 7 7 )}$ |
| $\mathbf{8 8 , 4 2 2 , 6 7 2 , 2 2 1}$ |

5. Balances at June 30, 2017
$\xlongequal{\$ \mathbf{9 3 , 0 7 6}, 575,487}$
$\$ \quad$ 4,653,903,266
\$ 88,422,672,221
6. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate
a. $1 \%$ Decrease
\$105,410,486,226
b. $1 \%$ Increase
\$ 75,152,394,719
7. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate
a. $1 \%$ Decrease
\$ 72,229,262,042
b. $1 \%$ Increase
\$111,502,027,867
OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources. OPEB expense recognized by the City for the Fiscal Years ended June 30, 2017 and June 30, 2016 are $\$ 5.8$ billion and $\$ 7.6$ billion, respectively.

Deferred outflows of resources and deferred inflows of resources by source reported by the City at June 30, 2017 and June 30, 2016 are as follows:

|  | Fiscal Year 2016 |  |
| :---: | :---: | :---: |
|  | Deferred Outflows of Resources | Deferred Inflows of Resources |
| Differences between Expected and Actual Experience | \$ - | \$102,531,451 |
| Changes of Assumptions | - | - |
| Net Difference between Projected and Actual Earnings on OPEB Plan Investments | 102,045,202 | - |
| Total | \$102,045,202 | \$102,531,451 |
|  |  | 2017 |
|  | Deferred Outflows of Resources | Deferred Inflows of Resources |
| Differences between Expected and Actual Experience | \$443,006,881 | \$ 85,526,653 |
| Changes of Assumptions | - | 9,365,838,566 |
| Net Difference between Projected and Actual Earnings on OPEB Plan Investments | 197,925,563 | - |
| Total | \$640,932,444 | \$9,451,365,219 |

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

| Fiscal Year ended June 30 | Amount |
| :---: | :---: |
| 2018 | \$(1,497,713,766) |
| 2019 | (1,497,713,766) |
| 2020 | (1,497,713,768) |
| 2021 | $(1,523,225,069)$ |
| 2022 | (1,550,217,886) |
| Thereafter | (1,243,848,520) |

Funded Status and Funding Progress. As of June 30, 2017, the most recent actuarial measurement date, the funded status was $5.0 \%$. The total OPEB liability for benefits was $\$ 93.1$ billion, and the plan fiduciary net position was $\$ 4.7$ billion, resulting in a net OPEB liability of $\$ 88.4$ billion. The covered payroll (annual payroll of active employees covered) was $\$ 25.2$ billion, and the ratio of the net OPEB liability to the covered payroll was $351.0 \%$. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The determined actuarial valuations of OPEB incorporated the use of demographic and salary increase assumptions among others as reflected below. Amounts determined regarding the funded status and the annual expense of the City are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of changes in the net OPEB liability and related ratios shown in the RSI section immediately following the notes to financial statements, disclosures required by GASB Statement No. 74 for OPEB Plan reporting (replacing GASB 43), presents GASB Statement No. 75 (replacing GASB 45) results of OPEB valuations for Fiscal Years 2017 and 2016.

Actuarial Methods and Assumptions. The actuarial assumptions used in the Fiscal Years 2017 and 2016 OPEB valuations are classified as those used in the New York City Retirement Systems (NYCRS) pension valuations and those specific to the OPEB valuations. NYCRS consist of: (i) New York City Employees' Retirement System (NYCERS); (ii) Teachers' Retirement System of The City of New York (TRS); (iii) New York City Board of Education Retirement System (BERS); (iv) New York City Police Pension Fund (POLICE); and (v) New York City Fire Pension Fund (FIRE). The OPEB valuations incorporate only the use of certain NYCRS demographic and salary increase assumptions. The NYCRS demographic and salary scale assumptions are unchanged from the prior OPEB valuation. For purposes of determining pension obligations, the demographic and salary scale assumptions requiring NYCRS Board approval (available on the website of the Office of the Actuary at www.nyc.gov/actuary) were adopted by each respective Board of Trustees during fiscal year 2012 (the Silver Books), with revisions proposed by the Actuary and adopted by each respective Board of Trustees in fiscal year 2016. Chapter 3 of the Laws of 2013 enacted those actuarial assumptions and methods that require New York State Legislation.

The OPEB-specific actuarial assumptions used in the Fiscal Year 2017 OPEB valuation of the Plan are as follows:

| Valuation Date | June 30, 2016 |  |
| :---: | :---: | :---: |
| Measurement Date | June 30, 2017 |  |
| Discount Rate. | $3.17 \%$ per annum ${ }^{(1)}$ for the June 30, 2017 measurement date SCA). Results as of the June 30, 2016 measurement date are prese for ECF and SCA). |  |
| Actuarial Cost Method | Entry Age calculated on an individual basis with the Actuaria Benefits allocated on a level basis over earnings from hire throug |  |
| Per-Capita Claims Costs | EBCBS and GHI plans are insured via a Minimum Premium ar HIP and many of the other HMOs are community rated. Costs premiums for all plans. HIP HMO and GHI/EBCBS non-Med been adjusted for Health Savings Agreement changes. |  |
|  | Age adjustment based on assumed age distribution of covered non-Medicare retirees and HIP and Other HMO Medicare retiree |  |
|  | Age adjustment based on actual age distribution of the GHI/EBCB population. |  |
|  | All reported premiums assumed to include administrative costs. |  |
|  | ${ }^{(1)}$ As required under GASB 75 this is a weighted blend of the $4.00 \%$ OPEB plan investments and the S\&P Municipal Bond 20 Year Hi as of June 30, 2017 of $3.13 \%$. |  |
|  | Initial monthly premium rates used in valuation are shown below |  |
|  |  | Monthly Rat |
|  | Plan | FY' 17 |
|  | HIP HMO |  |
|  | Non-Medicare Single | \$ 600.18 |
|  | Non-Medicare Family | 1,470.45 |
|  | Medicare | 160.83 |
|  | GHI/EBCBS |  |
|  | Non-Medicare Single | 567.48 |
|  | Non-Medicare Family | 1,487.47 |
|  | Medicare | 168.35 |
|  | Others ${ }^{(2)}$ |  |
|  | Non-Medicare Single | 1,030.56 |
|  | Non-Medicare Family | 2,226.45 |
|  | Medicare Single | 276.18 |
|  | Medicare Family | 546.28 |

${ }^{(1)}$ For the Fiscal Year 2017 valuation, HIP HMO premiums are decreased by $5.10 \%$ and GHI/EBCBS Pre-Medicare premiums are decreased by $0.82 \%$ to reflect Fiscal Year 2018 Health Savings agreement changes announced during Fiscal Year 2017.
${ }^{(2)}$ Other HMO premiums represent the total premium for medical (not prescription) coverage including retiree contributions.
Welfare Funds The Welfare Fund contribution reported as of the valuation date, June 30, 2016, (including any reported retroactive amounts) was used as the per capita cost for valuation purposes.
The calculations reflect an additional one time \$100 contribution for Fiscal Year 2017 in July 2016. Projected contributions reflect \$25 increases at July 1, 2016 and July 1, 2017.

Reported annual contribution amounts for the last two years are shown in the Fiscal Year 2017 GASB 74/75 report in Appendix B, Tables 2a to 2e. Welfare Fund rates are based on actual reported Union Welfare Fund code for current retirees. Weighted average annual contribution rates used for future retirees, based on Welfare Fund enrollment of recent retirees, are shown in the following table.

| NYCERS | \$1,743 |
| :---: | :---: |
| TRS | 1,771 |
| BERS | 1,713 |
| POLICE | 1,593 |
| FIRE | 1,729 |
| Calendar Year | Monthly Premium |
| 2013-15 | \$104.90 |
| 2016 | 109.97 |
| 2017 | 113.63 |

Medicare Part B Premium reimbursement amounts have been updated to reflect actual premium rates announced for calendar years through 2017. Due to no cost-of-living adjustment in Social Security benefits for Calendar Year 2016, and a minimal cost-ofliving increase for Calendar Year 2017, most Medicare Part B participants will not be charged the Medicare Part B premium originally projected or ultimately announced for those years. Thus, the valuation uses a blended estimate as a better representation of future Part B premium costs.
For the Fiscal Year 2017 OPEB valuation the annual premium used was $\$ 1,341.60$, which is equal to:

- $70 \%$ of the basic $\$ 104.90$ monthly hold-harmless amount, assuming that there would be no claims made for the slight increase in Part B premiums for continuing retirees, and
- $30 \%$ of the announced premiums ( 6 months at $\$ 121.80$ for Calendar Year 2016 and 6 months at $\$ 134.00$ for Calendar Year 2017), representing the proportion of the Medicare population that will pay the announced amount.
Overall Medicare Part B Premium amounts are assumed to increase by the following percentages to reflect the income-related increases in Medicare Part B Premiums for high income individuals.

| Fiscal Year | Income-related Medicare Part B Increase |
| :--- | :---: |
| 2017 | 4.0 |
| 2018 | 4.5 |
| 2019 | 5.0 |
| 2020 | 5.2 |
| 2021 | 5.3 |
| 2022 | 5.4 |
| 2023 | 5.5 |
| 2024 | 5.6 |
| 2025 | 5.8 |
| 2026 | 5.9 |
| 2027 and later | 6.0 |

Medicare Part B Premium
Reimbursement Assumption
...........
$90 \%$ of Medicare participants are assumed to claim reimbursement; based on historical data.

Health Care Cost Trend Rate
(HCCTR) . . . . . . . . . . . . . . . . . . . . . . Covered medical expenses are assumed to increase by the following percentages (unchanged from the last valuation). For purposes of measuring entry age calculations, actual historic plan increases are reflected to the extent known.

| Year Ending ${ }^{(1)}$ | Pre-Medicare Plans | Medicare Plans | Medicare Part B Premium |
| :---: | :---: | :---: | :---: |
| $2017{ }^{(2)}$ | 7.84\% | 2.51\% | 5.0\% |
| 2018 | 7.5 | 5.0 | 5.0 |
| 2019 | 7.0 | 5.0 | 5.0 |
| 2020 | 6.5 | 5.0 | 5.0 |
| 2021 | 6.0 | 5.0 | 5.0 |
| 2022 | 5.5 | 5.0 | 5.0 |
| 2023 and Later | 5.0 | 5.0 | 5.0 |

${ }^{(1)}$ Fiscal Year for Pre-Medicare Plans and Medicare Plans and Calendar Year for Medicare Part B Premiums.
${ }^{(2)}$ Actual amounts based on the 2015 Health Care Savings Agreement Initiative Report of Status of Healthcare Savings dated June 19, 2017. Welfare Fund contribution rates assumed to increase based on current pattern bargaining (additional $\$ 25$ each for Fiscal Year 2017 and 2018, plus a one-time $\$ 100$ in Fiscal Year 2017).

Age-and Gender-Related Morbidity .... The premiums are age and gender adjusted for HIP HMO, GHI/EBCBS and Other HMO participants. The assumed relative costs of coverage are consistent with information presented in the 2013 study Health Care Costs-From Birth to Death, sponsored by the Society of Actuaries.

For non-Medicare costs, a sample of factors used is:

| Age | Male | Female | Age | Male | Female |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 0.170 | 0.225 | 45 | 0.355 | 0.495 |
| 25 | 0.146 | 0.301 | 50 | 0.463 | 0.576 |
| 30 | 0.181 | 0.428 | 55 | 0.608 | 0.671 |
| 35 | 0.227 | 0.466 | 60 | 0.783 | 0.783 |
| 40 | 0.286 | 0.467 | 64 | 0.957 | 0.917 |

Children costs were assumed to represent a relative factor of 0.229 .
Medicare costs prior to age 65 assume an additional disability-related morbidity factor. A sample of factors used is:

| Age | Males | Females | Age | Males | $\underline{\text { Females }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 0.323 | 0.422 | 60 | 1.493 | 1.470 |
| 25 | 0.278 | 0.565 | 65 | 0.919 | 0.867 |
| 30 | 0.346 | 0.804 | 70 | 0.946 | 0.885 |
| 35 | 0.432 | 0.876 | 75 | 1.032 | 0.953 |
| 40 | 0.545 | 0.878 | 80 | 1.122 | 1.029 |
| 45 | 0.676 | 0.929 | 85 | 1.217 | 1.116 |
| 50 | 0.883 | 1.082 | 90 | 1.287 | 1.169 |
| 55 | 1.159 | 1.260 | 95 | 1.304 | 1.113 |
|  |  |  | $99+$ | 1.281 | 0.978 |

The age adjustment for the non-Medicare GHI/EBCBS premium reflects a $5 \%$ reduction in the GHI portion of the monthly premium (with the GHI portion representing $\$ 254.27$ out of $\$ 572.19$ for single coverage, and $\$ 674.06$ out of $\$ 1,499.82$ for family coverage for Fiscal Year 2017 rates) and a $3 \%$ reduction in the EBCBS portion of the premium (with the EBCBS portion representing the remainder of the premiums) for the estimated margin anticipated to be returned.

Non-contributory Basic Medical Coverage and Part B premium reimbursement for dependents is assumed to terminate when an employee or retiree dies, except for Line of Duty survivors. The valuation also includes an estimate of costs in excess of premium contributions made by other survivors of POLICE, FIRE and uniformed members of the Departments of Correction and Sanitation that are eligible for a lifetime continuation benefit. The valuation assumes that $30 \%$ of eligible spouses will elect the lifetime continuation benefit.

Dependents
Male retirees were assumed to be four years older than their wives, and female retirees were assumed to be two years younger than their husbands; for POLICE and FIRE employees, husbands are assumed to be two years older than their wives. Child dependents of current retirees are assumed to receive coverage until age 26. Children are assumed to be covered for eight years after retirement plus an additional five years for service retirements of POLICE, FIRE, and NYCERS retirees who were eligible to retire based only on service and no minimum age. Dependent allocation assumptions
are shown below. The assumptions have been updated since the prior valuation to reflect recent experience.

|  | Dependent Coverage Assumptions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Group |  |  |  |  |  |
|  | NYCERS | TRS | BERS | POLICE | FIRE |
| Male |  |  |  |  |  |
| -Single Coverage | 35\% | 50\% | 45\% | 15\% | 10\% |
| -Spouse | 35 | 30 | 45 | 10 | 20 |
| -Child/No Spouse | 5 | 5 | 2 | 10 | 5 |
| -Spouse and Child | 25 | 15 | 8 | 65 | 65 |
| Total | 100\% | 100\% | 100\% | 100\% | 100\% |
| Female |  |  |  |  |  |
| -Single Coverage | 70\% | 60\% | 60\% | 45\% | 10\% |
| -Spouse | 20 | 30 | 35 | 10 | 20 |
| -Child/No Spouse | 5 | 5 | 2.5 | 25 | 5 |
| -Spouse and Child | 5 | 5 | 2.5 | 20 | 65 |
| Total | 100\% | $\underline{\underline{100 \%}}$ | $\underline{\underline{100 \%}}$ | 100\% | $\underline{\underline{100 \%}}$ |

Note: For accidental death, $70 \%$ of POLICE and $80 \%$ of FIRE members are assumed to have family coverage.
Demographic Assumptions . . . . . . . . . . . The actuarial assumptions used in the Fiscal Year 2017 and the Fiscal Year 2016 OPEB valuations are a combination of those used in the NYCRS pension actuarial valuations and those specific to the OPEB valuations.
Additional demographic information is provided in the five "Silver Books" available on the Reports page of the OA website (www.nyc.gov/actuary).

COBRA Benefits .................... . There is no cost to the City for COBRA beneficiaries who enroll in community-rated HMO's, including HIP, since these individuals pay their full community rate. However, there is a cost under the experience-rated GHI/EBCBS coverage.

The valuation assumes $15 \%$ of employees not eligible for OPEB elect COBRA coverage for 15 months based on experience of other large employers. A lump-sum COBRA cost of $\$ 1,000$ was assumed for terminations during Fiscal Year 2017. This amount is increased by the Pre-Medicare HCCTR for future years but is not adjusted for agerelated morbidity.
Census data was not available for surviving spouses of POLICE, FIRE, Corrections or Sanitation members who are entitled to lifetime COBRA continuation coverage, as this benefit is administered directly by the insurance carriers. The number and obligation for the surviving spouses with lifetime coverage were estimated based on current census of POLICE and FIRE retirees and the projected number of deaths that would have occurred since the inception of this benefit on November 13, 2001 (and on August 31, 2010 for the Departments of Correction and Sanitation).

Cadillac Tax
The OPEB valuation includes an explicit calculation of the high-cost plan excise tax (Cadillac Tax) that will be imposed beginning in 2020 under HCR.
The tax is $40 \%$ of the excess of (a) over (b) where (a) is the cost of medical coverage, and (b) is the statutory limits ( $\$ 10,200$ for single coverage and $\$ 27,500$ for family coverage), adjusted for the following:

- For Pre-Medicare retirees above the age of 55 , the limit will be further increased by $\$ 1,650$ for single coverage; $\$ 3,450$ for family coverage.
- The dollar limits are increased by CPI+1\% (e.g. 3.5\%) for 2019 and by CPI (e.g. 2.5\%) for subsequent years. Indexing of limits starts in 2018; tax first applies in 2020.

The impact of the Cadillac Tax for the NYCHBP benefits is calculated based on the following assumptions about the cost of medical coverage:

- The cost for each benefit option without age adjustment (GHI, HIP, or other HMO, combined with the average cost of Medicare Part B Premium reimbursement, if applicable) was separately compared to the applicable limit.
- The additional Cadillac Tax due to the riders or optional benefit arrangements is assumed to be reflected in the contribution required for the rider or optional benefit.
- The additional Cadillac Tax due to amounts provided by Welfare Fund benefits is assumed to be absorbed by the Welfare Fund or by lower net Welfare Fund contribution amounts.
- Pre-Medicare retirees under age 55 are not assumed to have the higher limits that apply to employees engaged in high-risk professions because the majority of employees included in this valuation are not in such professions.
In cases where the City provides only a portion of the OPEB benefits which give rise to the Cadillac Tax, the calculated Cadillac Tax is allocated in proportion to the OPEB liabilities for relevant OPEB benefits.

Actives/Inactives Liabilities $\qquad$ $40 \%$ of the measured liability of the Active/Inactive population, which is roughly equivalent to assuming $60 \%$ of the Active/Inactive members will terminate membership prior to vesting and not receive OPEB.
Stabilization Fund
A $0.3 \%$ load is applied on all City GASB75 obligations to reflect certain benefits paid on behalf of retirees directly from the Stabilization Fund which was decreased from $0.4 \%$ in the Fiscal Year 2016 OPEB valuation based on recent data. The load is not applicable to Component Units.
Educational Construction Fund ........ The actuarial assumptions used for determining GASB 75 obligations for ECF are shown starting on page 24 of the Fiscal Year 2017 GASB 74/75 Report dated September 15, 2017. The Report is available at the Office of the Comptroller, Bureau of AccountancyRoom 200 South, 1 Centre Street, New York, New York 10007 and on the website of the New York City Office of the Actuary (www.nyc.gov/actuary).
CUNY TIAA
The actuarial assumptions used for determining obligations for CUNY TIAA are shown Starting on page 26 of the Fiscal Year 2017 GASB 74/75 Report dated September 15, 2017. The Report is available at the Office of the Comptroller, Bureau of AccountancyRoom 200 South, 1 Centre Street, New York, New York 10007 and on the website of the New York City Office of the Actuary (www.nyc.gov/actuary).

## 5. Pensions

## Plan Descriptions

The City sponsors or participates in five pension trusts providing benefits to its employees, the majority of whom are members of one of these pension trusts (collectively referred to as NYCRS). Each of the trusts administers a qualified pension plan (QPP) and one or more variable supplements funds (VSFs) or tax-deferred annuity programs (TDA Programs) that supplement the pension benefits provided by the QPP. The trusts administered by NYCRS function in accordance with existing State statutes and City laws, which are the basis by which benefit terms and employer and member contribution requirements are established. The QPPs combine features of a defined benefit pension plans with those of a defined contribution pension plans; however, they are considered defined benefit plans for financial reporting purposes. The VSFs are considered defined benefit pension plans and the TDA Programs are considered defined contribution plans for financial reporting purposes. A brief description of each of the NYCRS and the individual plans they administer follows:

1. New York City Employees' Retirement System (NYCERS) administers the NYCERS QPP and five VSFs. The NYCERS QPP is a cost-sharing multiple-employer pension plan that provides pension benefits for employees of the City not covered by one of the other NYCRS, and employees of certain component units of the City and certain other governmental units.

NYCERS administers the following VSFs, which operate pursuant to the provisions of Title 13, Chapter 1 of the Administrative Code of The City of New York (ACNY):

- Transit Police Officer's Variable Supplements Fund (TPOVSF), which provides supplemental benefits to NYCERS QPP members who retire from service on or after July 1, 1987 with 20 or more years of service as Transit Police Officers.
- Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF), which provides supplemental benefits to NYCERS QPP members who retire from service on or after July 1, 1987 as Transit Police Superior Officers with 20 or more years of service.
- Housing Police Officer's Variable Supplements Fund (HPOVSF), which provides supplemental benefits to NYCERS QPP members who retire from service on or after July 1, 1987 with 20 or more years of service as Housing Police Officers.
- Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF), which provides supplemental benefits to NYCERS QPP members who retire from service on or after July 1, 1987 as Housing Police Superior Officers with 20 or more years of service.
- Correction Officers' Variable Supplements Fund (COVSF), which provides supplemental benefits to NYCERS QPP members who retire for service on or after July 1, 1999 (with 20 or 25 years of service, depending upon the plan) as members of the Uniformed Correction Force.

TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF are closed to new entrants.
2. Teachers' Retirement System of The City of New York (TRS) administers the TRS QPP and the TRS TDA Program. The TRS QPP is a cost-sharing, multiple-employer pension plan for pedagogical employees in the public schools of the City and certain Charter Schools and certain other specified school and CUNY employees. The TRS TDA Program was established and is administered pursuant to Internal Revenue Code Section 403(b) and Chapter 4 of Title 13 of ACNY. The TRS TDA Program provides a means of deferring income tax payments on members' voluntary pre-tax contributions and earnings thereon until the periods after retirement or upon withdrawal of contributions. Members of the TRS QPP have the option to participate in the TRS TDA Program.
3. New York City Board of Education Retirement System (BERS) administers the BERS QPP and the BERS TDA Program. The BERS QPP is a cost-sharing, multiple-employer pension plan for non-pedagogical employees of the Department of Education and certain Charter Schools and certain employees of the School Construction Authority. The BERS TDA Program was established and is administered pursuant to Internal Revenue Code Section 403(b), the New York State Education Law and the BERS Rules and Regulations. The BERS TDA Program provides a means of deferring income tax payments on members' voluntary pre-tax contributions and earnings thereon until the periods after retirement or upon withdrawal of contributions. Members of the BERS QPP have the option to participate in the BERS TDA Program.
4. New York City Police Pension Fund (POLICE) administers the POLICE QPP, along with the Police Officer's Variable Supplements Fund (POVSF) and Police Superior Officers' Variable Supplements Fund (PSOVSF). The POLICE QPP is a single-employer pension plan for all full-time uniformed employees of the New York City Police Department.

POVSF and PSOVSF operate pursuant to the provisions of Title 13, Chapter 2 of the ACNY. POVSF provides supplemental benefits to POLICE QPP members who retire for service on or after October 1, 1968 with 20 or more years of service as police officers. PSOVSF provides supplemental benefits to POLICE QPP members who retire for service on or after October 1, 1968 as police superior officers with 20 or more years of service.
5. New York City Fire Pension Fund (FIRE) administers the FIRE QPP, along with the Firefighter's Variable Supplements Fund (FFVSF) and the Fire Officers' Variable Supplements Fund (FOVSF). The FIRE QPP is a single-employer pension plan for all full-time uniformed employees of the New York City Fire Department.

FFVSF and FOVSF operate pursuant to the provisions of Title 13, Chapter 3 of the ACNY. FFVSF provides supplemental benefits to FIRE QPP members who retire for service on or after October 1, 1968 with 20 or more years of service as firefighters or wipers. FOVSF provides supplemental benefits to FIRE QPP members who retire for service on or after October 1, 1968 as fire officers, and all pilots and marine uniformed engineers, with 20 or more years of service.

Except for NYCERS and BERS, permanent, full-time employees are generally required to become members of a NYCRS QPP upon employment. Permanent full-time employees who are eligible to participate in the NYCERS QPP and BERS QPP are generally required to become members within six months of their permanent employment status but may elect to become members earlier. Other employees who are eligible to participate in the NYCERS QPP and BERS QPP may become members at their option.

As of June 30, 2015 and June 30, 2014, the dates of the most recent actuarial valuations, system-wide membership data for the QPPs are as follows:

|  | NYCERS | TRS | BERS | POLICE | FIRE | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| QPP Membership at June 30, 2015 |  |  |  |  |  |  |
| Retirees and Beneficiaries Receiving Benefits | 144,526 | 82,777 | 16,438 | 48,703 | 16,710 | 309,154 |
| Terminated Vested Members Not Yet |  |  |  |  |  |  |
| Receiving Benefits | 9,402 | 13,482 | 237 | 546 | 32 | 23,699 |
| Other Inactives | 16,907 | 7,347 | 3,972 | 1,484 | 18 | 29,728 |
| Active Members | 185,758 | 114,652 | 24,903 | 34,435 | 10,780 | 370,528 |
| Total QPP Membership | 356,593 | 218,258 | 45,550 | 85,168 | 27,540 | 733,109 |
|  | NYCERS | TRS | BERS | POLICE | FIRE | Total |
| QPP Membership at June 30, 2014 |  |  |  |  |  |  |
| Retirees and Beneficiaries Receiving Benefits | 142,095 | 80,419 | 15,995 | 48,212 | 16,763 | 303,484 |
| Terminated Vested Members Not Yet |  |  |  |  |  |  |
| Receiving Benefits | 9,674 | 12,349 | 195 | 572 | 40 | 22,830 |
| Other Inactives | 16,527 | 8,702 | 4,005 | 1,369 | 16 | 30,619 |
| Active Members | 184,762 | $\underline{111,726}$ | 25,182 | 34,402 | 10,319 | 366,391 |
| Total QPP Membership | 353,058 | 213,196 | 45,377 | $\underline{84,555}$ | 27,138 | 723,324 |

As of June 30, 2016 and 2015, the dates of the most recent actuarial valuations, membership data for the NYCERS VSFs are as follows:

|  | TPOVSF | TPSOVSF | HPOVSF | HPSOVSF | COVSF | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Membership at June 30, 2016 |  |  |  |  |  |  |
| Retirees Receiving or Eligible to Receive Benefits | 325 | 247 | 160 | 220 | 7,424 | 8,376 |
| Active Members | - | - | - | - | 8,815 | 8,815 |
| Total Membership | 325 | 247 | 160 | 220 | 16,239 | 17,191 |
|  | TPOVSF | TPSOVSF | HPOVSF | HPSOVSF | COVSF | Total |
| Membership at June 30, 2015 |  |  |  |  |  |  |
| Retirees Receiving or Eligible to Receive Benefits | 333 | 255 | 170 | 224 | 6,850 | 7,832 |
| Active Members | - | - | - | - | 8,466 | 8,466 |
| Total Membership | 333 | 255 | 170 | 224 | $\underline{15,316}$ | 16,298 |

As of June 30, 2016 and 2015, the dates of the most recent actuarial valuations, membership data for the POLICE and FIRE VSFs are as follows:

|  | PSOVSF | POVSF | $\begin{aligned} & \text { Total } \\ & \text { POLICE } \end{aligned}$ | FOVSF | FFVSF | Total FIRE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Membership at June 30, 2016 |  |  |  |  |  |  |
| Retirees Receiving Benefits | 18,357 | 12,418 | 30,775 | 1,553 | 3,535 | 5,088 |
| Active Members | 12,276 | 23,685 | 35,961 | 2,552 | 8,399 | 10,951 |
| Total Membership | 30,633 | 36,103 | 66,736 | 4,105 | 11,934 | 16,039 |

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|  | Sovs | , | Pres | , | , | , |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Membership at June 30, 2015 |  |  |  |  |  |  |
| Retirees Receiving Benefits | 18,029 | 12,367 | 30,396 | 1,593 | 3,621 | 5,214 |
| Active Members | 12,273 | 22,162 | 34,435 | 2,699 | 8,081 | 10,780 |
| Total Membership | 30,302 | 34,529 | 64,831 | 4,292 | 11,702 | 15,994 |
| Summary of Plan Benefits |  |  |  |  |  |  |
| QPPs |  |  |  |  |  |  |

The NYCRS QPPs provide pension benefits to retired employees generally based on salary, length of service, and pension tier. For certain members of the NYCRS QPPs, voluntary member contributions also impact pension benefits provided. The NYCRS also provide automatic Cost-of-Living Adjustments (COLA) and other supplemental pension benefits to certain retirees and beneficiaries. In the event of disability during employment, participants may receive retirement allowances based on satisfaction of certain service requirements and other provisions. The NYCRS QPPs also provide death benefits. Subject to certain conditions, members become fully vested as to benefits upon the completion of 5 or 10 years of service depending on tier. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions, including accumulated interest, less any outstanding loan balances.

The State Constitution provides that pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, 1976, 1983 and 2012, significant amendments made to the State Retirement and Social Security Law (RSSL) modified certain benefits for employees joining the QPPs on or after the effective date of such amendments, creating membership tiers. Currently, there are several tiers referred to as Tier I, Tier II, Tier III, Tier IV and Tier VI. Members are assigned a tier based on membership date. The specific membership dates for each tier may vary depending on the respective QPP. The Tier II Plan ended as of June 30, 2009. This affects new hires into the uniformed forces of the New York City Police Department and the New York City Fire Department (new members of the POLICE QPP and FIRE QPP) and District Attorney Investigators who become new members of the NYCERS QPP from July 1, 2009 to March 31, 2012. Chapter 18 of the Laws of 2012 (Chapter 18/12) amended the retirement benefits of public employees who establish membership in one of the NYCRS on or after April 1, 2012. Chapter 18/12 is commonly referred to as Tier VI.

## VSFs

The VSFs provide supplemental benefits for their respective eligible members at a maximum annual amount of $\$ 12,000$. For COVSF prior to Calendar Year 2019, total supplemental benefits paid, although determined in the same manner as for other VSFs, are only paid if the assets of COVSF are sufficient to pay the full amount due to all eligible retirees. Scheduled benefits to COVSF participants were paid for Calendar Years 2000 to 2005 and for Calendar Years 2014 and 2015. Scheduled benefits are expected to be paid for Calendar Years 2017. Due to insufficient assets, no benefits were paid to COVSF participants from Calendar Year 2006 to Calendar Year 2013 and for Calendar Year 2016. For Calendar Years 2019 and later, COVSF provides for supplemental benefits to be paid regardless of the sufficiency of assets in the COVSF.

In accordance with ACNY, VSFs are not pension funds or retirement systems. Instead, they provide scheduled supplemental payments, in accordance with applicable statutory provisions. While a portion of these payments are guaranteed by the City, the Legislature has reserved to itself and the State, the right and power to amend, modify, or repeal VSFs and the payments they provide. However, any assets transferred to the VSFs are held in trust solely for the benefit of its members.

## TDA Programs

Benefits provided under the TRS and BERS TDA Programs are derived from members' accumulated contributions. No direct contributions are provided by employers; however certain investment options, if selected by members, may indirectly create employer financial obligations or benefits, as discussed below. A participant may withdraw all or part of the balance of his or her account at the time of retirement or termination of employment. Beginning January 1, 1989, the tax laws restricted withdrawals of tax-deferred annuity contributions and accumulated earnings thereon for reasons other than retirement or termination. Contributions made after December 31, 1988, and investment earnings credited after December 31, 1988, may only be withdrawn upon attainment of age 59-1/2 or for reasons of hardship (as defined by Internal Revenue Service regulations). Hardship withdrawals are limited to contributions only.

A member making a hardship withdrawal may not contribute to the TDA Program for a period of six months following the withdrawal.

When a member resigns before attaining vested rights under the respective QPP, he or she may withdraw the value of his or her TDA Program account or leave the account in the TDA Program for a period of up to seven school years after the date of resignation for TRS TDA members or for a period of up to five years after the date of resignation for BERS TDA members. If a member resigns after attaining vested rights under the respective QPP, he or she may leave his or her account in the TDA Program.

Upon retirement, a member may choose to take the balance in the form of an annuity that is calculated based on a statutory rate of interest and statutory mortality assumptions, which may differ from the pension funding assumptions.

The TDA Programs have several investment options broadly categorized as fixed return funds and variable return funds. Under the fixed return funds, accounts are credited with a statutory rate of interest, currently $7 \%$ for UFT members and $8.25 \%$ for all other members (the Statutory Rates). Deposits from members' TDA Program accounts are used by the respective QPP to purchase investments; If earnings on the respective QPP are less than the amount credited to the TDA Program members' accounts, then additional payments by the City to the respective QPP, as determined by the Actuary, may be required. If the earnings are higher, then lower payments by the City to the QPP may be required.

All investment securities held in the fixed return funds are owned and reported by the QPP. A receivable due from the QPP equal to the aggregate original principal amounts contributed by TDA Program members to the fixed return funds, plus accrued interest at the statutory rate, less member withdrawals, is owned by the TDA Program. The balance of TDA Program fixed return funds held by the TRS QPP as of June 30, 2017 and 2016 were $\$ 22.0$ billion and $\$ 20.3$ billion, respectively, and interest paid on TDA Program fixed return funds by the TRS QPP for the years then ended were $\$ 1.5$ billion and $\$ 1.4$ billion, respectively. The balance of TDA Program fixed return funds held by the BERS QPP as of June 30, 2017 and 2016 are $\$ 1,436$ million and $\$ 1,283$ million, respectively, and interest paid on TDA Program fixed return funds by the BERS QPP for the years then ended were $\$ 106.6$ million and $\$ 94.8$ million, respectively. Under the variable return funds, members' TDA Program accounts are adjusted for actual returns on the underlying investments of the specific fund selected. Members may switch all or a part of their TDA contributions between the fixed and variable return funds on a quarterly basis.

## Contributions and Funding Policy

## QPPs

The City's funding policy is to contribute statutorily-required contributions (Statutory Contributions). Statutory Contributions for the NYCRS, determined by the Actuary in accordance with State statutes and City laws, are generally funded by the 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. For example, the June 30, 2015 actuarial valuation was used for determining the Fiscal Year 2017 Statutory Contributions. Statutory Contributions are determined annually to be an amount that, together with member contributions and investment income, provides for QPP assets to be sufficient to pay benefits when due. The aggregate Statutory Contributions due to each QPP from all participating employers for Fiscal Years 2017 and 2016 and the amount of the City's Statutory and Actual contribution to each QPP for such fiscal years are as follows (in millions):

| QPP | $\begin{gathered} \text { Fiscal } \\ \text { Year 2017 } \\ \text { Aggregate } \\ \text { Statutory } \\ \text { Contribution } \\ \hline \end{gathered}$ | Fiscal Year 2017 City Statutory/Actual Contribution | Fiscal Year 2016 <br> Aggregate Statutory Contribution | Fiscal Year 2016 City Statutory/Actual Contribution |
| :---: | :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |  |
| NYCERS | \$ 3,328 | \$ 1,808 | \$ 3,365 | \$ 1,843 |
| TRS | 3,888 | 3,796 | 3,703 | 3,594 |
| BERS | 288 | 288 | 266 | 265 |
| POLICE | 2,294 | 2,294 | 2,394 | 2,394 |
| FIRE | 1,061 | 1,061 | 1,054 | 1,054 |

Member contributions are established by law and vary by QPP. In general, Tier I and Tier II member contribution rates are dependent upon the employee's age at membership and retirement plan election. In general, Tier III and Tier IV 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, 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. Effective December 2000, certain Transit Authority Tier III and Tier IV members make basic member contributions of $2.0 \%$ of salary in accordance with Chapter 10 of the Laws of 2000. Certain members of the NYCERS QPP, TRS QPP and BERS QPP also make additional member contributions. Tier VI members contribute between $3.0 \%$ and $6.0 \%$ of salary, depending on salary level.

## VSFs

ACNY provides that the POLICE QPP and FIRE QPP transfer to their respective VSFs amounts equal to certain excess earnings on QPP equity investments, generally limited to the unfunded accumulated benefit obligation for each VSF. ACNY also provides that the NYCERS QPP transfer to COVSF a fraction of certain excess earnings on NYCERS QPP equity investments, such fraction reflecting the ratio of Uniformed Correction member salaries to the salaries of all active members of the NYCERS QPP. In each case, the earnings to be transferred (or the appropriate fraction thereof in the case of COVSF) are the amount by which earnings on equity investments exceed what the earnings would have been had such funds been invested at a yield comparable to that available from fixed income securities, less any cumulative past deficiencies (Excess Earnings).

In addition to the transfer of Excess Earnings, under Chapter 3 of the Laws of 2013, should the assets of the POVSF or the PSOVSF be insufficient to pay annual benefits, the POLICE QPP is required to transfer amounts sufficient to make such benefit payments. Additionally, under Chapter 583 of the Laws of 1989, should the assets of the FFVSF or the FOVSF be insufficient to pay annual benefits, the City is required to transfer amounts sufficient to make such benefit payments. Further, under Chapter 255 of the Laws of 2000, the NYCERS QPP is required to make transfers to TPOVSF, TPSOVSF, HPOVSF and HPSOVSF sufficient to meet their annual benefit payments.

For Fiscal Year 2017, Excess Earnings on equity investments, inclusive of prior year's cumulative deficiencies, exceeded zero, and therefore, transfers of assets from the QPPs to their respective VSFs were required. As of the date of this report, the amount of such transfer due for Fiscal Year 2017 from the NYCERS QPP to COVSF is estimated to be $\$ 281$ million. The amounts of such transfers due for Fiscal Year 2017 from the POLICE QPP to POVSF and PSOVSF are estimated to be $\$ 738$ million and $\$ 1,416$ million, respectively. The amounts of such transfers due for Fiscal Year 2017 from the FIRE QPP to FFVSF and FOVSF are estimated to be $\$ 14$ million and $\$ 0$ million, respectively. Additionally, in Fiscal Year 2017, the NYCERS QPP made required transfers of $\$ 3.8$ million, $\$ 3.0$ million, $\$ 1.9$ million, and $\$ 2.6$ million to TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF, respectively, to fund annual benefits.

For Fiscal Year 2016, there were no Excess Earnings on equity investments, and therefore, no transfers of such assets from the QPPs to their respective VSFs were required other than to TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF.

## TDA Programs

Contributions to the TDA Programs are made by the members only and are voluntary. Active members of the respective QPP are required to submit a salary reduction agreement and an enrollment request to make contributions. A participant may elect to exclude an amount (within the maximum allowed by the Internal Revenue Service) of his or her compensation from current taxable income by contributing it to the TDA Programs. This maximum is determined annually by the IRS for each calendar year. Additionally, members can elect either a fixed or variable investment program for investment of their contributions.

No employer contributions are made to the TDA Programs. However, the TDA Programs offer a fixed return investment option as discussed above which could increase or decrease the City's contribution to the respective QPPs.

## Net Pension Liability and Pension Related Restatements

The City's net pension liabilities for each of the QPPs reported at June 30, 2017 and 2016 were measured as of those fiscal year end dates. The total pension liabilities used to calculate those net pension liabilities were determined by actuarial valuations as of June 30, 2015 and June 30, 2014, respectively, based on the OLYM described above, and rolled forward to the respective fiscal year-end measurement dates. Information about the fiduciary net position of each QPP and additions to and deductions from each QPP's fiduciary net position has been determined on the same basis as they are reported by the respective QPP. 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.

## Actuarial Assumptions

The total pension liabilities in the June 30, 2015 and June 30, 2014 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement:

|  | June 30, 2015 | June 30, 2014 |
| :---: | :---: | :---: |
| Investment Rate of Return | 7.0\% per annum, net of investment expenses (Actual Return for Variable Funds). | 7.0\% per annum, net of investment expenses (Actual Return for Variable Funds). |
| Post-Retirement Mortality | Tables adopted by the respective Boards of Trustees during Fiscal Year 2016. | Tables adopted by the respective Boards of Trustees during Fiscal Year 2016. |
| Active Service: Withdrawal, Death, Disability, Retirement | Tables adopted by the respective Boards of Trustees during Fiscal Year 2012. | Tables adopted by the respective Boards of Trustees during Fiscal Year 2012. |
| Salary Increases ${ }^{1}$ | 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. |
| Cost-of-Living Adjustments ${ }^{1}$ | 1.5\% per annum for Tiers I, II, IV, and certain Tier III and Tier VI retirees. 2.5\% per annum for certain Tier III and Tier VI retirees. | 1.5\% per annum for Tiers I, II, IV and certain Tier III and Tier VI retirees. 2.5\% per annum for certain Tier III and Tier VI retirees. |

${ }^{(1)}$ Developed assuming a long-term Consumer Price Inflation assumption of 2.5\% per year.
Pursuant to Section 96 of the New York City Charter, audits of the actuarial assumptions used to value liabilities of the five actuarially-funded QPPs are conducted by an independent actuarial firm every two years.

In accordance with the ACNY and with appropriate practice, the Boards of Trustees of the five actuarially-funded QPPs are to periodically review and adopt certain actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions, which are also generally used to determine the total pension liability, as applicable. Based, in part, upon a review of the experience studies completed in November 2006 by the Segal Company (Segal) and in December 2011 by The Hay Group (Hay), the Actuary issued reports for the QPPs proposing changes in actuarial assumptions and methods for Fiscal Years beginning on and after July 1, 2011 (February 2012 Reports). Where required, the Boards of Trustees of the NYCRS adopted those changes to actuarial assumptions that require Board approval. The State Legislature enacted Chapter $3 / 13$ to provide for those changes to the actuarial assumptions and methods that require legislation, including the Actuarial Interest Rate (AIR) assumption of $7.0 \%$ per annum, net of investment expenses.

In October 2015 the independent actuarial auditor, Gabriel, Roeder, Smith \& Company (GRS), issued a report on their NYC Charter-mandated actuarial experience studies for the four-year and ten-year periods ended June 30, 2013 (the GRS Report).

Based, in part, on the GRS Report, on published studies of mortality improvement, and on input from the City's outside consultants, the Actuary proposed, and the Boards of Trustees of the NYCRS adopted, new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement mortality are based primarily on the experience of the NYCRS (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015 (the Valuation Tables). Scale MP-2015 replaced Mortality Improvement Scale AA.

In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be within a $20 \%$ corridor of the Market Value of Assets.

The long-term expected rate of return for each of the pension funds is $7.0 \%$ per annum. This is based upon weighted expected real rates of return (RROR) ranging from $5.0 \%$ to $5.2 \%$ and a long-term Consumer Price Inflation assumption of $2.5 \%$ offset by investment related expenses. The target asset allocation of each of the funds and the expected RROR for each of the asset classes are summarized in the following tables:

| Asset Class | NYCERS |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { Target } \\ \text { Asset } \\ \text { Allocation } \end{gathered}$ | Long-Term <br> Expected RROR |
| U.S. Public Market Equities | 29.00\% | 5.70\% |
| International Public Market Equities | 13.00 | 6.10\% |
| Emerging Public Market Equities | 7.00 | 7.60\% |
| Private Market Equities | 7.00 | 8.10\% |
| Fixed Income | 33.00 | 3.00\% |
| Alternatives (Real Assets, Hedge Funds) | 11.00 | 4.70\% |
| Total | 100.00\% |  |


|  | TRS |  |
| :--- | :--- | :---: |
|  |  |  |
| Asset Class |  |  |


| Asset Class | BERS |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Target } \\ \text { Asset } \\ \text { Allocation } \\ \hline \end{gathered}$ | Long-Term <br> Expected RROR |
| U.S. Public Market Equities | 30.00\% | 5.70\% |
| International Public Market Equities | 13.00 | 6.10\% |
| Emerging Public Market Equities | 7.00 | 7.60\% |
| Private Market Equities | 9.00 | 8.10\% |
| Fixed Income | 28.00 | 3.00\% |
| Alternatives (Real Assets, Hedge Funds) | 13.00 | 4.70\% |
| Total | 100.00\% |  |


| Asset Class | POLICE |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { Target } \\ \text { Asset } \\ \text { Allocation } \end{gathered}$ | Long-Term <br> Expected RROR |
| U.S. Public Market Equities | 31.00\% | 5.70\% |
| International Public Market Equities | 9.00 | 6.10\% |
| Emerging Public Market Equities | 6.00 | 7.60\% |
| Private Market Equities | 7.00 | 8.10\% |
| Fixed Income | 31.00 | 3.00\% |
| Alternatives (Real Assets, Hedge Funds) | 16.00 | 4.70\% |
| Total | 100.00\% |  |


| Asset Class | FIRE |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { Target } \\ \text { Asset } \\ \text { Allocation } \\ \hline \end{gathered}$ | Long-Term Expected RROR |
| U.S. Public Market Equities | 31.00\% | 5.70\% |
| International Public Market Equities | 9.00 | 6.10\% |
| Emerging Public Market Equities | 6.00 | 7.60\% |
| Private Market Equities | 7.00 | 8.10\% |
| Fixed Income | 31.00 | 3.00\% |
| Alternatives (Real Assets, Hedge Funds) | 16.00 | 4.70\% |
| Total | 100.00\% |  |

## Discount Rate

The discount rate used to measure the total pension liability of each QPP as of June 30, 2017 and 2016 was $7.0 \%$. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the rates applicable to the current tier for each member and that employer contributions will be made based on rates determined by the Actuary. Based on those assumptions, each QPP's fiduciary net position was projected to be available to make all projected future benefit payments of current active and non-active QPP members. Therefore, the long-term expected rate of return on QPP investments was applied to all periods of projected benefit payments to determine the total pension liability.

## Changes in Net Pension Liability-POLICE and FIRE QPPs

Changes in the City's net pension liability for POLICE and FIRE for the Fiscal Years ended June 30, 2017 and 2016 are as follows:

|  | POLICE |  |  | FIRE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Pension Liability | Plan Fiduciary Net Position | Net Pension Liability | Total Pension Liability | Plan Fiduciary Net Position | Net Pension Liability |
|  | (in millions) |  |  |  |  |  |
| Balances at June 30, 2015 | \$48,209 | \$35,345 | \$12,864 | \$19,447 | \$11,679 | \$ 7,768 |
| Changes for the Fiscal Year 2016: |  |  |  |  |  |  |
| Service cost | 1,340 | - | 1,340 | 431 | - | 431 |
| Interest | 3,441 | - | 3,441 | 1,396 | - | 1,396 |
| Differences between expected and actual experience . . . . . . . . . . . | 233 | - | 233 | 324 | - | 324 |
| Change of Assumptions | 795 | - | 795 | 405 | - | 405 |
| Contributions-employer | - | 2,394 | $(2,394)$ | - | 1,054 | $(1,054)$ |
| Contributions-employee | - | 250 | (250) | - | 117 | (117) |
| Net investment income | - | 403 | (403) | - | 203 | (203) |
| Benefit payments, including refunds of employee contributions | $(2,878)$ | $(2,878)$ | - | $(1,359)$ | $(1,359)$ | - |
| Administrative expense | - | (19) | 19 | - | - | - |
| Other changes | - | 7 | (7) | - | 44 | (44) |
| Net changes | 2,931 | 157 | 2,774 | 1,197 | 59 | 1,138 |
| Balances at June 30, 2016 | 51,140 | 35,502 | 15,638 | 20,644 | 11,738 | 8,906 |
| Changes for the Fiscal Year 2017: |  |  |  |  |  |  |
| Service cost | 1,320 | - | 1,320 | 432 | - | 432 |
| Interest | 3,525 | - | 3,525 | 1,439 | - | 1,439 |
| Differences between expected and actual experience . . . . | (645) | - | (645) | 134 | - | 134 |
| Change of Assumptions | - | - | - | - | - | - |
| Contributions-employer | - | 2,294 | $(2,294)$ | - | 1,061 | $(1,061)$ |
| Contributions-employee | - | 276 | (276) | - | 108 | (108) |
| Net investment income | - | 4,287 | $(4,287)$ | - | 1,372 | $(1,372)$ |
| Benefit payments, including refunds of employee contributions . . ..... | $(2,987)$ | $(2,987)$ | - | $(1,335)$ | $(1,335)$ | - |
| Administrative expense | - | (19) | 19 | - | - | - |
| Other changes | - | 11 | (11) | - | 47 | (47) |
| Net changes | 1,213 | 3,862 | $(2,649)$ | 670 | 1,253 | (583) |
| Balances at June 30, 2017 | \$52,353 | \$39,364 | \$12,989 | \$21,314 | \$12,991 | \$8,323 |

The following table presents the City's net pension liability for POLICE and FIRE calculated using the discount rate of $7.0 \%$, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower $(6.0 \%)$ or 1-percentage-point higher ( $8.0 \%$ ) than the current rate:

|  |  | Fiscal Year 2017 |  |  | Fiscal Year 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1 \% \text { Decrease } \\ (6.0 \%) \\ \hline \end{gathered}$ | Current Discount Rate $(7.0 \%)$ | $\begin{gathered} 1 \% \text { Increase } \\ (8.0 \%) \end{gathered}$ | $\begin{gathered} 1 \% \text { Decrease } \\ (6.0 \%) \\ \hline \end{gathered}$ | Current Discount Rate $(7.0 \%)$ | $\begin{gathered} 1 \% \text { Increase } \\ (8.0 \%) \\ \hline \end{gathered}$ |
|  |  |  | (in n | ons) |  |  |
| POLICE | \$18,788 | \$12,989 | \$8,168 | \$21,344 | \$15,638 | \$10,900 |
| FIRE | 10,675 | 8,323 | 6,351 | 11,203 | 8,906 | 6,981 |

## City Proportion of Net Pension Liability-NYCERS, TRS and BERS (Excluding TDAs)

The following table presents the City's proportionate share of the net pension liability of the NYCERS, TRS and BERS QPPs at June 30, 2017 and 2016, and the proportion percentage of the aggregate net pension liability of each QPP allocated to the City:

|  | June 30, 2017 |  |  | June 30, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NYCERS | TRS | BERS | NYCERS | TRS | BERS |
|  | (in millions, except for \%) |  |  |  |  |  |
| City's proportion of the net pension liability | 54.33\% | 97.62\% | 99.96\% | 54.77\% | 97.07\% | 99.99\% |
| City's proportionate share of the net pension liability | \$11,282 | \$22,674 | \$973 | \$13,307 | \$25,600 | \$1,384 |

The City's proportion of the respective QPP's net pension liability was based on actual required contributions of each of the participating employers.

The following table presents the City's proportionate share of net pension liability for the NYCERS, TRS, and BERS QPPs calculated using the discount rate of $7.0 \%$, as well as what the City's proportionate share of the respective net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0\%) or 1-percentage-point higher (8.0\%) than the current rate:

|  | Fiscal Year 2017 |  |  |  |  | Fiscal Year 2016 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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

Pension expense recognized by the City for the Fiscal Years ended June 30, 2017 and 2016 related to the NYCRS are as follows:

| NYCRS | 2017 | 2016 |
| :---: | :---: | :---: |
|  | (in millions) |  |
| NYCERS | \$1,341 | \$1,658 |
| TRS (Excluding TDA) | 3,618 | 3,763 |
| BERS (Excluding TDA) | 195 | 302 |
| POLICE | 1,761 | 2,213 |
| FIRE | 1,071 | 1,139 |
| TOTAL | \$7,986 | \$9,075 |

Deferred outflows of resources and deferred inflows of resources by source reported by the City at June 30, 2017 and 2016 for each NYCRS are as follows:


Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at June 30,2017 will be recognized in pension expense as follows:

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NYCERS | TRS | BERS | POLICE | FIRE | TOTAL |
|  | (in thousands) |  |  |  |  |  |
| Year ending June 30. |  |  |  |  |  |  |
| 2018 | \$(133,851) | \$(104,786) | \$(196,796) | \$(284,731) | \$102,806 | \$ $(617,358)$ |
| 2019 | 269,100 | 668,241 | $(90,440)$ | 144,583 | 139,649 | 1,131,133 |
| 2020 | $(91,029)$ | $(374,022)$ | $(107,660)$ | $(98,472)$ | 40,305 | $(630,878)$ |
| 2021 | $(379,966)$ | $(742,328)$ | $(121,130)$ | $(363,273)$ | $(93,286)$ | $(1,699,983)$ |
| Thereafter | $(24,288)$ | 340,067 | 645 | - | - | 316,424 |
| Total | \$(360,034) | \$(212,828) | \$(515,381) | \$(601,893) | \$189,474 | \$(1,500,662) |

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## The City of New York

Comprehensive Annual Financial Report<br>of the Comptroller

## Part II-B

## REQUIRED SUPPLEMENTARY INFORMATION (Unaudited)

The pension and other postemployment benefit plan schedules in the required supplementary information are intended to show information for ten years. Additional years' information will be displayed as it becomes available.

Fiscal Year Ended June 30, 2017
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## THE CITY OF NEW YORK <br> REQUIRED SUPPLEMENTARY INFORMATION (Unaudited)

|  | POLICE |  | FIRE |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2017 | 2016 |
|  | (in thousands, except \%) |  |  |  |
| Total pension liability: |  |  |  |  |
| Service cost | \$ 1,320,416 | \$ 1,340,615 | \$ 432,482 | \$ 431,268 |
| Interest | 3,524,332 | 3,441,398 | 1,438,805 | 1,395,735 |
| Changes of Assumptions |  | 794,680 | - | 405,498 |
| Benefit payments and withdrawals | $(2,987,000)$ | $(2,878,451)$ | $(1,335,343)$ | $(1,359,095)$ |
| Difference b/t Expected and Actual Experience | $(645,248)$ | 233,462 | 134,478 | 323,609 |
| Net change in total pension liability | 1,212,500 | 2,931,704 | 670,422 | 1,197,015 |
| Total pension liability - Beginning | 51,140,746 | 48,209,042 | 20,643,808 | 19,446,792 |
| Total pension liability - Ending(a) | 52,353,246 | 51,140,746 | 21,314,230 | 20,643,807 |
| Plan fiduciary net position: |  |  |  |  |
| Employer contributions | 2,293,840 | 2,393,940 | 1,061,170 | 1,054,478 |
| Member contributions | 276,301 | 249,921 | 108,368 | 116,619 |
| Net investment income | 4,286,894 | 403,534 | 1,371,721 | 203,104 |
| Benefit payments and withdrawals | $(2,987,000)$ | $(2,878,451)$ | $(1,335,343)$ | $(1,359,095)$ |
| Administrative expenses | $(18,917)$ | $(18,478)$ | - | - |
| Other | 10,507 | 6,756 | 47,284 | 43,673 |
| Net change in plan fiduciary net position | 3,861,625 | 157,222 | 1,253,200 | 58,779 |
| Plan fiduciary net position-Beginning | 35,502,274 | 35,345,052 | 11,738,110 | 11,679,331 |
| Plan fiduciary net position-Ending(b) | 39,363,899 | 35,502,274 | 12,991,310 | 11,738,110 |
| Employer's net pension liability-ending(a)-(b) | \$12,989,347 | \$15,638,472 | \$ 8,322,920 | \$8,905,697 |
| Plan fiduciary net position as a percentage of the total pension liability | 75.2\% | 69.4\% | 61.0\% | 56.9\% |
| Covered-employee payroll | \$ 3,509,985 | \$ 3,540,326 | \$ 1,145,919 | \$ 1,129,470 |
| Employer's net pension liability as a percentage of covered-employee payroll | 370.1\% | 441.7\% | 726.3\% | 788.5\% |

B. Schedule of the City's Proportionate Share of the Net Pension Liabilities of Cost-Sharing Multiple-Employer Pension Plans at June 30,

|  | NYCERS |  | TRS |  | BERS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 |
|  | (in millions, except \%) |  |  |  |  |  |
| City's proportion of the net pension liability | 54.33\% | 54.77\% | 97.62\% | 97.07\% | 99.96\% | 99.99\% |
| City's proportionate share of the net pension liability | \$11,281.7 | \$13,307.9 | \$22,674.0 | \$25,599.9 | \$ 973.4 | \$1,384.1 |
| City's covered-employee payroll | \$ 6,556.7 | \$ 6,462.2 | \$ 8,612.8 | \$ 8,039.3 | \$1,051.6 | \$1,007.5 |
| City's proportionate share of the net pension liability as a percentage of its covered-employee payroll . . | 172.06\% | 205.93\% | 263.26\% | 318.43\% | 92.56\% | 137.38\% |
| Plan fiduciary net position as a percentage of the total pension |  |  |  |  |  |  |
| liability | 74.80\% | 69.57\% | 68.32\% | 62.33\% | 80.81\% | 71.17\% |


|  | 2017 | 2016 | 2015 | 2014 | 2013 | 2012* | 2011* | 2010* | 2009* | 2008* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NYCERS |  |  |  |  | (in thousands except \%) |  |  |  |  |  |
| Contractually required contribution | \$1,808,067 | \$1,843,323 | \$1,758,378 | \$1,729,616 | \$1,692,278 | \$3,017,004 | \$2,387,216 | \$2,197,717 | \$2,150,438 | \$1,874,242 |
| Contributions in relation to the contractually required contributions | \$1,808,067 | \$1,843,323 | \$1,758,378 | \$1,729,616 | \$1,692,278 | \$3,017,004 | \$2,387,216 | \$2,197,717 | \$2,150,438 | \$1,874,242 |
| Contribution deficiency (excess) | - | - | - | - | - | - | - | - | - | - |
| Covered-employee payroll | $\overline{\overline{\$ 6,556,720}}$ | $\overline{\overline{\$ 6,462,231}}$ | $\overline{\overline{\$ 6,500,475}}$ | $\overline{\overline{\$ 6,506,353}}$ | $\overline{\overline{\$ 6,322,125}}$ | \$11,812,858 | \$11,465,975 | \$10,977,607 | \$10,454,244 | $\overline{\overline{\$ 9,863,942}}$ |
| Contributions as a percentage of covered-employee payroll . . . | 27.576\% | 28.524\% | 27.050\% | 26.583\% | 26.768\% | 25.540\% | 20.820\% | 20.020\% | 20.570\% | 19.001\% |
| TRS <br> Contractually required contribution | \$3,795,657 | \$3,594,301 | \$3,180,865 | \$2,917,129 | \$2,777,966 | \$2,673,078 | \$2,468,973 | \$2,484,074 | \$2,223,644 | \$1,916,520 |
| Contributions in relation to the contractually required contributions | \$3,795,657 | \$3,594,301 | \$3,180,865 | \$2,917,129 | \$2,777,966 | \$2,673,078 | \$2,468,973 | \$2,484,074 | \$2,223,644 | \$1,916,520 |
| Contribution deficiency (excess) | - | - | - | - | - | - | - | - | - | - |
| Covered-employee payroll | $\overline{\$ 8,612,809}$ | $\overline{\text { \$8,039,326 }}$ | $\overline{\text { \$7,869,774 }}$ | $\overline{\overline{\$ 7,772,827}}$ | $\overline{\overline{\$ 7,683,465}}$ | $\overline{\overline{\$ 7,920,935}}$ | $\overline{\overline{\$ 7,935,248}}$ | $\overline{\overline{\$ 7,859,999}}$ | $\overline{\overline{\$ 7,221,499}}$ | $\overline{\overline{\$ 6,998,174}}$ |
| Contributions as a percentage of covered-employee payroll . . . . . . <br> BERS | 44.070\% | 44.709\% | 40.419\% | 37.530\% | 36.155\% | 33.747\% | 31.114\% | 31.604\% | 30.792\% | 27.386\% |
| Contractually required contribution | \$288,116 | \$265,497 | \$258,055 | \$214,574 | \$196,231 | \$213,651 | \$180,191 | \$147,349 | \$134,225 | \$143,100 |
| Contributions in relation to the contractually required contributions $\qquad$ | \$288,116 | \$265,497 | \$258,055 | \$214,574 | \$196,231 | \$213,651 | \$180,191 | \$147,349 | \$134,225 | \$143,100 |
| Contribution deficiency (excess) . . | 二 | - | - | - | - | - | 二 | - | - | - |
| Covered-employee payroll ........ | \$1,051,567 | \$1,007,499 | \$1,016,277 | \$988,757 | \$885,491 | \$879,476 | \$880,656 | \$826,782 | \$755,516 | \$729,098 |
| Contributions as a percentage of covered-employee payroll | 27.399\% | 26.352\% | 25.392\% | 21.701\% | 22.161\% | 24.293\% | 20.461\% | 17.822\% | 17.766\% | 19.627\% |
| POLICE |  |  |  |  |  |  |  |  |  |  |
| Contractually required contribution | \$2,293,840 | \$2,393,940 | \$2,309,619 | \$2,320,910 | \$2,424,690 | \$2,385,731 | \$2,083,633 | \$1,980,996 | \$1,932,150 | \$1,797,824 |
| Contributions in relation to the contractually required contributions | \$2,293,840 | \$2,393,940 | \$2,309,619 | \$2,320,910 | \$2,424,690 | \$2,385,731 | \$2,083,633 | \$1,980,996 | \$1,932,150 | \$1,797,824 |
| Contribution deficiency (excess) .... | - | - | - | - | - | - | - | - | - | - |
| Covered-employee payroll | $\overline{\overline{\$ 3,509,985}}$ | $\overline{\overline{\$ 3,540,326}}$ | $\overline{\overline{\$ 3,512,778}}$ | \$3,420,312 | $\overline{\overline{\$ 3,459,889}}$ | $\overline{\overline{\$ 3,448,784}}$ | $\overline{\overline{\$ 3,252,729}}$ | $\overline{\overline{\$ 3,097,484}}$ | $\overline{\overline{\$ 2,946,698}}$ | $\overline{\overline{\$ 2,797,429}}$ |
| Contributions as a percentage of covered-employee payroll | 65.352\% | 67.619\% | 65.749\% | 67.857\% | 70.080\% | 69.176\% | 64.058\% | 63.955\% | 65.570\% | 64.267\% |
| FIRE |  |  |  |  |  |  |  |  |  |  |
| Contractually required contribution | \$1,061,170 | \$1,054,478 | \$988,784 | \$969,956 | \$962,173 | \$976,895 | \$890,706 | \$874,331 | \$843,751 | \$780,202 |
| Contributions in relation to the contractually required contributions | \$1,061,170 | \$1,054,478 | \$988,784 | \$969,956 | \$962,173 | \$976,895 | \$890,706 | \$874,331 | \$843,751 | \$780,202 |
| Contribution deficiency (excess) | - | - | - | - | - | - | - | - | - | - |
| Covered-employee payroll ........ | $\overline{\$ 1,145,919}$ | $\overline{\$ 1,129,470}$ | $\overline{\$ 1,111,744}$ | $\overline{\overline{\$ 1,102,396}}$ | $\overline{\text { \$1,129,921 }}$ | $\overline{\overline{\$ 1,149,423}}$ | $\overline{\overline{\$ 1,057,243}}$ | $\overline{\overline{\$ 1,059,911}}$ | $\overline{\overline{\$ 1,013,661}}$ | $\overline{\text { \$ 944,463 }}$ |
| Contributions as a percentage of covered-employee payroll | 92.604\% | 93.360\% | 88.940\% | 87.986\% | 85.154\% | 84.990\% | 84.248\% | 82.491\% | 83.238\% | 82.608\% |

* For City Fiscal Years 2012, 2011, 2010, 2009, and 2008, reported contributions and covered payroll amounts are those of each retirement system as a whole (i.e., the sums for all participating employers.) City-only covered payroll is not readily available for years prior to 2013; and due to methodological changes during the periods 2005 through 2012, the City-only employer contributions are not comparable over the ten year period.


## Notes to Schedule C:

The above actuarially determined and contractually required contributions were developed using a One-Year Lag Methodology, under which the actuarial valuation determines the employer contribution for the second following fiscal year (e.g. Fiscal Year 2017 contributions were determined using an actuarial valuation as of June 30, 2015). The methods and assumptions used to determine the actuarially determined and contractually required contributions are as follows:



Increasing Dollar Payments Increasing Dollar Payments Level Dollar Payments Level Dollar Payments
ear moving average of Market Value ${ }^{6}$
more than $20 \%$ from Market Value
$7.0 \%$ per annum, net of investment expenses (4.0\% per annum for the variable annuity programs of TR

Tables adopted
during Fiscal Year 2016

Tables adopted by
Boards of Trustees
during Fiscal Year 2012


NA Market Value
$7.0 \%$ per annum, net of investment expenses (4.0\% per annum for benefits payable under the variable annuity programs of TRS and BERS)
Tables adopted by during Fiscal Year 2016
Tables adopted by
Boards of Trustees

Board of Trustees


NA
Increasing Dollar Payments Level Dollar Payments

$$
\begin{array}{cc}
\text { NA } & \text { NA } \\
\text { 18 Years (Closed) } & \text { 19 Years (Closed) } \\
\text { 2 Years (Closed) } & 3 \text { Years (Closed) } \\
\text { 12 Years (Closed) } & 13 \text { Years (Closed) } \\
\text { 13 Years (Closed) } & 14 \text { Years (Closed) } \\
\text { 14 Years (Closed) } & 15 \text { Years (Closed) } \\
\text { 4 Years (Closed) } & 5 \text { Years (Closed) } \\
\text { 15 years (Closed) } & \text { NA } \\
\text { 20 Years (Closed) } & \text { NA } \\
\text { 20 Years (Closed) } & \text { NA } \\
\text { NA } & \text { NA } \\
\text { 6-year moving average of } & \text { 6-year moving average of } \\
\text { Market Value } & \text { Market Value }{ }^{6} \\
\begin{array}{c}
\text { Constrained to be no } \\
\text { more than } 20 \% \text { from }
\end{array} & \text { NA }
\end{array}
$$

$7.0 \%$ per annum, net of investment expenses (4.0\% per annum for benefits payable under the variable annuity programs of TRS and BERS)
Tables adopted by
Boards of Trustees
during Fiscal Year 2012

## Tables adopted by <br> Boards of Trustees <br> Boards of Trustees

NA
20 Years (Closed)
4 Years (Closed)
14 Years (Closed)
15 Years (Closed)
NA
NA
NA
NA
NA
NA
6-year moving average of
Market Value
NA

$$
\frac{\mathbf{2 0 1 3}}{\substack{\text { June } 30,2011\left(\text { Lag) } \\ \text { Entry Age }^{5}\right.}}
$$

NA
Increasing Dollar Payments
Level Dollar Payments

## NA

21 years (Closed)
5 Years (Closed)
15 Years (Closed)
NA
NA
NA
NA
NA
NA

6-year moving average of Market Value ${ }^{6}$

NA

$$
\frac{2012}{\substack{\text { June } 30,2010(\text { Lag }) \\ \text { Entry Age }^{5}}}
$$

Increasing Dollar Payments. Level Dollar Payments.

## NA

22 years (Closed).
NA

NA
NA
NA
NA
NA
6-year moving average of
Market Value ${ }^{6}$
NA

| 7.0\% per annum, net of | 7.0\% per annum, net of |
| :---: | :---: |
| investment expenses | investment expenses |
| (4.0\% per annum for | (4.0\% per annum for |
| benefits payable under | benefits payable under |
| the variable annuity | the variable annuity |
| programs of TRS | programs of TRS |
| and BERS) | and BERS). |
| Tables adopted by | Tables adopted by |
| Boards of Trustees | Boards of Trustees |
| during Fiscal Year 2012 | during Fiscal Year 2012 |
|  |  |
| Tables adopted by | Tables adopted by |
| Boards of Trustees | Boards of Trustees |
| during Fiscal Year 2012 | during Fiscal Year 2012 |

## REQUIRED SUPPLEMENTARY INFORMATION (Unaudited), Continued



## Notes to Schedule C:

## Fiscal Year

Actuarial Asset:
Valuation Method

Actuarial assumptions
Assumed rate of return . . . . . . . . . . .

Post-retirement mortality .........
Active service: withdrawal, death, disability, service retirement . . . . . . .

Salary Increases . . . . . . . . . . . . . . . . . . . .

Cost-of-Living Adjustments ${ }^{4} \ldots$. . . . .

6 -year moving average of Market Value with "Market Value Restart" as of June 30, 1999
8.0\% per annum, gross of investment expenses ( $4.0 \%$ per annum for benefit payable under the variable annuity programs of TRS and BERS)
Tables adopted by Boards of Trustees during Fiscal Year 2006

Tables adopted by Boards of Trustee during Fiscal Year 2006
In general, Merit and Promotion Increases plus assumed General Wage Increases of $3.0 \%$ per year ${ }^{4}$ $1.3 \%$ per annum

6 -year moving average of Market
Value with "Market Value Restart" as of June 30, 1999
8.0\% per annum, gross of investment expenses ( $4.0 \%$ per annum for benefit payable under the variable annuity programs of TRS and BERS)
Tables adopted by Boards of Trustees during Fiscal Year 2006

Tables adopted by Boards of Trustees during Fiscal Year 2006 In general, Merit and Promotion Increases plus assumed General Wage Increases of $3.0 \%$ per year ${ }^{4}$ $1.3 \%$ per annum

6 -year moving average of Market Value with "Market Value Restart" as of June 30, 1999
8.0\% per annum, gross of investment expenses ( $4.0 \%$ per annum for benefits payable under the variable annuity programs of TRS and BERS)
Tables adopted by Boards of Trustees during Fiscal Year 2006

Tables adopted by Boards of Trustee during Fiscal Year 2006
In general, Merit and Promotion Increases plus assumed General Wage Increases of $3.0 \%$ per year ${ }^{4}$ $1.3 \%$ per annum

6 -year moving average of Market Value with "Market Value Restart" as of June 30, 1999
8.0\% per annum, gross of investment expenses ( $4.0 \%$ per annum for benefit payable under the variable annuity programs of TRS and BERS)
Tables adopted by Boards of Trustees during Fiscal Year 2006

Tables adopted by Boards of Trustees during Fiscal Year 2006 In general, Merit and Promotion Increases plus assumed General Wage Increases of $3.0 \%$ per year $1.3 \%$ per annum
 Assets plus the UAAL, if any, and the APV of future employee contributions is allocated on a level basis over the future earnings of members who are on the payroll of the valuation date. The Initial Liability was reestablished by the Entry Age Actuarial Cost Method as of June 20, 1999 but with the UAAL not less than $\$ 0$. Actuarial gains and losses are reflected in the employer normal contribution rate.
2 In conjunction with Chapter 85 of the Laws of 2000 (Chapter 85/100), there is an amortization method. However, the initial pre-2010 UAAL of NYCERS, TRS, BERS, and POLICE equal $\$ 0$ and no amortization periods are required.
3 Laws of established UAAL for Early Retirement Incentive Programs to be amortized on a level dollar basis over periods of 5 years.
4 Developed assuming a long-term Consumer Price Inflation assumption of $2.5 \%$ per year.
5 Beginning with the June 30, 2010 (Lag) actuarial valuation under the 2012 A\&M, the Entry Age Actuarial Cost Method (EAACM) of funding is utilized by the Actuary to calculate the contributions required of the Employer. Under this method, the Actuarial Present Value (APV) of Benefits (APVB) of each individual included in the actuarial valuation is allocated on a level basis over the earnings (or service) of the individual between entry age and assumed exit ages. The employer portion of this APV allocated to a valuation year is the Normal Cost. The portion of this APV not provided for at a valuation date by the APV of Future Normal Costs or future member contributions is the Actuarial Accrued Liability (AAL). The excess, if any, of the AAL over the Actuarial Asset Value (AAV) is the Unfunded Actuarial Accrued Liability (UAAL). Under this method, actuarial gains (losses), as they occur, reduce (increase) the UAAL and are explicitly identified and amortized. Increases (decreases) in obligations due to benefit changes, actuarial assumption changes and/or actuarial method changes are also explicitly identified and amortized.
6 Market Value Restart as of June 30, 2011. Actuarial Asset Value (AAV) as of June 30, 2010 defined to recognize Fiscal Year 2011 investment performance. The June 30, 2010 AAV is derived as equal to the June 30, 2011 Market Value of Assets, discounted by the Actuarial Interest Rate assumption (adjusted for cash flow) to June 30, 2010.
D. Schedule of Changes in the City's Net OPEB Liability and Related Ratios for Single-Employer Pension Plans at June 30,

|  |  | 2017 |  | 2016 |
| :---: | :---: | :---: | :---: | :---: |
| 1. Total OPEB Liability |  |  |  |  |
| a. Service Cost | \$ | 4,522,135,121 |  | 5 5,113,884,783 |
| b. Interest |  | 2,899,170,607 |  | 2,669,589,440 |
| c. Changes of Benefit Terms |  | - |  | - |
| d. Differences b/t Expected and Actual Experience |  | 520,672,737 |  | $(120,159,155)$ |
| e. Changes of Assumptions |  | (10,978,714,816) |  |  |
| f. Benefit Payments |  | (2,425,375,364) |  | (2,278,055,136) |
| g. Net Changes in Total OPEB Liability | \$ | (5,462,111,715) |  | 5,385,259,932 |
| 2. Total OPEB Liability - Beginning | \$ | 98,538,687,202 |  | 93,153,427,270 |
| 3. Total OPEB Liability - Ending | \$ | 93,076,575,487 |  | 98,538,687,202 |
| 4. Plan Fiduciary Net Position |  |  |  |  |
| a. Contributions - Employer | \$ | 3,021,551,454 |  | 2,897,668,434 |
| b. Contributions - Employee |  | - - |  | , - |
| c. Net Investment Income |  | 21,515,588 |  | 20,565,435 |
| d. Benefit Payments |  | (2,425,375,364) |  | (2,278,055,136) |
| e. Administrative Expenses |  | $(41,100)$ |  | $(40,000)$ |
| f. Payment of Interest on TDA Fixed Funds |  | - |  |  |
| g. Other Changes |  | $(78,516)$ |  | $(331,067)$ |
| h. Net Changes in Plan Fiduciary Net Position | \$ | 617,572,062 |  | 639,807,666 |
| 5. Plan Fiduciary Net Position - Beginning | \$ | 4,036,331,204 |  | 3,396,523,538 |
| 6. Plan Fiduciary Net Position - Ending | \$ | 4,653,903,266 |  | 4,036,331,204 |
| 7. Net OPEB Liability | \$ | 88,422,672,221 |  | 94,502,355,998 |
| 8. Plan Fiduciary Net Position as a Percentage of Total OPEB Liability |  | 5.0\% |  | 4.1\% |
| 9. Covered Employee Payroll | \$ | 25,180,497,466 |  | \$24,266,021,759 |
| 10. Net OPEB Liability as a Percentage of Covered Employee Payroll |  | 351.2\% |  | 389.4\% |

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# The City of New York 

Comprehensive Annual Financial Report of the Comptroller

## Part II-D

## SUPPLEMENTARY INFORMATION

## COMBINING FINANCIAL INFORMATION FIDUCIARY FUNDS

Fiscal Year Ended June 30, 2017
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## THE CITY OF NEW YORK

## PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS

 COMBINING STATEMENT OF FIDUCIARY NET POSITIONJUNE 30, 2017
(in thousands)

|  | Pension Funds* | Other Employee Benefit Trust Funds |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Deferred Compensation Plans December 31, 2016 | The New York City Other <br> Postemployment Benefits Plan |  |
| Assets: |  |  |  |  |
| Cash and cash equivalents | \$ 430,715 | \$ 14,898 | \$ 1,050,735 | \$ 1,496,348 |
| Receivables: |  |  |  |  |
| Member loans | 2,127,361 | 235,905 | - | 2,363,266 |
| Investment securities sold | 2,809,613 | - | - | 2,809,613 |
| Accrued interest and dividends | 515,885 | - | 5,976 | 521,861 |
| Other receivables | 283 | - | 2,023 | 2,306 |
| Total receivables | 5,453,142 | 235,905 | 7,999 | 5,697,046 |
| Investments: |  |  |  |  |
| Short-term investments | 3,153,337 | - | - | 3,153,337 |
| Debt securities | 40,882,792 | - | 3,928,421 | 44,811,213 |
| Equity securities | 63,428,113 | - | - | 63,428,113 |
| Alternative investments | 26,996,866 | - | - | 26,996,866 |
| Mutual funds | - | 11,484,251 | - | 11,484,251 |
| Collective trust funds | 65,840,204 | - | - | 65,840,204 |
| Collateral from securities lending transactions | 14,160,766 | - | - | 14,160,766 |
| Guaranteed investment contracts | - | 5,789,053 | - | 5,789,053 |
| Total investments | 214,462,078 | 17,273,304 | 3,928,421 | 235,663,803 |
| Other assets | 174,187 | 3,855 | 42 | 178,084 |
| Total assets | 220,520,122 | 17,527,962 | 4,987,197 | 243,035,281 |
| Liabilities: |  |  |  |  |
| Accounts payable and accrued liabilities | 1,439,414 | 6,439 | 333,294 | 1,779,147 |
| Payable for investment securities purchased | 3,326,760 | - | - | 3,326,760 |
| Accrued benefits payable | 802,943 | - | - | 802,943 |
| Securities lending transactions | 14,160,766 | - | - | 14,160,766 |
| Other liabilities | 1,088 | - | - | 1,088 |
| Total liabilities | 19,730,971 | 6,439 | 333,294 | 20,070,704 |
| Net Position: |  |  |  |  |
| Restricted for benefits to be provided by QPPs | 163,025,497 | - | - | 163,025,497 |
| Restricted for benefits to be provided by VSFs | 4,911,873 | - | - | 4,911,873 |
| Restricted for benefits to be provided by TDA Program | 32,851,781 | - | - | 32,851,781 |
| Restricted for other employee benefits | - | 17,521,523 | 4,653,903 | 22,175,426 |
| Total net position | \$200,789,151 | \$ 17,521,523 | \$ 4,653,903 | \$222,964,577 |

[^18]
## THE CITY OF NEW YORK

## PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS

 COMBINING STATEMENT OF FIDUCIARY NET POSITIONJUNE 30, 2016
(in thousands)

|  | Pension Funds* |  | Other Employee Benefit Trust Funds |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Deferred Compensation Plans December 31, 2015 |  | The New York City Other Postemployment Benefits Plan |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | \$ 344,051 | \$ | \$ 15,372 | \$ | 1,503,320 | \$ | 1,862,743 |
| Receivables: |  |  |  |  |  |  |  |  |
| Member loans |  | 2,089,798 |  | 229,362 |  | - |  | 2,319,160 |
| Investment securities sold |  | 4,181,594 |  | - |  | - |  | 4,181,594 |
| Accrued interest and dividends |  | 537,647 |  | - |  | 3,188 |  | 540,835 |
| Other receivables |  | 14 |  | - |  | 365 |  | 379 |
| Total receivables |  | 6,809,053 |  | 229,362 |  | 3,553 |  | 7,041,968 |
| Investments: |  |  |  |  |  |  |  |  |
| Short-term investments |  | 5,117,216 |  | - |  | - |  | 5,117,216 |
| Debt securities |  | 37,207,963 |  | - |  | 2,911,796 |  | 40,119,759 |
| Equity securities |  | 59,731,778 |  | - |  | - |  | 59,731,778 |
| Alternative investments |  | 25,752,930 |  | - |  | - |  | 25,752,930 |
| Mutual funds |  | - |  | 10,352,595 |  | - |  | 10,352,595 |
| Collective trust funds |  | 51,716,410 |  | - |  | - |  | 51,716,410 |
| Collateral from securities lending transactions |  | 11,902,353 |  | 5,303,762 |  | - |  | 11,902,353 |
| Guaranteed investment contracts |  | - |  | 5,303,762 |  | - |  | 5,303,762 |
| Total investments |  | 191,428,650 |  | 15,656,357 |  | 2,911,796 |  | 209,996,803 |
| Other assets |  | 273,223 |  | 2,545 |  | 41 |  | 275,809 |
| Total assets |  | 198,854,977 |  | 15,903,636 |  | 4,418,710 |  | 219,177,323 |
| Liabilities: |  |  |  |  |  |  |  |  |
| Accounts payable and accrued liabilities |  | 1,056,030 |  | 6,128 |  | 327,321 |  | 1,389,479 |
| Payable for investment securities purchased |  | 5,377,323 |  | - |  | 55,058 |  | 5,432,381 |
| Accrued benefits payable |  | 787,009 |  | - |  | - |  | 787,009 |
| Securities lending transactions |  | 11,902,353 |  | - |  | - |  | 11,902,353 |
| Other liabilities |  | 97,746 |  | - |  | - |  | 97,746 |
| Total liabilities |  | 19,220,461 |  | 6,128 |  | 382,379 |  | 19,608,968 |
| Net Position: |  |  |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPPs |  | 146,917,855 |  | - |  | - |  | 146,917,855 |
| Restricted for benefits to be provided by VSFs |  | 2,642,245 |  | - |  | - |  | 2,642,245 |
| Restricted for benefits to be provided by TDA Program |  | 30,074,416 |  | - |  | - |  | 30,074,416 |
| Restricted for other employee benefits |  | - |  | 15,897,508 |  | 4,036,331 |  | 19,933,839 |
| Total net position |  | \$179,634,516 |  | \$ 15,897,508 | \$ | 4,036,331 |  | 199,568,355 |

[^19]
# THE CITY OF NEW YORK <br> PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

|  | Pension Funds* |  | Other Employee Benefit Trust Funds |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Deferred Compensation Plans December 31, 2016 | The New York City Other Postemployment Benefits Plan |  |
| Additions: |  |  |  |  |  |  |
| Contributions: |  |  |  |  |  |  |
| Member contributions |  | \$ 1,947,508 |  | \$ 920,078 | \$ | \$ 2,867,586 |
| Employer contributions |  | 10,859,835 |  | - | 3,020,943 | 13,880,778 |
| Other employer contributions |  | 57,369 |  | - | - | 57,369 |
| Total contributions |  | 12,864,712 |  | 920,078 | 3,020,943 | 16,805,733 |
| Investment income: |  |  |  |  |  |  |
| Interest income |  | 2,332,835 |  | 131,270 | 21,516 | 2,485,621 |
| Dividend income |  | 2,823,560 |  | - | - | 2,823,560 |
| Net appreciation in fair value of investments |  | 18,763,970 |  | 1,229,869 | - | 19,993,839 |
| Investment expenses |  | $(893,822)$ |  | $(31,573)$ | - | $(925,395)$ |
| Investment income, net |  | 23,026,543 |  | 1,329,566 | 21,516 | 24,377,625 |
| Securities lending transactions: |  |  |  |  |  |  |
| Securities lending income |  | 90,516 |  | - | - | 90,516 |
| Securities lending fees |  | $(6,263)$ |  | - | - | $(6,263)$ |
| Securities lending income, net |  | 84,253 |  | - | - | 84,253 |
| Other |  | $(110,010)$ |  | - | - | $(110,010)$ |
| Total additions |  | 35,865,498 |  | 2,249,644 | 3,042,459 | 41,157,601 |
| Deductions: |  |  |  |  |  |  |
| Benefit payments and withdrawals |  | 14,512,464 |  | 611,032 | 2,424,766 | 17,548,262 |
| Administrative expenses |  | 188,021 |  | 14,597 | 121 | 202,739 |
| Other |  | 10,378 |  | - | - | 10,378 |
| Total deductions |  | 14,710,863 |  | 625,629 | 2,424,887 | 17,761,379 |
| Net increase in net position |  | 21,154,635 |  | 1,624,015 | 617,572 | 23,396,222 |
| Net Position: |  |  |  |  |  |  |
| Restricted for benefits: |  |  |  |  |  |  |
| Beginning of year |  | 179,634,516 |  | 15,897,508 | 4,036,331 | 199,568,355 |
| End of year |  | \$200,789,151 |  | \$17,521,523 | \$ 4,653,903 | \$222,964,577 |

[^20]
# THE CITY OF NEW YORK <br> PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | Pension Funds* |  | Other Employee Benefit Trust Funds |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Deferred <br> Compensation <br> Plans <br> December 31, <br> 2015 | $\begin{gathered} \text { The New York City } \\ \text { Other } \\ \text { Postemployment } \\ \text { Benefits Plan } \\ \hline \end{gathered}$ |  |
| Additions: |  |  |  |  |  |  |
| Contributions: |  |  |  |  |  |  |
| Member contributions |  | \$ 1,859,350 |  | \$ 879,864 | \$ | \$ 2,739,214 |
| Employer contributions. |  | 10,781,973 |  | - | 2,897,129 | 13,679,102 |
| Other employer contributions |  | 58,145 |  | - | - | 58,145 |
| Total contributions |  | 12,699,468 |  | 879,864 | 2,897,129 | 16,476,461 |
| Investment income: |  |  |  |  |  |  |
| Interest income |  | 2,212,985 |  | 122,953 | 20,565 | 2,356,503 |
| Dividend income |  | 2,561,066 |  | - | - | 2,561,066 |
| Net depreciation in fair value of investments |  | $(1,323,067)$ |  | $(76,782)$ | - | $(1,399,849)$ |
| Investment expenses |  | $(640,509)$ |  | $(33,008)$ | - | $(673,517)$ |
| Investment income, net |  | 2,810,475 |  | 13,163 | 20,565 | 2,844,203 |
| Securities lending transactions: |  |  |  |  |  |  |
| Securities lending income. |  | 88,389 |  | - | - | 88,389 |
| Securities lending fees. |  | $(6,057)$ |  | - | - | $(6,057)$ |
| Securities lending income, net |  | 82,332 |  | - | - | 82,332 |
| Other |  | $(106,450)$ |  | - | - | $(106,450)$ |
| Total additions |  | 15,485,825 |  | 893,027 | 2,917,694 | 19,296,546 |
| Deductions: |  |  |  |  |  |  |
| Benefit payments and withdrawals |  | 14,052,394 |  | 587,624 | 2,277,516 | 16,917,534 |
| Administrative expenses |  | 180,828 |  | 14,132 | 371 | 195,331 |
| Other |  | 7,440 |  | - | 二 | 7,440 |
| Total deductions |  | 14,240,662 |  | 601,756 | 2,277,887 | 17,120,305 |
| Net increase in net position |  | 1,245,163 |  | 291,271 | 639,807 | 2,176,241 |
| Net Position: |  |  |  |  |  |  |
| Restricted for benefits: |  |  |  |  |  |  |
| Beginning of year |  | 178,389,353 |  | 15,606,237 | 3,396,524 | 197,392,114 |
| End of year |  | \$179,634,516 |  | \$15,897,508 | \$ 4,036,331 | $\underline{\underline{\$ 199,568,355}}$ |

[^21]
# THE CITY OF NEW YORK PENSION TRUST FUNDS* COMBINING SCHEDULE OF FIDUCIARY NET POSITION 

JUNE 30, 2017
(in thousands)

|  |  | New York City <br> Employees' <br> Retirement System |  | Teachers' <br> Retirement <br> System ** |  | Board of Education Retirement System** |  | New York City Police Pension Funds |  | New York City Fire Pension Funds |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | 172,223 | \$ | 105,451 |  | 3,337 |  | 110,372 | \$ | 39,332 |  | \$ 430,715 |
| Receivables: |  |  |  |  |  |  |  |  |  |  |  |  |
| Member loans |  | 1,102,986 |  | 674,162 |  | 88,692 |  | 234,570 |  | 26,951 |  | 2,127,361 |
| Investment securities sold |  | 687,047 |  | 1,013,681 |  | 99,581 |  | 812,596 |  | 196,708 |  | 2,809,613 |
| Accrued interest and dividends |  | 301,717 |  | 176,940 |  | 9,698 |  | 3,463 |  | 24,067 |  | 515,885 |
| Other receivables |  | 12 |  | - |  | 60 |  | - |  | 211 |  | 283 |
| Total receivables |  | 2,091,762 |  | 1,864,783 |  | 198,031 |  | 1,050,629 |  | 247,937 |  | 5,453,142 |
| Investments: |  |  |  |  |  |  |  |  |  |  |  |  |
| Short-term investments |  | 1,129,977 |  | 1,249,819 |  | 57,514 |  | 478,510 |  | 237,517 |  | 3,153,337 |
| Debt securities |  | 13,520,986 |  | 16,326,740 |  | 1,111,952 |  | 7,702,213 |  | 2,220,901 |  | 40,882,792 |
| Equity securities |  | 18,956,302 |  | 35,438,844 |  | 636,126 |  | 6,518,200 |  | 1,878,641 |  | 63,428,113 |
| Alternative investments |  | 9,258,955 |  | 7,523,885 |  | 612,677 |  | 7,209,973 |  | 2,391,376 |  | 26,996,866 |
| Collective trust funds: |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt securities |  | 4,558,167 |  | 4,969,005 |  | 381,830 |  | 3,163,637 |  | 1,488,894 |  | 14,561,533 |
| Domestic equity |  | - |  | - |  | 1,738,135 |  | 7,310,206 |  | 2,408,391 |  | 11,456,732 |
| International equity |  | 13,360,204 |  | 15,734,149 |  | 1,251,628 |  | 7,030,703 |  | 2,445,255 |  | 39,821,939 |
| Collateral from securities lendin transactions |  | 7,034,093 |  | 1,718,735 |  | 380,860 |  | 3,916,225 |  | 1,110,853 |  | 14,160,766 |
| Total investments |  | 67,818,684 |  | 82,961,177 |  | 6,170,722 |  | 43,329,667 |  | 14,181,828 |  | 214,462,078 |
| Other assets |  | 93,948 |  | 28,063 |  | 32,001 |  | 17,667 |  | 2,508 |  | 174,187 |
| Total assets |  | 70,176,617 |  | 84,959,474 |  | 6,404,091 |  | 44,508,335 |  | 14,471,605 |  | 220,520,122 |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounts payable and accrued |  |  |  |  |  |  |  |  |  |  |  |  |
| Payable for investment securities purchased |  | 955,572 |  | 1,397,219 |  | 93,608 |  | 674,766 |  | 205,595 |  | 3,326,760 |
| Accrued benefits payable |  | 371,690 |  | 96,902 |  | 16,480 |  | 272,239 |  | 45,632 |  | 802,943 |
| Securities lending transactions |  | 7,034,093 |  | 1,718,735 |  | 380,860 |  | 3,916,225 |  | 1,110,853 |  | 14,160,766 |
| Other liabilities |  | 1,088 |  | - |  | - |  | - |  | - |  | 1,088 |
| Total liabilities |  | 8,571,670 |  | 3,811,658 |  | 504,832 |  | 5,332,564 |  | 1,510,247 |  | 19,730,971 |
| Net Position: |  |  |  |  |  |  |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPPs |  | 61,316,782 |  | 50,095,723 |  | 4,099,571 |  | 35,423,525 |  | 12,089,896 |  | 163,025,497 |
| Restricted for benefits to be provided by VSFs |  | 288,165 |  | - |  | - |  | 3,752,246 |  | 871,462 |  | 4,911,873 |
| Restricted for benefits to be provided by TDA Program |  | - |  | 31,052,093 |  | 1,799,688 |  | - |  | - |  | 32,851,781 |
| Total net position |  | 61,604,947 |  | $\underline{\text { 81,147,816 }}$ |  | 5,899,259 |  | 39,175,771 |  | 12,961,358 |  | \$200,789,151 |

[^22]
# THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* COMBINING SCHEDULE OF FIDUCIARY NET POSITION 

JUNE 30, 2016
(in thousands)

|  |  | New York City <br> Employees' Retirement System |  | Teachers' <br> Retirement <br> System** |  | Board of <br> Education Retirement System** |  | New York City Police Pension Funds |  | New York City Fire Pension Funds |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash and cash equivalents. | \$ | 166,041 | \$ | 9,856 |  | \$ 532 | \$ | 118,867 | \$ | 48,755 | \$ | 344,051 |
| Receivables: |  |  |  |  |  |  |  |  |  |  |  |  |
| Member loans |  | 1,081,783 |  | 643,568 |  | 85,669 |  | 251,861 |  | 26,917 |  | 2,089,798 |
| Investment securities sold |  | 1,413,529 |  | 1,802,207 |  | 119,970 |  | 668,224 |  | 177,664 |  | 4,181,594 |
| Accrued interest and dividends |  | 280,765 |  | 164,612 |  | 873 |  | 69,223 |  | 22,174 |  | 537,647 |
| Other receivables |  | 11 |  | - |  | 3 |  | - |  | - |  | 14 |
| Total receivables |  | 2,776,088 |  | 2,610,387 |  | 206,515 |  | 989,308 |  | 226,755 |  | 6,809,053 |
| Investments: |  |  |  |  |  |  |  |  |  |  |  |  |
| Short-term investments |  | 1,614,900 |  | 2,314,459 |  | 113,900 |  | 857,866 |  | 216,091 |  | 5,117,216 |
| Debt securities |  | 11,446,576 |  | 15,196,888 |  | 890,152 |  | 7,312,481 |  | 2,361,866 |  | 37,207,963 |
| Equity securities |  | 18,523,033 |  | 31,885,457 |  | 726,951 |  | 6,793,390 |  | 1,802,947 |  | 59,731,778 |
| Alternative investments |  | 9,873,044 |  | 6,872,850 |  | 506,922 |  | 6,382,258 |  | 2,117,856 |  | 25,752,930 |
| Collective trust funds: |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt securities. |  | 4,078,137 |  | 4,576,038 |  | 354,248 |  | 2,462,140 |  | 1,096,178 |  | 12,566,741 |
| Domestic equity. |  | - |  | - |  | 1,401,665 |  | 6,013,129 |  | 2,103,107 |  | 9,517,901 |
| International equity |  | 9,220,895 |  | 11,507,149 |  | 942,911 |  | 5,856,080 |  | 2,104,733 |  | 29,631,768 |
| Collateral from securities lendin transactions |  | 5,267,092 |  | 2,141,284 |  | 493,265 |  | 3,078,231 |  | 922,481 |  | 11,902,353 |
| Total investments. |  | 60,023,677 |  | 74,494,125 |  | 5,430,014 |  | 38,755,575 |  | 12,725,259 |  | 191,428,650 |
| Other assets. |  | 84,632 |  | 42,280 |  | 124,031 |  | 16,104 |  | 6,176 |  | 273,223 |
| Total assets. |  | 63,050,438 |  | 77,156,648 |  | 5,761,092 |  | 39,879,854 |  | 13,006,945 |  | 198,854,977 |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounts payable and accrued liabilities |  | 177,909 |  | 499,669 |  | 6,907 |  | 279,398 |  | 92,147 |  | 1,056,030 |
| Payable for investment securities |  |  |  |  |  |  |  |  |  |  |  |  |
| Accrued benefits payable |  | 314,386 |  | 103,690 |  | 14,140 |  | 305,412 |  | 49,381 |  | 787,009 |
| Securities lending transactions |  | 5,267,092 |  | 2,141,284 |  | 493,265 |  | 3,078,231 |  | 922,481 |  | 11,902,353 |
| Other liabilities |  | 1,590 |  | - |  | 96,156 |  | - |  | - |  | 97,746 |
| Total liabilities |  | 7,555,917 |  | 5,082,763 |  | 714,583 |  | 4,567,875 |  | 1,299,323 |  | 19,220,461 |
| Net Position: |  |  |  |  |  |  |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPPs |  | 55,489,504 |  | 43,629,545 |  | 3,416,433 |  | 33,482,610 |  | 10,899,763 |  | 146,917,855 |
| Restricted for benefits to be provided by VSFs. |  | 5,017 |  | - |  | - |  | 1,829,369 |  | 807,859 |  | 2,642,245 |
| Restricted for benefits to be provided by TDA Program |  | - |  | 28,444,340 |  | 1,630,076 |  | - |  | - |  | 30,074,416 |
| Total net position. |  | 55,494,521 |  | \$72,073,885 |  | \$5,046,509 |  | 35,311,979 |  | 11,707,622 |  | 179,634,516 |

[^23]
## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

|  | New York City Employees' Retirement System | Teachers’ Retirement System | Board of <br> Education <br> Retirement <br> System | New York City Police Pension Funds | New York City Fire Pension Funds | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions: |  |  |  |  |  |  |
| Contributions: |  |  |  |  |  |  |
| Member contributions | \$ 513,514 | \$ 923,739 | \$ 125,586 | \$ 276,301 | \$ 108,368 | \$ 1,947,508 |
| Employer contributions | 3,328,193 | 3,888,399 | 288,233 | 2,293,840 | 1,061,170 | 10,859,835 |
| Other employer contributions | - | 57,369 | - | - | - | 57,369 |
| Total contributions | 3,841,707 | 4,869,507 | 413,819 | 2,570,141 | 1,169,538 | 12,864,712 |
| Investment income: |  |  |  |  |  |  |
| Interest income | 754,089 | 966,537 | 58,528 | 410,332 | 143,349 | 2,332,835 |
| Dividend income | 931,480 | 1,119,324 | 85,420 | 515,725 | 171,611 | 2,823,560 |
| Net appreciation in fair value of investments | 5,489,005 | 7,734,954 | 818,982 | 3,585,394 | 1,135,635 | 18,763,970 |
| Investment expenses | $(223,756)$ | $(308,283)$ | $(30,665)$ | $(245,994)$ | $(85,124)$ | $(893,822)$ |
| Investment income, net | 6,950,818 | 9,512,532 | 932,265 | 4,265,457 | 1,365,471 | 23,026,543 |
| Securities lending transactions: |  |  |  |  |  |  |
| Securities lending income | 33,703 | 20,820 | 6,235 | 23,042 | 6,716 | 90,516 |
| Securities lending fees | $(2,369)$ | $(1,572)$ | (251) | $(1,605)$ | (466) | $(6,263)$ |
| Securities lending income, net | 31,334 | 19,248 | 5,984 | 21,437 | 6,250 | 84,253 |
| Other | 3,266 | - | (171,067) | 10,507 | 47,284 | $(110,010)$ |
| Total additions | 10,827,125 | 14,401,287 | 1,181,001 | 6,867,542 | 2,588,543 | 35,865,498 |
| Deductions: |  |  |  |  |  |  |
| Benefit payments and withdrawals | 4,648,941 | 5,231,243 | 312,640 | 2,984,833 | 1,334,807 | 14,512,464 |
| Administrative expenses | 59,671 | 93,822 | 15,611 | 18,917 | - | 188,021 |
| Other | 8,087 | 2,291 | - | - | - | 10,378 |
| Total deductions | 4,716,699 | 5,327,356 | 328,251 | 3,003,750 | 1,334,807 | 14,710,863 |
| Net increase in net position | 6,110,426 | 9,073,931 | 852,750 | 3,863,792 | 1,253,736 | 21,154,635 |
| Net Position: |  |  |  |  |  |  |
| Restricted for benefits: |  |  |  |  |  |  |
| Beginning of year . | 55,494,521 | 72,073,885 | 5,046,509 | 35,311,979 | 11,707,622 | 179,634,516 |
| End of year | \$61,604,947 | $\underline{\underline{\$ 81,147,816}}$ | $\underline{\underline{\$ 5,899,259}}$ | \$39,175,771 | \$12,961,358 | $\underline{\text { \$200,789,151 }}$ |

[^24]
# THE CITY OF NEW YORK PENSION TRUST FUNDS* COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | New York City Employees' Retirement System | Teachers’ <br> Retirement System | Board of <br> Education <br> Retirement <br> System | New York City Police Pension Funds |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions: |  |  |  |  |  |  |
| Contributions: |  |  |  |  |  |  |
| Member contributions | \$ 485,508 | \$ 891,262 | \$ 116,040 | \$ 249,921 | \$ 116,619 | \$ 1,859,350 |
| Employer contributions | 3,365,454 | 3,702,569 | 265,532 | 2,393,940 | 1,054,478 | 10,781,973 |
| Other employer contributions | - | 58,145 | - | - | - | 58,145 |
| Total contributions | 3,850,962 | 4,651,976 | 381,572 | 2,643,861 | 1,171,097 | 12,699,468 |
| Investment income: |  |  |  |  |  |  |
| Interest income | 692,957 | 893,691 | 48,122 | 433,009 | 145,206 | 2,212,985 |
| Dividend income | 836,490 | 1,024,591 | 57,316 | 484,994 | 157,675 | 2,561,066 |
| Net (depreciation) appreciation in fair value of investments | $(174,204)$ | $(780,798)$ | 71,243 | $(379,436)$ | $(59,872)$ | $(1,323,067)$ |
| Investment expenses | $(212,996)$ | $(209,423)$ | $(14,998)$ | $(156,771)$ | $(46,321)$ | $(640,509)$ |
| Investment income, net | 1,142,247 | 928,061 | 161,683 | 381,796 | 196,688 | 2,810,475 |
| Securities lending transactions: |  |  |  |  |  |  |
| Securities lending income. | 31,719 | 22,796 | 3,763 | 23,249 | 6,862 | 88,389 |
| Securities lending fees | $(2,062)$ | $(1,785)$ | (253) | $(1,511)$ | (446) | $(6,057)$ |
| Securities lending income, net | 29,657 | 21,011 | 3,510 | 21,738 | 6,416 | 82,332 |
| Other | 2,928 | 1,233 | $(161,040)$ | 6,756 | 43,673 | $(106,450)$ |
| Total additions | 5,025,794 | 5,602,281 | 385,725 | 3,054,151 | 1,417,874 | 15,485,825 |
| Deductions: |  |  |  |  |  |  |
| Benefit payments and withdrawals | 4,496,180 | 5,024,644 | 290,916 | 2,882,223 | 1,358,431 | 14,052,394 |
| Administrative expenses | 56,683 | 91,999 | 13,668 | 18,478 | - | 180,828 |
| Other | 7,440 | - | - | - | - | 7,440 |
| Total deductions | 4,560,303 | 5,116,643 | 304,584 | 2,900,701 | 1,358,431 | 14,240,662 |
| Net increase in net position | 465,491 | 485,638 | 81,141 | 153,450 | 59,443 | 1,245,163 |
| Net Position: |  |  |  |  |  |  |
| Restricted for benefits: |  |  |  |  |  |  |
| Beginning of year | 55,029,030 | 71,588,247 | 4,965,368 | 35,158,529 | 11,648,179 | 178,389,353 |
| End of year | \$55,494,521 | \$72,073,885 | \$5,046,509 | \$35,311,979 | \$11,707,622 | \$179,634,516 |

[^25]
## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30, 2017
(in thousands)


* Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.


## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS＊

## NEW YORK CITY EMPLOYEES＇RETIREMENT SYSTEM

## COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30， 2016
（in thousands）

TotalNew York City New York City Retirement Reniremen
System
NYCERS
Qualified Pension

|  | NYCERS Qualified Pension Plan（QPP） |  |  |  |  |  |  |  |  |  |  | Total <br> New York City <br> Employees＇ <br> Retirement <br> System |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Variable Supplements Funds（VSFs） |  |  |  |  |  |  |  | Eliminations |  |  |  |
|  |  | TPOVSF |  | TPSOVSF | HPOVSF |  | HPSOVSF | COVSF |  |  |  |  |  |
| Assets： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \＄165，685 |  | \＄ 29 | \＄ 40 |  | \＄ 30 |  | \＄ | 213 |  | \＄－ | \＄ | 166，041 |
| Receivables：${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member loans | 1，081，783 |  | － | － |  | － | － |  | － |  | － |  | 1，081，783 |
| Investment securities sold | 1，413，529 |  | － | － |  | － | － |  | － |  | － |  | 1，413，529 |
| Accrued interest and dividends | 280，740 |  | － | － |  | － | － |  | 25 |  | － |  | 280，765 |
| Other receivables． | － |  | － | － |  | － | － |  | 11 |  | － |  | 11 |
| Transferrable earnings due from QPP to VSFs | － |  | － | － |  | － | － |  | 3，000 |  | $(3,000)$ |  | － |
| Total receivables | 2，776，052 |  | － | － |  | － | － |  | 3，036 |  | $(3,000)$ |  | 2，776，088 |
| Investments： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Short－term investments | 1，571，207 |  | － | － |  | － | － |  | 43，693 |  | － |  | 1，614，900 |
| Debt securities | 11，446，576 |  | － | － |  | － | － |  | － |  | － |  | 11，446，576 |
| Equity securities | 18，523，033 |  | － | － |  | － | － |  | － |  | － |  | 18，523，033 |
| Alternative investments | 9，873，044 |  | － | － |  | － | － |  | － |  | － |  | 9，873，044 |
| Collective trust funds： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt securities | 4，078，137 |  | － | － |  | － | － |  | － |  | － |  | 4，078，137 |
| International equity | 9，220，895 |  | － | － |  | － | － |  | － |  | － |  | 9，220，895 |
| Collateral from securities lending transactions | 5，267，092 |  | － | － |  | － | － |  | － |  | － |  | 5，267，092 |
| Total investments | 59，979，984 |  | － | － |  | － | － |  | 43，693 |  | － |  | 60，023，677 |
| Due from QPP | － |  | 1，967 | 1，448 |  | 991 | 1，318 |  | － |  | $(5,724)$ |  |  |
| Other assets | 84，632 |  | － | － |  | － | － |  | － |  | － |  | 84，632 |
| Total assets | 63，006，353 |  | 1，996 | 1，488 |  | 1，021 | 1，362 |  | 46，942 |  | $(8,724)$ |  | 63，050，438 |
| Liabilities： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | 177，887 |  | 22 | － |  | － | － |  | － |  | － |  | 177，909 |
| Payable for investment securities purchased | 1，794，940 |  | － | － |  | － | － |  | － |  | － |  | 1，794，940 |
| Accrued benefits payable | 266，616 |  | 1，974 | 1，488 |  | 1，021 | 1，362 |  | 41，925 |  | － |  | 314，386 |
| Transferrable earnings due from QPP to VSFs | 3，000 |  | － | － |  | － | － |  | － |  | $(3,000)$ |  | － |
| Due to VSFs ．．．．．．．．．．．． | 5，724 |  | － | － |  | － | － |  | － |  | $(5,724)$ |  | － |
| Securities lending transactions | 5，267，092 |  | － | － |  | － | － |  | － |  | － |  | 5，267，092 |
| Other liabilities | 1，590 |  | － | － |  | － | － |  | － |  | 二 |  | 1，590 |
| Total liabilities | 7，516，849 |  | 1，996 | 1，488 |  | 1，021 | 1，362 |  | 41，925 |  | $(8,724)$ |  | 7，555，917 |
| Net Position： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 55，489，504 |  | － | － |  | － | － |  | － |  | － |  | 55，489，504 |
| Restricted for benefits to be provided by VSFs | － |  | － | － |  | － | 二 |  | 5，017 |  | － |  | 5，017 |
| Total net position ． | \＄55，489，504 | \＄ | \＄ | \＄ | \＄ | \＄ | \＄－ | \＄ | 5，017 |  | \＄ |  | 55，494，521 |


|  | NYCERS Qualified Pension Plan（QPP） | Variable Supplements Funds（VSFs） |  |  |  |  |  |  |  | Eliminations |  | Total New York City Employees＇ Retirement System |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | TPOVSF |  | TPSOVSF | HPOVSF |  | HPSOVSF | COVSF |  |  |  |  |  |
| Assets： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \＄165，685 |  | \＄ 29 | \＄ 40 | \＄ | \＄ 30 | \＄ 44 | \＄ | 213 |  | \＄－ | \＄ | 166，041 |
| Receivables： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member loans | 1，081，783 |  | － | － |  | － | － |  | － |  | － |  | 1，081，783 |
| Investment securities sold | 1，413，529 |  | － | － |  | － | － |  | － |  | － |  | 1，413，529 |
| Accrued interest and dividends | 280，740 |  | － | － |  | － | － |  | 25 |  | － |  | 280，765 |
| Other receivables． | － |  | － | － |  | － | － |  | 11 |  | － |  | 11 |
| Transferrable earnings due from QPP to VSFs | － |  | － | － |  | － | － |  | 3，000 |  | $(3,000)$ |  | 二 |
| Total receivables | 2，776，052 |  | － | － |  | － | － |  | 3，036 |  | $(3,000)$ |  | 2，776，088 |
| Investments： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Short－term investments | 1，571，207 |  | － | － |  | － | － |  | 43，693 |  | － |  | 1，614，900 |
| Debt securities | 11，446，576 |  | － | － |  | － | － |  | － |  | － |  | 11，446，576 |
| Equity securities | 18，523，033 |  | － | － |  | － | － |  | － |  | － |  | 18，523，033 |
| Alternative investments | 9，873，044 |  | － | － |  | － | － |  | － |  | － |  | 9，873，044 |
| Collective trust funds： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt securities | 4，078，137 |  | － | － |  | － | － |  | － |  | － |  | 4，078，137 |
| International equity | 9，220，895 |  | － | － |  | － | － |  | － |  | － |  | 9，220，895 |
| Collateral from securities lending transactions | 5，267，092 |  | － | － |  | － | － |  | － |  | － |  | 5，267，092 |
| Total investments | 59，979，984 |  | － | － |  | － | － |  | 43，693 |  | － |  | 60，023，677 |
| Due from QPP | － |  | 1，967 | 1，448 |  | 991 | 1，318 |  | － |  | $(5,724)$ |  | － |
| Other assets | 84，632 |  | － | － |  | － | － |  | － |  | － |  | 84，632 |
| Total assets | 63，006，353 |  | 1，996 | 1，488 |  | 1，021 | 1，362 |  | 46，942 |  | $(8,724)$ |  | 63，050，438 |
| Liabilities： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | 177，887 |  | 22 | － |  | － | － |  | － |  | － |  | 177，909 |
| Payable for investment securities purchased | 1，794，940 |  | － | － |  | － | － |  | － |  | － |  | 1，794，940 |
| Accrued benefits payable | 266，616 |  | 1，974 | 1，488 |  | 1，021 | 1，362 |  | 41，925 |  | － |  | 314，386 |
| Transferrable earnings due from QPP to VSFs | 3，000 |  | － | － |  | － | － |  | － |  | $(3,000)$ |  | － |
| Due to VSFs | 5，724 |  | － | － |  | － | － |  | － |  | $(5,724)$ |  | － |
| Securities lending transactions | 5，267，092 |  | － | － |  | － | － |  | － |  | （5，724） |  | 5，267，092 |
| Other liabilities | 1，590 |  | － | － |  | － | － |  | － |  | － |  | 1，590 |
| Total liabilities | 7，516，849 |  | 1，996 | 1，488 |  | 1，021 | 1，362 |  | 41，925 |  | $(8,724)$ |  | 7，555，917 |
| Net Position： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 55，489，504 |  | － | － |  | － | － |  | － |  | － |  | 55，489，504 |
| Restricted for benefits to be provided by VSFs | － |  | － | － |  | － | － |  | 5，017 |  | － |  | 5，017 |
| Total net position | $\underline{\$ 55,489,504}$ |  | \＄ | \＄ | \＄ | \＄ | \＄－ | \＄ | 5，017 |  | \＄ |  | 55，494，521 | System Plan（QPP）

Cash and cash equivalents
Receivables：
Member loans

|  | NYCERS Qualified Pension Plan（QPP） | Variable Supplements Funds（VSFs） |  |  |  |  |  |  |  | Eliminations |  | Total New York City Employees＇ Retirement System |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | TPOVSF |  | TPSOVSF | HPOVSF |  | HPSOVSF | COVSF |  |  |  |  |  |
| Assets： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \＄165，685 |  | \＄ 29 | \＄ 40 | \＄ | \＄ 30 | \＄ 44 | \＄ | 213 |  | \＄－ | \＄ | 166，041 |
| Receivables： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member loans | 1，081，783 |  | － | － |  | － | － |  | － |  | － |  | 1，081，783 |
| Investment securities sold | 1，413，529 |  | － | － |  | － | － |  | － |  | － |  | 1，413，529 |
| Accrued interest and dividends | 280，740 |  | － | － |  | － | － |  | 25 |  | － |  | 280，765 |
| Other receivables． | － |  | － | － |  | － | － |  | 11 |  | － |  | 11 |
| Transferrable earnings due from QPP to VSFs | － |  | － | － |  | － | － |  | 3，000 |  | $(3,000)$ |  | 二 |
| Total receivables | 2，776，052 |  | － | － |  | － | － |  | 3，036 |  | $(3,000)$ |  | 2，776，088 |
| Investments： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Short－term investments | 1，571，207 |  | － | － |  | － | － |  | 43，693 |  | － |  | 1，614，900 |
| Debt securities | 11，446，576 |  | － | － |  | － | － |  | － |  | － |  | 11，446，576 |
| Equity securities | 18，523，033 |  | － | － |  | － | － |  | － |  | － |  | 18，523，033 |
| Alternative investments | 9，873，044 |  | － | － |  | － | － |  | － |  | － |  | 9，873，044 |
| Collective trust funds： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt securities | 4，078，137 |  | － | － |  | － | － |  | － |  | － |  | 4，078，137 |
| International equity | 9，220，895 |  | － | － |  | － | － |  | － |  | － |  | 9，220，895 |
| Collateral from securities lending transactions | 5，267，092 |  | － | － |  | － | － |  | － |  | － |  | 5，267，092 |
| Total investments | 59，979，984 |  | － | － |  | － | － |  | 43，693 |  | － |  | 60，023，677 |
| Due from QPP | － |  | 1，967 | 1，448 |  | 991 | 1，318 |  | － |  | $(5,724)$ |  | － |
| Other assets | 84，632 |  | － | － |  | － | － |  | － |  | － |  | 84，632 |
| Total assets | 63，006，353 |  | 1，996 | 1，488 |  | 1，021 | 1，362 |  | 46，942 |  | $(8,724)$ |  | 63，050，438 |
| Liabilities： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | 177，887 |  | 22 | － |  | － | － |  | － |  | － |  | 177，909 |
| Payable for investment securities purchased | 1，794，940 |  | － | － |  | － | － |  | － |  | － |  | 1，794，940 |
| Accrued benefits payable | 266，616 |  | 1，974 | 1，488 |  | 1，021 | 1，362 |  | 41，925 |  | － |  | 314，386 |
| Transferrable earnings due from QPP to VSFs | 3，000 |  | － | － |  | － | － |  | － |  | $(3,000)$ |  | － |
| Due to VSFs | 5，724 |  | － | － |  | － | － |  | － |  | $(5,724)$ |  | － |
| Securities lending transactions | 5，267，092 |  | － | － |  | － | － |  | － |  | （5，724） |  | 5，267，092 |
| Other liabilities | 1，590 |  | － | － |  | － | － |  | － |  | － |  | 1，590 |
| Total liabilities | 7，516，849 |  | 1，996 | 1，488 |  | 1，021 | 1，362 |  | 41，925 |  | $(8,724)$ |  | 7，555，917 |
| Net Position： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 55，489，504 |  | － | － |  | － | － |  | － |  | － |  | 55，489，504 |
| Restricted for benefits to be provided by VSFs | － |  | － | － |  | － | － |  | 5，017 |  | － |  | 5，017 |
| Total net position | $\underline{\$ 55,489,504}$ |  | \＄ | \＄ | \＄ | \＄ | \＄－ | \＄ | 5，017 |  | \＄ |  | 55，494，521 |

＊Includes VSFs and TDAs，which are not pension funds or retirement systems under ACNY．

## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* <br> NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)
Total New York City Employees Retiremen


System


Additions:
Contributions:
Member contributions . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Member contributions . . . . . . . . . . . . . . . . . . . . . . . . . . .
Employer contributions
Total contributions . . . . . . . . . . . . . . . . . . . . . . . . .

Investment income
Interest income
$\qquad$
Dividend income
Net appreciation (depreciation) in fair value of investments
Investment expenses
Investment income (loss) net . . . . . . . . . . . . . . . . . . . .
Securities lending (loss)
Securities lending income
Securities lending fees

Payments from QPP
Transferrable earnings due from QPP to VSFs
Other
Total additions
Deductions:
Benefit payments and withdrawals
Payments to VSFs
Transferrable earnings due from QPP to VSFs
Administrative expenses
Other . . . . . . . . . . .
Net increase in net position

## Net Position:

Restricted for benefits:
Beginning of year
 $\qquad$

$\qquad$ 55,494,52

* Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.


## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS＊ <br> NEW YORK CITY EMPLOYEES＇RETIREMENT SYSTEM COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30， 2016
（in thousands）

| NYCERS Qualified Pension Plan（QPP） | Variable Supplements Funds（VSFs） |  |  |  |  |  |  |  |  |  | Eliminations |  | Total <br> New York City <br> Employees <br> Retirement <br> System |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TPOVSF |  | TPSOVSF |  | HPOVSF |  | HPSOVSF |  | COVSF |  |  |  |  |  |
| \＄485，508 | \＄ | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | \＄ | － | \＄ | 485，508 |
| 3，365，454 |  | － |  |  |  | － |  | － |  |  |  | － |  | 3，365，454 |
| 3，850，962 |  | － |  | － |  | － |  | － |  | － |  | － |  | 3，850，962 |
| 692，773 |  | － |  | － |  | － |  | － |  | 184 |  | － |  | 692，957 |
| 836，490 |  | － |  | － |  | － |  | － |  | － |  | － |  | 836，490 |
| $(174,204)$ |  | － |  | － |  | － |  | － |  | － |  | － |  | $(174,204)$ |
| $(212,996)$ |  | － |  | － |  | － |  | － |  | － |  | － |  | $(212,996)$ |
| 1，142，063 |  | － |  | － |  | － |  | － |  | 184 |  | － |  | 1，142，247 |
| 31，719 |  | － |  | － |  | － |  | － |  | － |  | － |  | 31，719 |
| $(2,062)$ |  | － |  | － |  | － |  | － |  | － |  | － |  | $(2,062)$ |
| 29，657 |  | － |  | － |  | － |  | － |  | － |  | － |  | 29，657 |
| － |  | 3，945 |  | 2，964 |  | 1，968 |  | 2，648 |  |  |  | （11，525） |  | － |
|  |  |  |  | － |  | － |  | － |  | $(52,724)$ |  | 52，724 |  |  |
| 2，928 |  | － |  | － |  | － |  | － |  | 二 |  | － |  | 2，928 |
| 5，025，610 |  | 3，945 |  | 2，964 |  | 1，968 |  | 2，648 |  | $(52,540)$ |  | 41，199 |  | 5，025，794 |
| 4，402，506 |  | 3，945 |  | 2，964 |  | 1，968 |  | 2，648 |  | 82，149 |  | － |  | 4，496，180 |
| 11，525 |  | － |  | － |  | － |  | － |  | － |  | （ 11,525 ） |  |  |
| $(52,724)$ |  | － |  | － |  | － |  | － |  | － |  | 52，724 |  | － |
| 56，683 |  | － |  | － |  | － |  | － |  | － |  | － |  | 56，683 |
| 7，440 |  | － |  | － |  | － |  | － |  | － |  | － |  | 7，440 |
| 4，425，430 |  | 3，945 |  | 2，964 |  | 1，968 |  | 2，648 |  | 82，149 |  | 41，199 |  | 4，560，303 |
| 600，180 |  | － |  | － |  | － |  | － |  | $(134,689)$ |  | － |  | 465，491 |
| 54，889，324 |  | － |  | － |  | － |  | － |  | 139，706 |  | － |  | 55，029，030 |
| \＄55，489，504 | \＄ | － | \＄ | 二 | \＄ | 二 | \＄ | 二 | \＄ | 5，017 | \＄ | 二 |  | 55，494，521 |

＊Includes VSFs and TDAs，which are not pension funds or retirement systems under ACNY．

# THE CITY OF NEW YORK PENSION TRUST FUNDS* TEACHERS' RETIREMENT SYSTEM COMBINING SCHEDULE OF FIDUCIARY NET POSITION 

JUNE 30, 2017
(in thousands)

|  | $\begin{gathered} \text { TRS Qualified } \\ \text { Pension } \\ \text { Plan (QPP) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \\ \hline \end{gathered}$ | Eliminations | Total Teachers' Retirement System |
| :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |
| Cash and cash equivalents | \$ 101,499 | \$ 3,952 | \$ | \$ 105,451 |
| Receivables: |  |  |  |  |
| Member loans | 298,146 | 376,016 | - | 674,162 |
| Investment securities sold | 989,725 | 23,956 | - | 1,013,681 |
| Accrued interest and dividends | 164,163 | 12,777 | - | 176,940 |
| Total receivables | 1,452,034 | 412,749 | - | 1,864,783 |
| Investments: |  |  |  |  |
| Fixed return funds: |  |  |  |  |
| Short-term investments | 1,070,286 | - | - | 1,070,286 |
| Debt securities | 15,700,893 | - | - | 15,700,893 |
| Equity securities | 21,086,002 | - | - | 21,086,002 |
| Alternative investments | 7,523,885 | - | - | 7,523,885 |
| Collective trust funds: |  |  |  |  |
| International equity | 15,734,149 | - | - | 15,734,149 |
| Debt securities | 4,969,005 | - | - | 4,969,005 |
| Collateral from securities lending transactions | 1,530,310 | - | - | 1,530,310 |
| Variable funds: |  |  |  |  |
| Short-term investments | 70,139 | 109,394 | - | 179,533 |
| Debt securities | 189,640 | 436,207 | - | 625,847 |
| Equity securities | 6,060,291 | 8,292,551 | - | 14,352,842 |
| Collateral from securities lending transactions | 80,011 | 108,414 | - | 188,425 |
| Total investments | 74,014,611 | 8,946,566 | - | 82,961,177 |
| Investment in fixed return funds | - | 22,004,183 | $(22,004,183)$ |  |
| Other assets | 38,932 | 16,296 | $(27,165)$ | 28,063 |
| Total assets | 75,607,076 | 31,383,746 | $(22,031,348)$ | 84,959,474 |
| Liabilities: |  |  |  |  |
| Accounts payable and accrued liabilities | 529,059 | 96,908 | $(27,165)$ | 598,802 |
| Payable for investment securities purchased | 1,353,803 | 43,416 | - | 1,397,219 |
| Accrued benefits payable | 13,987 | 82,915 | - | 96,902 |
| Due to TDA fixed return funds | 22,004,183 | - | $(22,004,183)$ | - |
| Securities lending transactions | 1,610,321 | 108,414 | - | 1,718,735 |
| Total liabilities | 25,511,353 | 331,653 | (22,031,348) | 3,811,658 |
| Net Position: |  |  |  |  |
| Restricted for benefits to be provided by QPP | 50,095,723 | - | - | 50,095,723 |
| Restricted for benefits to be provided by TDA Program | - | 31,052,093 | - | 31,052,093 |
| Total net position | \$50,095,723 | $\underline{\underline{\$ 31,052,093}}$ | \$ - | $\underline{\underline{\$ 81,147,816}}$ |

[^26]
## THE CITY OF NEW YORK PENSION TRUST FUNDS* TEACHERS' RETIREMENT SYSTEM COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30, 2016
(in thousands)

|  | $\begin{gathered} \text { TRS Qualified } \\ \text { Pension } \\ \text { Plan (QPP) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \end{gathered}$ | Eliminations | Total Teachers’ Retirement System |
| :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |
| Cash and cash equivalents. | \$ 5,157 | \$ 4,699 | \$ | \$ 9,856 |
| Receivables: |  |  |  |  |
| Member loans | 275,704 | 367,864 | - | 643,568 |
| Investment securities sold. | 1,772,521 | 29,686 | - | 1,802,207 |
| Accrued interest and dividends | 151,330 | 13,282 | - | 164,612 |
| Total receivables | 2,199,555 | 410,832 | - | 2,610,387 |
| Investments: |  |  |  |  |
| Fixed return funds: |  |  |  |  |
| Short-term investments. | 2,179,314 | - | - | 2,179,314 |
| Debt securities. | 14,655,009 | - | - | 14,655,009 |
| Equity securities. | 22,284,584 | - | - | 22,284,584 |
| Alternative investments | 6,872,850 | - | - | 6,872,850 |
| Collective trust funds: |  |  |  |  |
| International equity. | 11,507,149 | - | - | 11,507,149 |
| Debt securities | 4,576,038 | - | - | 4,576,038 |
| Collateral from securities lending transactions | 1,774,456 | - | - | 1,774,456 |
| Variable funds: |  |  |  |  |
| Short-term investments. | 30,113 | 105,032 | - | 135,145 |
| Debt securities | 74,934 | 466,945 | - | 541,879 |
| Equity securities | 2,226,196 | 7,374,677 | - | 9,600,873 |
| Collateral from securities lending transactions | 84,226 | 282,602 | - | 366,828 |
| Total investments | 66,264,869 | 8,229,256 | - | 74,494,125 |
| Investment in fixed return funds | - | 20,292,733 | $(20,292,733)$ | - |
| Other assets. | 49,873 | 13,429 | $(21,022)$ | 42,280 |
| Total assets | 68,519,454 | 28,950,949 | (20,313,755) | 77,156,648 |
| Liabilities: |  |  |  |  |
| Accounts payable and accrued liabilities. | 417,408 | 103,283 | $(21,022)$ | 499,669 |
| Payable for investment securities purchased | 2,308,523 | 29,597 | - | 2,338,120 |
| Accrued benefits payable | 12,563 | 91,127 | - | 103,690 |
| Due to TDA fixed return funds | 20,292,733 | - | $(20,292,733)$ | - |
| Securities lending transactions. | 1,858,682 | 282,602 | - | 2,141,284 |
| Total liabilities | 24,889,909 | 506,609 | (20,313,755) | 5,082,763 |
| Net Position: |  |  |  |  |
| Restricted for benefits to be provided by QPP . | 43,629,545 | - | - | 43,629,545 |
| Restricted for benefits to be provided by TDA Program | - | 28,444,340 | - | 28,444,340 |
| Total net position. | \$43,629,545 | $\underline{\text { \$28,444,340 }}$ | \$ | \$72,073,885 |

[^27]
# THE CITY OF NEW YORK PENSION TRUST FUNDS* TEACHERS' RETIREMENT SYSTEM COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

|  | TRS Qualified Pension Plan (QPP) | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \\ \hline \end{gathered}$ | Total Teachers' Retirement System |
| :---: | :---: | :---: | :---: |
| Additions: |  |  |  |
| Contributions: |  |  |  |
| Member contributions | \$ 180,076 | \$ 743,663 | \$ 923,739 |
| Employer contributions | 3,888,399 | - | 3,888,399 |
| Other employer contributions | 57,369 | - | 57,369 |
| Total contributions | 4,125,844 | 743,663 | 4,869,507 |
| Investment income: |  |  |  |
| Interest income | 932,169 | 34,368 | 966,537 |
| Dividend income | 981,087 | 138,237 | 1,119,324 |
| Net appreciation in fair value of investments | 6,516,379 | 1,218,575 | 7,734,954 |
| Investment expenses | $(313,801)$ | 5,518 | $(308,283)$ |
| Investment income, net | 8,115,834 | 1,396,698 | 9,512,532 |
| Securities lending transactions: |  |  |  |
| Securities lending income | 18,806 | 2,014 | 20,820 |
| Securities lending fees | $(1,360)$ | (212) | $(1,572)$ |
| Securities lending income, net | 17,446 | 1,802 | 19,248 |
| Total additions | 12,259,124 | 2,142,163 | 14,401,287 |
| Deductions: |  |  |  |
| Benefit payments and withdrawals | 4,219,312 | 1,011,931 | 5,231,243 |
| Administrative expenses | 60,790 | 33,032 | 93,822 |
| Interest on TDA Program fixed return funds | 1,466,615 | $(1,466,615)$ | - |
| Actuarial rebalance | 43,938 | $(43,938)$ | - |
| Other | 2,291 | - | 2,291 |
| Total deductions | 5,792,946 | $(465,590)$ | 5,327,356 |
| Net increase in net position | 6,466,178 | 2,607,753 | 9,073,931 |
| Net Position: |  |  |  |
| Restricted for benefits: |  |  |  |
| Beginning of year | 43,629,545 | 28,444,340 | 72,073,885 |
| End of year | \$50,095,723 | \$31,052,093 | \$81,147,816 |

[^28]
# THE CITY OF NEW YORK PENSION TRUST FUNDS* TEACHERS' RETIREMENT SYSTEM COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | $\begin{gathered} \text { TRS Qualified } \\ \text { Pension } \\ \text { Plan (QPP) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \end{gathered}$ | Total Teachers' Retirement System |
| :---: | :---: | :---: | :---: |
| Additions: |  |  |  |
| Contributions: |  |  |  |
| Member contributions | \$ 173,696 | \$ 717,566 | \$ 891,262 |
| Employer contributions | 3,702,569 | - | 3,702,569 |
| Other employer contributions | 58,145 | - | 58,145 |
| Total contributions | 3,934,410 | 717,566 | 4,651,976 |
| Investment income: |  |  |  |
| Interest income | 860,222 | 33,469 | 893,691 |
| Dividend income | 896,208 | 128,383 | 1,024,591 |
| Net depreciation in fair value of investments | $(598,443)$ | $(182,355)$ | $(780,798)$ |
| Investment expenses | $(215,068)$ | 5,645 | $(209,423)$ |
| Investment income (loss), net | 942,919 | $(14,858)$ | 928,061 |
| Securities lending transactions: |  |  |  |
| Securities lending income | 18,742 | 4,054 | 22,796 |
| Securities lending fees | $(1,395)$ | (390) | $(1,785)$ |
| Securities lending income, net | 17,347 | 3,664 | 21,011 |
| Other | 1,233 | - | 1,233 |
| Total additions | 4,895,909 | 706,372 | 5,602,281 |
| Deductions: |  |  |  |
| Benefit payments and withdrawals | 4,107,455 | 917,189 | 5,024,644 |
| Administrative expenses | 59,367 | 32,632 | 91,999 |
| Interest on TDA Program fixed return funds | 1,354,207 | $(1,354,207)$ | - |
| Total deductions | 5,521,029 | $(404,386)$ | 5,116,643 |
| Net (decrease) increase in net position | $(625,120)$ | 1,110,758 | 485,638 |
| Net Position: |  |  |  |
| Restricted for benefits: |  |  |  |
| Beginning of year | 44,254,665 | 27,333,582 | 71,588,247 |
| End of year | \$43,629,545 | \$28,444,340 | \$72,073,885 |

[^29]
## THE CITY OF NEW YORK PENSION TRUST FUNDS* BOARD OF EDUCATION RETIREMENT SYSTEM COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30, 2017
(in thousands)

|  | BERS Qualified Pension Plan (QPP) | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \\ \hline \end{gathered}$ | Eliminations |  | Total Board of Education Retirement System |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |
| Cash and cash equivalents | \$ 3,232 | \$ 105 | \$ | - | \$ 3,337 |
| Receivables: |  |  |  |  |  |
| Member loans | 47,935 | 40,757 |  | - | 88,692 |
| Investment securities sold | 98,675 | 906 |  | - | 99,581 |
| Accrued interest and dividends | 9,080 | 618 |  | - | 9,698 |
| Other receivables | 60 | - |  | - | 60 |
| Total receivables | 155,750 | 42,281 |  | - | 198,031 |
| Investments: |  |  |  |  |  |
| Fixed return funds: |  |  |  |  |  |
| Short-term investments | 52,083 | - |  | - | 52,083 |
| Debt securities | 1,103,180 | - |  | - | 1,103,180 |
| Equity securities | 145,431 | - |  | - | 145,431 |
| Alternative investments | 612,677 | - |  | - | 612,677 |
| Collective trust funds: |  |  |  |  |  |
| Debt securities | 381,830 | - |  | - | 381,830 |
| Domestic equity | 1,738,135 | - |  | - | 1,738,135 |
| International equity | 1,251,628 | - |  | - | 1,251,628 |
| Collateral from securities lending transactions | 374,326 | - |  | - | 374,326 |
| Variable funds: |  |  |  |  |  |
| Short-term investments | 513 | 4,918 |  | - | 5,431 |
| Debt securities | 828 | 7,944 |  | - | 8,772 |
| Equity securities | 46,309 | 444,386 |  | - | 490,695 |
| Collateral from securities lending transactions | 617 | 5,917 |  | - | 6,534 |
| Total investments | 5,707,557 | 463,165 |  | - | 6,170,722 |
| Investment in fixed return funds | - | 1,436,478 |  | 478) | - |
| Other assets | 160,453 | - |  | 452) | 32,001 |
| Total assets | 6,026,992 | 1,942,029 |  | 930) | 6,404,091 |
| Liabilities: |  |  |  |  |  |
| Accounts payable and accrued liabilities | 13,884 | - |  | - | 13,884 |
| Payable for investment securities purchased | 92,173 | 1,435 |  | - | 93,608 |
| Accrued benefits payable | 9,943 | 6,537 |  | - | 16,480 |
| Due to TDA Program fixed return funds | 1,436,478 | - |  | 478) | - |
| Securities lending transactions | 374,943 | 5,917 |  | - | 380,860 |
| Other liabilities | - | 128,452 |  | 452) | - |
| Total liabilities | 1,927,421 | 142,341 |  | 930) | 504,832 |
| Net Position: |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 4,099,571 | - |  | - | 4,099,571 |
| Restricted for benefits to be provided by TDA Program | - | 1,799,688 |  | - | 1,799,688 |
| Total net position | \$4,099,571 | \$1,799,688 | \$ | - | \$5,899,259 |

[^30]
## THE CITY OF NEW YORK PENSION TRUST FUNDS* BOARD OF EDUCATION RETIREMENT SYSTEM COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30, 2016
(in thousands)

|  | BERS Qualified <br> Pension <br> Plan (QPP) | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \\ \hline \end{gathered}$ |  | Eliminations | Total Board of Education Retirement System |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |
| Cash and cash equivalents | \$ 327 | \$ 205 | \$ | - | \$ 532 |
| Receivables: |  |  |  |  |  |
| Member loans | 46,748 | 38,921 |  | - | 85,669 |
| Investment securities sold | 119,062 | 908 |  | - | 119,970 |
| Accrued interest and dividends | 247 | 626 |  | - | 873 |
| Other receivables | 3 | - |  | - | 3 |
| Total receivables | 166,060 | 40,455 |  | - | 206,515 |
| Investments: |  |  |  |  |  |
| Fixed return funds: |  |  |  |  |  |
| Short-term investments | 107,821 | - |  | - | 107,821 |
| Debt securities | 879,762 | - |  | - | 879,762 |
| Equity securities | 291,144 | - |  | - | 291,144 |
| Alternative investments | 506,922 | - |  | - | 506,922 |
| Collective trust funds: |  |  |  |  |  |
| Debt securities | 354,248 | - |  | - | 354,248 |
| Domestic equity | 1,401,665 | - |  | - | 1,401,665 |
| International equity | 942,911 | - |  | - | 942,911 |
| Collateral from securities lending transactions | 476,001 | - |  | - | 476,001 |
| Variable funds: |  |  |  |  |  |
| Short-term investments | 571 | 5,508 |  | - | 6,079 |
| Debt securities | 976 | 9,414 |  | - | 10,390 |
| Equity securities | 40,953 | 394,854 |  | - | 435,807 |
| Collateral from securities lending transactions | 1,622 | 15,642 |  | - | 17,264 |
| Total investments | 5,004,596 | 425,418 |  | 二 | 5,430,014 |
| Investment in fixed return funds | - | 1,283,481 |  | $(1,283,481)$ | - |
| Other assets | 124,031 | - |  | - | 124,031 |
| Total assets | 5,295,014 | 1,749,559 |  | $(1,283,481)$ | 5,761,092 |
| Liabilities: |  |  |  |  |  |
| Accounts payable and accrued liabilities | 6,907 | - |  | - | 6,907 |
| Payable for investment securities purchased | 103,213 | 902 |  | - | 104,115 |
| Accrued benefits payable | 7,357 | 6,783 |  | - | 14,140 |
| Due to TDA Program fixed return funds | 1,283,481 | - |  | $(1,283,481)$ | - |
| Securities lending transactions | 477,623 | 15,642 |  | - | 493,265 |
| Other liabilities | 二 | 96,156 |  |  | 96,156 |
| Total liabilities | 1,878,581 | 119,483 |  | $(1,283,481)$ | 714,583 |
| Net Position: |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 3,416,433 | - |  | - | 3,416,433 |
| Restricted for benefits to be provided by TDA Program | - | 1,630,076 |  | - | 1,630,076 |
| Total net position | $\underline{\$ 3,416,433}$ | $\underline{\$ 1,630,076}$ | \$ | - | $\underline{\underline{\$ 5,046,509}}$ |

[^31]
# THE CITY OF NEW YORK PENSION TRUST FUNDS* BOARD OF EDUCATION RETIREMENT SYSTEM COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION 

FOR THE YEAR ENDED JUNE 30, 2017<br>(in thousands)

|  | BERS Qualified <br> Pension <br> Plan (QPP) | $\begin{gathered} \text { Tax-Deferred } \\ \text { Annuity } \\ \text { Program (TDA) } \end{gathered}$ | Total Board of Education Retirement System |
| :---: | :---: | :---: | :---: |
| Additions: |  |  |  |
| Contributions: |  |  |  |
| Member contributions | \$ 39,821 | \$ 85,765 | \$ 125,586 |
| Employer contributions | 288,233 | - | 288,233 |
| Total contributions | 328,054 | 85,765 | 413,819 |
| Investment income: |  |  |  |
| Interest income | 54,964 | 3,564 | 58,528 |
| Dividend income | 70,610 | 14,810 | 85,420 |
| Net appreciation in fair value of investments | 760,262 | 58,720 | 818,982 |
| Investment expenses | $(29,204)$ | $(1,461)$ | $(30,665)$ |
| Investment income, net | 856,632 | 75,633 | 932,265 |
| Securities lending transactions: |  |  |  |
| Securities lending income | 6,118 | 117 | 6,235 |
| Securities lending fees | (240) | (11) | (251) |
| Securities lending income, net | 5,878 | 106 | 5,984 |
| Interest on TDA Program fixed return funds | $(106,554)$ | 106,554 |  |
| Other receipts from other retirement systems | $(122,954)$ | $(48,113)$ | $(171,067)$ |
| Total additions | 961,056 | 219,945 | 1,181,001 |
| Deductions: |  |  |  |
| Benefit payments and withdrawals | 262,432 | 50,208 | 312,640 |
| Administrative expenses | 15,486 | 125 | 15,611 |
| Total deductions | 277,918 | 50,333 | 328,251 |
| Net increase in net position | 683,138 | 169,612 | 852,750 |
| Net Position: |  |  |  |
| Restricted for benefits: |  |  |  |
| Beginning of year . | 3,416,433 | 1,630,076 | 5,046,509 |
| End of year | $\underline{ }$ | \$1,799,688 | \$5,899,259 |

[^32]
# THE CITY OF NEW YORK PENSION TRUST FUNDS* BOARD OF EDUCATION RETIREMENT SYSTEM COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION 

$\underset{\text { FOR THE YEAR ENDED JUNE 30, } 2016}{\text { (in thousands) }}$ (in thousands)

|  | BERS Qualified Pension Plan (QPP) | Tax-Deferred Annuity <br> Program (TDA) | Total Board of Education Retirement System |
| :---: | :---: | :---: | :---: |
| Additions: |  |  |  |
| Contributions: |  |  |  |
| Member contributions | \$ 38,581 | \$ 77,459 | \$ 116,040 |
| Employer contributions | 265,532 | - | 265,532 |
| Total contributions | 304,113 | 77,459 | 381,572 |
| Investment income: |  |  |  |
| Interest income | 44,782 | 3,340 | 48,122 |
| Dividend income | 51,328 | 5,988 | 57,316 |
| Net appreciation (depreciation) in fair value of investments | 79,014 | $(7,771)$ | 71,243 |
| Investment expenses | $(14,296)$ | (702) | $(14,998)$ |
| Investment income, net | 160,828 | 855 | 161,683 |
| Securities lending transactions: |  |  |  |
| Securities lending income | 3,547 | 216 | 3,763 |
| Securities lending fees | (231) | (22) | (253) |
| Securities lending income, net | 3,316 | 194 | 3,510 |
| Interest on TDA Program fixed return funds | $(94,789)$ | 94,789 |  |
| Other receipts from other retirement systems | $(157,499)$ | $(3,541)$ | $(161,040)$ |
| Total additions | 215,969 | 169,756 | 385,725 |
| Deductions: |  |  |  |
| Benefit payments and withdrawals | 240,727 | 50,189 | 290,916 |
| Administrative expenses | 12,818 | 850 | 13,668 |
| Total deductions | 253,545 | 51,039 | 304,584 |
| Net (decrease) increase in net position | $(37,576)$ | 118,717 | 81,141 |
| Net Position: |  |  |  |
| Restricted for benefits: |  |  |  |
| Beginning of year . | 3,454,009 | 1,511,359 | 4,965,368 |
| End of year | \$3,416,433 | \$1,630,076 | \$5,046,509 |

[^33]
# THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* NEW YORK CITY POLICE PENSION FUNDS COMBINING SCHEDULE OF FIDUCIARY NET POSITION 

JUNE 30, 2017
(in thousands)

| Assets: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and cash equivalents | 107,908 | 1,880 | 584 | - | \$ 110,372 |
| Receivables: |  |  |  |  |  |
| Member loans | 234,570 | - | - | - | 234,570 |
| Investment securities sold | 694,085 | 100,709 | 17,802 |  | 812,596 |
| Transferrable earnings due to/from QPP to VSFs | 326,195 | 1,038,637 | 1,679,802 | $(3,044,634)$ |  |
| Accrued interest and dividends | 3,238 | 199 | 26 | - | 3,463 |
| Total receivables | 1,258,088 | 1,139,545 | 1,697,630 | (3,044,634) | 1,050,629 |
| Investments: |  |  |  |  |  |
| Short-term investments | 465,204 | 8,551 | 4,755 | - | 478,510 |
| Debt securities | 7,702,198 | 15 | - | - | 7,702,213 |
| Equity securities | 6,518,200 | - | - | - | 6,518,200 |
| Alternative investments | 7,209,973 | - | - | - | 7,209,973 |
| Collective trust funds: |  |  |  |  |  |
| Debt securities | 2,633,513 | 452,707 | 77,417 | - | 3,163,637 |
| Domestic equity | 6,785,844 | 444,732 | 79,630 | - | 7,310,206 |
| International equity | 6,552,823 | 404,825 | 73,055 | - | 7,030,703 |
| Collateral from securities lending transactions | 3,853,421 | 53,248 | 9,556 | - | 3,916,225 |
| Total investments | 41,721,176 | 1,364,078 | 244,413 | - | 43,329,667 |
| Other assets | 17,667 |  |  | - | 17,667 |
| Total assets | 43,104,839 | 2,505,503 | 1,942,627 | (3,044,634) | 44,508,335 |
| Llablitites: |  |  |  |  |  |
| Accounts payable and accrued liabilities | 468,980 | 290 | 64 | - | 469,334 |
| Payable for investment securities purchased | 556,363 | 100,608 | 17,795 | - | 674,766 |
| Accrued benefits payable | 84,111 | 75,739 | 112,389 | - | 272,239 |
| Transferrable earnings due from/to QPP to VSFs | 2,718,439 | 250,751 | 75,444 | $(3,044,634)$ |  |
| Securities lending transactions | 3,853,421 | 53,248 | 9,556 | - | 3,916,225 |
| Total liabilities | 7,681,314 | 480,636 | 215,248 | (3,044,634) | 5,332,564 |
| Net Position: |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 35,423,525 | - | - | - | 35,423,525 |
| Restricted for benefits to be provided by VSFs | - | 2,024,867 | 1,727,379 | - | 3,752,246 |
| Total net position | \$35,423,525 | $\underline{\underline{\$ 2,024,867}}$ | \$1,727,379 | \$ - | \$39,175,771 |

[^34]
# THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* NEW YORK CITY POLICE PENSION FUNDS COMBINING SCHEDULE OF FIDUCIARY NET POSITION 

JUNE 30, 2016
(in thousands)


[^35]
## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* NEW YORK CITY POLICE PENSION FUNDS COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2017<br>(in thousands)

|  | POLICE <br> Qualified Pension Plan (QPP) | Variable Supplements Funds (VSFs) |  | $\underline{\text { Eliminations }}$ | Total <br> New York City Police Pension Funds |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | POVSF | PSOVSF |  |  |
| Additions: |  |  |  |  |  |
| Contributions: |  |  |  |  |  |
| Member contributions | \$ 276,301 | \$ | \$ | \$ | \$ 276,301 |
| Employer contributions | 2,293,840 | - | - | - | 2,293,840 |
| Total contributions | 2,570,141 | - | - | - | 2,570,141 |
| Investment income: |  |  |  |  |  |
| Interest income | 400,562 | 7,892 | 1,878 | - | 410,332 |
| Dividend income | 485,237 | 24,359 | 6,129 | - | 515,725 |
| Net appreciation in fair value of investments | 3,418,739 | 134,327 | 32,328 | - | 3,585,394 |
| Investment expenses . . . . . . . . . . . . . . . | $(245,288)$ | (561) | (145) | - | $(245,994)$ |
| Investment income, net | 4,059,250 | 166,017 | 40,190 | - | 4,265,457 |
| Securities lending transactions: |  |  |  |  |  |
| Securities lending income. | 22,034 | 792 | 216 | - | 23,042 |
| Securities lending fees | $(1,537)$ | (54) | (14) | - | $(1,605)$ |
| Securities lending income, net | 20,497 | 738 | 202 | - | 21,437 |
| Transferrable earnings due from QPP to VSFs | 25,562 | 738,000 | 1,419,802 | $(2,183,364)$ | - |
| Other | 10,381 | 74 | 52 | - | 10,507 |
| Total additions | 6,685,831 | 904,829 | 1,460,246 | $(2,183,364)$ | 6,867,542 |
| Deductions: |  |  |  |  |  |
| Benefit payments and withdrawals | 2,571,999 | 158,216 | 254,618 | - | 2,984,833 |
| Transferrable earnings due from QPP to VSFs | 2,154,000 | 29,364 | - | $(2,183,364)$ | - |
| Administrative expenses | 18,917 | - | - | - | 18,917 |
| Total deductions | 4,744,916 | 187,580 | 254,618 | (2,183,364) | 3,003,750 |
| Net increase in net position | 1,940,915 | 717,249 | 1,205,628 | - | 3,863,792 |
| Net Position: 3, 3, 1, |  |  |  |  |  |
| Restricted for benefits: |  |  |  |  |  |
| Beginning of year | 33,482,610 | 1,307,618 | 521,751 | - | 35,311,979 |
| End of year | $\underline{\$ 35,423,525}$ | \$2,024,867 | \$1,727,379 | \$ | \$39,175,771 |

[^36]
## THE CITY OF NEW YORK <br> PENSION TRUST FUNDS* NEW YORK CITY POLICE PENSION FUNDS COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2016<br>(in thousands)

|  | POLICE <br> Qualified Pension Plan (QPP) | Variable Supplements Funds (VSFs) |  | Eliminations | Total <br> New York City Police Pension Funds |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | POVSF | PSOVSF |  |  |
| Additions: |  |  |  |  |  |
| Contributions: |  |  |  |  |  |
| Member contributions | \$ 249,921 | \$ | \$ | \$ | \$ 249,921 |
| Employer contributions | 2,393,940 | - | - | - | 2,393,940 |
| Total contributions | 2,643,861 | - | - | - | 2,643,861 |
| Investment income: |  |  |  |  |  |
| Interest income | 416,038 | 11,930 | 5,041 | - | 433,009 |
| Dividend income | 449,480 | 25,507 | 10,007 | - | 484,994 |
| Net depreciation in fair value of investments | $(85,518)$ | $(170,921)$ | $(122,997)$ | - | $(379,436)$ |
| Investment expenses | $(156,155)$ | (437) | (179) | - | $(156,771)$ |
| Investment income (loss), net | 623,845 | $(133,921)$ | $(108,128)$ | - | 381,796 |
| Securities lending transactions: |  |  |  |  |  |
| Securities lending income. | 21,896 | 967 | 386 | - | 23,249 |
| Securities lending fees | $(1,423)$ | (63) | (25) | - | $(1,511)$ |
| Securities lending income, net | 20,473 | 904 | 361 | - | 21,738 |
| Transferrable earnings due from QPP to VSFs | 326,195 | - | - | $(326,195)$ |  |
| Other | 6,479 | 147 | 130 | - | 6,756 |
| Total additions | 3,620,853 | $(132,870)$ | $(107,637)$ | $(326,195)$ | 3,054,151 |
| Deductions: |  |  |  |  |  |
| Benefit payments and withdrawals | 2,475,738 | 156,695 | 249,790 | - | 2,882,223 |
| Transferrable earnings due from QPP to VSFs | - | 250,751 | 75,444 | $(326,195)$ | - |
| Administrative expenses | 18,478 | - | - | - | 18,478 |
| Total deductions | 2,494,216 | 407,446 | 325,234 | $(326,195)$ | 2,900,701 |
| Net increase (decrease) in net position | 1,126,637 | $(540,316)$ | $(432,871)$ | - | 153,450 |
| Net Position: |  |  |  |  |  |
| Restricted for benefits: |  |  |  |  |  |
| Beginning of year | 32,355,973 | 1,847,934 | 954,622 | - | 35,158,529 |
| End of year | \$33,482,610 | \$1,307,618 | \$ 521,751 | \$ | \$35,311,979 |

[^37]THE CITY OF NEW YORK PENSION TRUST FUNDS* NEW YORK CITY FIRE PENSION FUNDS COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30, 2017
(in thousands)

|  | $\begin{gathered} \text { FIRE } \\ \text { Qualified } \\ \text { Pension } \\ \text { Plan (QPP) } \\ \hline \end{gathered}$ | Variable Supplements Funds (VSFs) |  |  | Eliminations | Total <br> New York City Fire Pension Funds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FFVSF |  | FOVSF |  |  |
| Assets: |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 37,035 | \$ 1,391 | \$ | 906 | \$ | \$ 39,332 |
| Receivables: |  |  |  |  |  |  |
| Member loans | 26,951 | - |  | - | - | 26,951 |
| Investment securities sold | 138,400 | 33,517 |  | 24,791 | - | 196,708 |
| Accrued interest and dividends | 23,004 | 631 |  | 432 | - | 24,067 |
| Transferrable earnings due from QPP to VSFs | - | 83,653 |  | 50,963 | $(134,616)$ | - |
| Other receivables | 178 | - |  | 33 | - | 211 |
| Total receivables | 188,533 | 117,801 |  | 76,219 | $(134,616)$ | 247,937 |
| Investments: |  |  |  |  |  |  |
| Short-term investments | 227,909 | 6,971 |  | 2,637 | - | 237,517 |
| Debt securities | 2,219,638 | - |  | 1,263 | - | 2,220,901 |
| Equity securities | 1,878,641 | - |  | - | - | 1,878,641 |
| Alternative investments | 2,391,376 | - |  | - | - | 2,391,376 |
| Collective trust funds: |  |  |  |  |  |  |
| Debt securities | 1,230,616 | 155,777 |  | 102,501 | - | 1,488,894 |
| Domestic equity | 2,149,785 | 156,098 |  | 102,508 | - | 2,408,391 |
| International equity | 2,209,426 | 142,644 |  | 93,185 | - | 2,445,255 |
| Collateral from securities lending transactions | 1,080,020 | 18,539 |  | 12,294 | - | 1,110,853 |
| Total investments | 13,387,411 | 480,029 |  | 314,388 | - | 14,181,828 |
| Other assets | 2,508 | - |  | - | - | 2,508 |
| Total assets | 13,615,487 | 599,221 |  | 391,513 | $(134,616)$ | 14,471,605 |
| Liabilities: |  |  |  |  |  |  |
| Accounts payable and accrued liabilities | 147,979 | 96 |  | 92 | - | 148,167 |
| Payable for investment securities purchased | 147,296 | 33,509 |  | 24,790 | - | 205,595 |
| Accrued benefits payable | 15,680 | 20,831 |  | 9,121 | - | 45,632 |
| Transferrable earnings due from QPP to VSFs | 134,616 | - |  | - | $(134,616)$ | - |
| Securities lending transactions | 1,080,020 | 18,539 |  | 12,294 | - | 1,110,853 |
| Total liabilities | 1,525,591 | 72,975 |  | 46,297 | $(134,616)$ | 1,510,247 |
| Net Position: |  |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 12,089,896 | - |  | - | - | 12,089,896 |
| Restricted for benefits to be provided by VSFs | - | 526,246 |  | 345,216 | - | 871,462 |
| Total net position | \$12,089,896 | \$ 526,246 |  | 345,216 | \$ - | \$12,961,358 |

[^38]
## THE CITY OF NEW YORK PENSION TRUST FUNDS* NEW YORK CITY FIRE PENSION FUNDS COMBINING SCHEDULE OF FIDUCIARY NET POSITION

JUNE 30, 2016
(in thousands)

| Assets: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and cash equivalents | \$ 37,457 | \$ 10,740 | 558 | \$ - | \$ 48,755 |
| Receivables: |  |  |  |  |  |
| Member loans | 26,917 | - | - | - | 26,917 |
| Investment securities sold | 153,595 | 12,433 | 11,636 | - | 177,664 |
| Accrued interest and dividends | 20,518 | 985 | 671 | - | 22,174 |
| Transferrable earnings due from QPP to VSFs | - | 59,739 | 29,134 | $(88,873)$ | - |
| Total receivables | 201,030 | 73,157 | 41,441 | $(88,873)$ | 226,755 |
| Investments: |  |  |  |  |  |
| Short-term investments | 197,458 | 12,719 | 5,914 | - | 216,091 |
| Debt securities | 2,211,925 | 93,304 | 56,637 | - | 2,361,866 |
| Equity securities | 1,802,947 | - | - | - | 1,802,947 |
| Alternative investments | 2,117,856 | - | - | - | 2,117,856 |
| Collective trust funds: |  |  |  |  |  |
| Debt securities | 1,034,765 | 37,279 | 24,134 | - | 1,096,178 |
| Domestic equity | 1,736,914 | 221,610 | 144,583 | - | 2,103,107 |
| International equity | 1,966,228 | 85,780 | 52,725 | - | 2,104,733 |
| Collateral from securities lending transactions | 854,211 | 37,719 | 30,551 | - | 922,481 |
| Total investments | 11,922,304 | 488,411 | 314,544 | - | 12,725,259 |
| Other assets | 6,176 | - | - | - | 6,176 |
| Total assets | 12,166,967 | 572,308 | 356,543 | $(88,873)$ | 13,006,945 |
| Labilities: |  |  |  |  |  |
| Accounts payable and accrued liabilities | 89,435 | - | 2,712 | - | 92,147 |
| Payable for investment securities purchased | 215,792 | 10,514 | 9,008 | - | 235,314 |
| Accrued benefits payable | 18,893 | 21,225 | 9,263 | - | 49,381 |
| Transferrable earnings due from QPP to VSFs | 88,873 | - | - | $(88,873)$ | - |
| Securities lending transactions | 854,211 | 37,719 | 30,551 | - | 922,481 |
| Total liabilities | 1,267,204 | 69,458 | 51,534 | $(88,873)$ | 1,299,323 |
| Net Position: |  |  |  |  |  |
| Restricted for benefits to be provided by QPP | 10,899,763 | - | - | - | 10,899,763 |
| Restricted for benefits to be provided by VSFs | - | 502,850 | 305,009 | - | 807,859 |
| Total net position | \$10,899,763 | \$ 502,850 | \$ 305,009 | \$ | \$11,707,622 |

[^39]
## THE CITY OF NEW YORK PENSION TRUST FUNDS* NEW YORK CITY FIRE PENSION FUNDS COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)


[^40]
## THE CITY OF NEW YORK PENSION TRUST FUNDS* NEW YORK CITY FIRE PENSION FUNDS COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)


[^41]THE CITY OF NEW YORK
OTHER EMPLOYEE BENEFIT TRUST FUNDS
DEFERRED COMPENSATION PLANS COMBINING SCHEDULE OF FIDUCIARY NET POSITION

DECEMBER 31, 2016
(in thousands)

|  | Deferred Compensation Plans |  |  | Defined <br> Contribution <br> Plan <br> 401(a) Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 457 Plan | 401(k) Plan | NYCE IRA |  |  |
| Assets: |  |  |  |  |  |
| Cash and cash equivalents | \$ 14,246 | \$ 637 | \$ 15 | \$ | \$ 14,898 |
| Receivables: |  |  |  |  |  |
| Member loans | 209,781 | 26,124 | - | - | 235,905 |
| Total receivables | 209,781 | 26,124 | - | - | 235,905 |
| Investments: |  |  |  |  |  |
| Mutual funds | 9,833,946 | 1,505,981 | 126,337 | 17,987 | 11,484,251 |
| Guaranteed investment contracts | 4,749,910 | 888,005 | 148,322 | 2,816 | 5,789,053 |
| Total investments | 14,583,856 | 2,393,986 | 274,659 | 20,803 | 17,273,304 |
| Other assets | 1,917 | 1,934 | - | 4 | 3,855 |
| Total assets | 14,809,800 | 2,422,681 | 274,674 | 20,807 | 17,527,962 |
| Liabilities: |  |  |  |  |  |
| Accounts payable and accrued liabilities | 5,460 | 765 | 214 | - | 6,439 |
| Total liabilities | 5,460 | 765 | 214 | - | 6,439 |
| Net Position: |  |  |  |  |  |
| Restricted for other employee benefits | 14,804,340 | 2,421,916 | 274,460 | 20,807 | 17,521,523 |
| Total net position | \$14,804,340 | $\underline{\underline{\$ 2,421,916}}$ | \$274,460 | \$20,807 | \$17,521,523 |

THE CITY OF NEW YORK
OTHER EMPLOYEE BENEFIT TRUST FUNDS
DEFERRED COMPENSATION PLANS COMBINING SCHEDULE OF FIDUCIARY NET POSITION

DECEMBER 31, 2015
(in thousands)

|  | Deferred Compensation Plans |  |  | Defined <br> Contribution <br> Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 457 Plan | 401(k) Plan | NYCE IRA | 401(a) Plan |  |
| Assets: |  |  |  |  |  |
| Cash and cash equivalents | \$ 14,177 | 1,174 | \$ 21 | \$ | \$ 15,372 |
| Receivables: |  |  |  |  |  |
| Member loans | 205,085 | 24,277 | - | - | 229,362 |
| Total receivables | 205,085 | 24,277 | - | - | 229,362 |
| Investments: |  |  |  |  |  |
| Mutual funds | 8,923,630 | 1,302,456 | 110,054 | 16,455 | 10,352,595 |
| Guaranteed investment contracts | 4,419,597 | 751,391 | 130,227 | 2,547 | 5,303,762 |
| Total investments | 13,343,227 | 2,053,847 | 240,281 | 19,002 | 15,656,357 |
| Other assets | 1,427 | 1,116 | - | 2 | 2,545 |
| Total assets | 13,563,916 | 2,080,414 | 240,302 | 19,004 | 15,903,636 |
| Liabilities: |  |  |  |  |  |
| Accounts payable and accrued liabilities | 5,822 | 137 | 169 | - | 6,128 |
| Total liabilities | 5,822 | 137 | 169 | - | 6,128 |
| Net Position: |  |  |  |  |  |
| Restricted for other employee benefits | 13,558,094 | 2,080,277 | 240,133 | 19,004 | 15,897,508 |
| Total net position | \$13,558,094 | \$2,080,277 | \$240,133 | $\underline{\underline{\$ 19,004}}$ | \$15,897,508 |

THE CITY OF NEW YORK
OTHER EMPLOYEE BENEFIT TRUST FUNDS
DEFERRED COMPENSATION PLANS COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED DECEMBER 31, 2016
(in thousands)

|  | Deferred Compensation Plans |  |  | Defined <br> Contribution <br> Plan <br> 401(a) Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 457 Plan | 401(k) Plan | NYCE IRA |  |  |
| Additions: |  |  |  |  |  |
| Contributions: |  |  |  |  |  |
| Member contributions | \$ 630,183 | \$ 255,873 | \$ 33,999 | \$ 23 | \$ 920,078 |
| Total contributions | 630,183 | 255,873 | 33,999 | 23 | 920,078 |
| Investment income: |  |  |  |  |  |
| Interest income | 109,770 | 18,430 | 3,015 | 55 | 131,270 |
| Net appreciation in fair value of investments | 1,066,550 | 148,755 | 12,499 | 2,065 | 1,229,869 |
| Investment expenses | $(26,505)$ | $(4,473)$ | (562) | (33) | (31,573) |
| Investment income, net | 1,149,815 | 162,712 | 14,952 | 2,087 | 1,329,566 |
| Total additions | 1,779,998 | 418,585 | 48,951 | 2,110 | 2,249,644 |
| Deductions: |  |  |  |  |  |
| Benefit payments and withdrawals | 521,331 | 74,958 | 14,439 | 304 | 611,032 |
| Administrative expenses | 12,421 | 1,988 | 185 | 3 | 14,597 |
| Total deductions | 533,752 | 76,946 | 14,624 | 307 | 625,629 |
| Net increase in net position | 1,246,246 | 341,639 | 34,327 | 1,803 | 1,624,015 |
| Net Position: |  |  |  |  |  |
| Restricted for other employee benefits: |  |  |  |  |  |
| Beginning of year . . . . . . . . . . . | 13,558,094 | 2,080,277 | 240,133 | 19,004 | 15,897,508 |
| End of year | \$14,804,340 | $\underline{\underline{\$ 2,421,916}}$ | \$274,460 | \$20,807 | \$17,521,523 |

THE CITY OF NEW YORK
OTHER EMPLOYEE BENEFIT TRUST FUNDS
DEFERRED COMPENSATION PLANS COMBINING SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED DECEMBER 31, 2015
(in thousands)

|  | Deferred Compensation Plans |  |  | Defined <br> Contribution <br> Plan <br> 401(a) Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 457 Plan | 401(k) Plan | NYCE IRA |  |  |
| Additions: |  |  |  |  |  |
| Contributions: |  |  |  |  |  |
| Member contributions | \$ 622,019 | \$ 226,803 | \$ 31,018 | \$ 24 | \$ 879,864 |
| Total contributions | 622,019 | 226,803 | 31,018 | 24 | 879,864 |
| Investment income: |  |  |  |  |  |
| Interest income | 104,207 | 15,972 | 2,722 | 52 | 122,953 |
| Net depreciation in fair value of investments | $(64,767)$ | $(10,966)$ | (940) | (109) | $(76,782)$ |
| Investment expenses | $(28,062)$ | $(4,363)$ | (547) | (36) | $(33,008)$ |
| Investment income (loss), net | 11,378 | 643 | 1,235 | (93) | 13,163 |
| Total additions | 633,397 | 227,446 | 32,253 | (69) | 893,027 |
| Deductions: |  |  |  |  |  |
| Benefit payments and withdrawals | 512,324 | 63,961 | 11,068 | 271 | 587,624 |
| Administrative expenses | 12,374 | 1,607 | 149 | 2 | 14,132 |
| Total deductions | 524,698 | 65,568 | 11,217 | 273 | 601,756 |
| Net increase (decrease) in net position | 108,699 | 161,878 | 21,036 | (342) | 291,271 |
| Net Position: |  |  |  |  |  |
| Restricted for other employee benefits: |  |  |  |  |  |
| Beginning of year . . . . . | 13,449,395 | 1,918,399 | 219,097 | 19,346 | 15,606,237 |
| End of year | \$13,558,094 | \$2,080,277 | \$240,133 | \$19,004 | \$15,897,508 |

THE CITY OF NEW YORK AGENCY FUNDS

## SCHEDULE OF CHANGES IN ASSETS AND LIABILITIES

FOR THE YEAR ENDED JUNE 30, 2017
(in thousands)

|  | Balance <br> July 1, 2016 | Additions | Deductions | $\begin{gathered} \text { Balance } \\ \text { June 30, } 2017 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |
| Cash and investments | \$4,472,376 | \$1,108,597 | \$1,508,598 | \$4,072,375 |
| Liabilities: |  |  |  |  |
| Other | \$4,472,376 | \$1,108,597 | \$1,508,598 | \$4,072,375 |

## THE CITY OF NEW YORK AGENCY FUNDS

## SCHEDULE OF CHANGES IN ASSETS AND LIABILITIES

FOR THE YEAR ENDED JUNE 30, 2016
(in thousands)

|  | Balance July 1, 2015 | Additions | Deductions | $\begin{gathered} \text { Balance } \\ \text { June 30, } 2016 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |
| Cash and investments | \$3,535,037 | \$2,094,708 | \$1,157,369 | \$4,472,376 |
| Liabilities: |  |  |  |  |
| Other | \$3,535,037 | \$2,094,708 | \$1,157,369 | \$4,472,376 |



## VARIABLE RATE BONDS

## Variable Rate Demand Bonds

| Series | Outstanding Principal Amount | Provider |
| :---: | :---: | :---: |
| 2004A-4 | \$ 25,000,000 | Bank of Montreal |
| 2004A-5 | 50,000,000 | Bank of Montreal |
| 2004H-5 | 23,955,000 | Dexia Crédit Local |
| 2004H-6 | 31,305,000 | Bank of America, N.A. |
| 2004H-8 | 31,335,000 | Bank of America, N.A. |
| 2006E-2 | 87,530,000 | Bank of America, N.A. |
| 2006E-3 | 87,530,000 | Bank of America, N.A. |
| 2006E-4 | 87,525,000 | Bank of America, N.A. |
| 2006F-3 | 75,000,000 | Sumitomo Mitsui Banking Corporation |
| 2006F-4A | 40,000,000 | Sumitomo Mitsui Banking Corporation |
| 2006F-4B | 35,000,000 | Bank of Tokyo-Mitsubishi UFJ, LTD |
| 2006H-1 | 50,535,000 | JPMorgan Chase Bank, N.A. |
| 2006H-2 | 50,530,000 | JPMorgan Chase Bank, N.A. |
| 2006I-3 | 50,000,000 | Bank of America, N.A. |
| 2006I-4 | 125,000,000 | TD Bank, N.A. |
| 2006I-5 | 75,000,000 | The Bank of New York Mellon |
| 2006I-6 | 75,000,000 | The Bank of New York Mellon |
| 2006I-7 | 50,000,000 | Bank of America, N.A. |
| 2006I-8 | 50,000,000 | State Street Bank and Trust Company |
| 2008D-3 | 50,000,000 | Bank of Montreal |
| 2008D-4 | 50,000,000 | Bank of Montreal |
| 2008J-3 | 75,000,000 | Barclays Bank, PLC |
| 2008J-5 | 101,405,000 | Bank of America, N.A. |
| 2008J-6 | 111,225,000 | Landesbank Hessen-Thüringen Girozentrale |
| 2008J-8 | 74,060,000 | Sumitomo Mitsui Banking Corporation |
| 2008J-10 | 100,000,000 | Bank of Tokyo-Mitsubishi UFJ, LTD. |
| 2008L-3 | 80,000,000 | Bank of America, N.A. |
| 2008L-4 | 100,000,000 | US Bank, N.A. |
| 2008L-5 | 145,400,000 | Bank of America, N.A. |
| 2009B-3 | 100,000,000 | TD Bank, N.A. |
| 2010G-4 | 150,000,000 | Barclays Bank, PLC |
| 2012A-3 | 25,000,000 | Landesbank Hessen-Thüringen Girozentrale |
| 2012A-4 | 100,000,000 | Bank of Tokyo-Mitsubishi UFJ, LTD. |
| 2012D-3A | 76,665,000 | The Bank of New York Mellon |
| 2012G-3 | 300,000,000 | Citibank, N.A. |
| 2012G-4 | 100,000,000 | Citibank, N.A. |
| 2012G-6 | 200,000,000 | Mizuho Bank, Ltd. |
| 2012G-7 | 85,000,000 | Bank of Tokyo-Mitsubishi UFJ, LTD |
| 2013A-2 | 100,000,000 | Mizuho Bank, Ltd. |
| 2013A-3 | 100,000,000 | Mizuho Bank, Ltd. |
| 2013A-4 | 75,000,000 | Sumitomo Mitsui Banking Corporation |
| 2013A-5 | 50,000,000 | Sumitomo Mitsui Banking Corporation |
| 2013F-3 | 180,000,000 | Bank of America, N.A. |
| 2014D-3 | 225,000,000 | JPMorgan Chase Bank, N.A. |
| 2014D-4 | 100,000,000 | TD Bank, N.A. |
| 2014D-5 | 75,000,000 | PNC Bank, National Association |


| Facility Type | Expiration <br> LOC |
| :---: | :---: |
| LO | August 12, 2020 |
| LOC | August 12, 2020 |
| LOC | February 2, 2022 |
| LOC | February 28, 2019 |
| LOC | February 28, 2019 |
| LOC | August 1, 2019 |
| LOC | August 1, 2019 |
| LOC | August 1, 2019 |
| LOC | September 17, 2021 |
| LOC | September 17, 2021 |
| LOC | November 15, 2019 |
| SBPA ${ }^{(2)}$ | October 14, 2019 |
| SBPA | October 14, 2019 |
| LOC | May 12, 2020 |
| LOC | May 24, 2019 |
| LOC | May 31, 2019 |
| LOC | May 31, 2019 |
| LOC | May 12, 2020 |
| SBPA | July 10, 2019 |
| SBPA | December 3, 2019 |
| SBPA | December 3, 2019 |
| SBPA | March 29, 2019 |
| SBPA | March 29, 2021 |
| LOC | December 14, 2020 |
| LOC | August 2, 2021 |
| LOC | April 27, 2020 |
| LOC | April 21, 2020 |
| LOC | December 18, 2020 |
| SBPA | April 19, 2021 |
| LOC | January 15, 2020 |
| SBPA | March 29, 2019 |
| SBPA | December 14, 2020 |
| LOC | June 26, 2020 |
| SBPA | October 30, 2020 |
| LOC | March 30, 2021 |
| LOC | March 30, 2021 |
| LOC | March 16, 2021 |
| LOC | April 1, 2021 |
| LOC | October 9, 2021 |
| LOC | October 9, 2021 |
| LOC | October 15, 2020 |
| LOC | October 15, 2020 |
| SBPA | March 15, 2019 |
| SBPA | October 14, 2019 |
| LOC | October 16, 2023 |
| LOC | October 14, 2019 |
|  |  |

[^42]| $\underline{\text { Series }}$ | Outstanding Principal Amount | Provider | Facility Type | Expiration |
| :---: | :---: | :---: | :---: | :---: |
| 2014I-2 | 100,000,000 | JPMorgan Chase Bank, N.A. | SBPA | March 24, 2020 |
| 2015F-4 | 100,000,000 | Bank of Tokyo-Mitsubishi UFJ, LTD | LOC | June 14, 2021 |
| 2015F-5 | 100,000,000 | Barclays Bank, PLC | SBPA | June 18, 2019 |
| 2015F-6 | 100,000,000 | JPMorgan Chase Bank, N.A. | SBPA | June 17, 2022 |
| 2017A-4 | 200,000,000 | Citibank, N.A. | LOC | August 16, 2019 |
| 2017A-5 | 81,000,000 | Landesbank Hessen-Thüringen Girozentrale | SBPA | August 17, 2021 |
| 2017A-6 | 50,000,000 | Landesbank Hessen-Thüringen Girozentrale | SBPA | August 17, 2021 |
| 2017A-7 | 50,000,000 | Bank of the West | LOC | August 16, 2019 |
| 2018B-4 | 100,000,000 | Barclays Bank, PLC | SBPA | October 1, 2021 |
| 2018B-5 | 100,000,000 | Barclays Bank, PLC | SBPA | October 1, 2021 |
| 2018E-5 | 50,000,000 | TD Bank, N.A. | LOC | March 10, 2023 |

## Index Rate Bonds ${ }^{(3)}$

| Series | Outstanding Principal Amount | Step up Date |
| :---: | :---: | :---: |
| 1994E-4 | \$ 50,000,000 | none |
| 1995F-4 | 46,300,000 | none |
| 2008J-11 | 100,000,000 | April 1, 2019 |
| 2008L-6 | 150,000,000 | June 23, 2019 |
| 2012A-5 | 50,000,000 | June 28, 2022 |
| 2012D-3B | 50,000,000 | June 28, 2022 |
| 2012G-5 | 75,000,000 | April 3, 2020 |
| 2014I-3 | 200,000,000 | April 1, 2019 |
| 2015F-7 | 50,000,000 | June 28, 2022 |
| 2018E-4 | 200,000,000 | March 1, 2023 |

## Auction Rate Bonds

| Series | Outstanding <br> Principal <br> Amount |
| :--- | :---: |
| Various $\ldots \ldots . .$. | $\$ 634,900,000$ |

(1) Letter of Credit.
(2) Standby Bond Purchase Agreement.
(3) The City's index rate bonds pay interest based on a specified index. Such bonds, other than the Series 1994E-4 and 1995F-4 Bonds, also provide for an increased rate of interest commencing on an identified step up date if such bonds are not converted or refunded.

## APPENDIX C

AUDITED FINANCIAL STATEMENTS OF THE NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND
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NYC<br>Educational<br>Construction<br>Fund

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND

A Component Unit of The City of New York
Financial Statements
(Together with Independent Auditors' Report)
June 30, 2018 and 2017

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> FINANCIAL STATEMENTS (Together with Independent Auditors' Report) <br> JUNE 30, 2018 AND 2017 

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# INDEPENDENT AUDITORS' REPORT 

To the Board of Trustees of<br>New York City Educational Construction Fund

We have audited the accompanying financial statements of the governmental activities of the New York City Educational Construction Fund (the "Fund"), a component unit of The City of New York, as of and for the year ended June 30, 2018, which collectively comprise the Fund's basic financial statements as listed in the table of contents, and the related notes to the financial statements.

## Management's Responsibility for the Financial Statements

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

## Auditors' Responsibility

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

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

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

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities of the Fund as of June 30, 2018, and the respective changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## Prior Period Financial Statements

The financial statements of the Fund as of and for the year ended June 30, 2017, were audited by other auditors whose report dated September 19, 2017 expressed an unmodified opinion on those statements.

## Other Matter - Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 7, the schedule of the Fund's proportionate share of the net pension liability on page 36, the schedule of employer contributions on page 37 and the schedule of changes in total OPEB liability and related ratios on page 38, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.


New York, NY
September 27, 2018

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2018 AND 2017 

## OVERVIEW OF THE FINANCIAL STATEMENTS

The following management's discussion and analysis ("MD\&A") of the financial position and performance of the New York City Educational Construction Fund (the "Fund") is for the fiscal years ended June 30, 2018 and 2017. This MD\&A is intended to serve as an introduction to the Fund's basic financial statements, which have the following components: (1) government-wide financial statements; (2) governmental funds financial statements; and (3) notes to the financial statements.

The MD\&A is designed to focus on current activities, resulting changes, and currently known facts with respect to the Fund's financial position. It should be read in conjunction with the accompanying basic financial statements.

The government-wide financial statements use the economic resource measurement focus and accrual basis of accounting. These statements present information about the reporting government as a whole. The following two statements make up the government-wide financial statements:

- The statements of net position present information on all of the Fund's assets, liabilities and deferred outflows and inflows of resources. Net position is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Fund has improved or has deteriorated.
- The statements of activities present information showing how the Fund's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in the statement of activities for some items that will only result in cash inflows or outflows in future fiscal periods.

The governmental funds financial statements are presented using the current financial resources measurement focus and the modified accrual basis of accounting. These statements are the governmental funds - balance sheets and the governmental funds - statements of revenues, expenditures and changes in fund balances. Revenue is recognized when it becomes both measurable and available to finance expenditures in the current fiscal year.

The governmental funds financial statements also include a reconciliation between the government-wide and governmental funds statements and the notes to the financial statements, which are an integral part of the financial statements and provide more detailed information to supplement the basic financial statements.

## FINANCIAL HIGHLIGHTS

The Fund's net position increased by approximately $\$ 25$ million during fiscal year 2018, following increases of $\$ 12.9$ million and $\$ 2.5$ million in fiscal years 2017 and 2016, respectively.

In fiscal year 2018, the Fund's rental income and tax equivalency revenues from its existing properties grew from $\$ 23.3$ million to $\$ 27$ million, an increase of $15.8 \%$. In addition, the developer of the 250 East 57th Street project has continued to close sales on the residential tower's condominium units, which began in March 2017. In connection with the sales from fiscal year 2018, the Fund received participation payments of $\$ 18.7$ million from the developer, reported as additional rent.

General and administrative expenses increased slightly, as increased deprecation was offset by a reduction in other postemployment benefits ("OPEB") expense. Depreciation in fiscal year 2018 increased from $\$ 6.3$ million to $\$ 8.1$ million after the estimated useful lives of the Fund's school building, PS 59/HSAD, to be more in line with the Fund's other buildings.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2018 AND 2017 

## FINANCIAL HIGHLIGHTS (Continued)

With the implementation of Governmental Accounting Standards Board ("GASB") Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions ("GASB 75"), in fiscal year 2017, the prior year included a one-time $\$ 1.5$ million increase in OPEB expense. GASB 75 required the actuarial present value of projected benefit payments to be calculated using a lower discount rate, which increased the OPEB liability. The Fund recognized the entire increase in OPEB liability as an expense in fiscal year 2017.

As of April 2018, the Fund closed its 250 East 57th Street construction account, after the project, including the residential portion, was completed. Remaining funds of approximately $\$ 7$ million were transferred to the Fund's 2011 bonds debt service account to contribute toward future debt service payments. The Fund had issued its 2010 and 2011 bonds to pay for construction of the PS 59/HSAD school associated with this project.

In fiscal year 2018, the developer of 250 East 57th Street sold the Retail Whole Foods Unit, but the Fund continues to receive the same rent and tax equivalency for this unit from the new owner. The developer paid off a prior loan from the Fund, listed as "Due from Developer" in the Fund's prior year statement of net position. The Fund had made the $\$ 3$ million loan to the developer of the 57 th Street project to cover a portion of their soft costs. This loan plus interest was paid off in February 2018.

The New York City School Construction Authority ("SCA") leased 17,305 square feet of space (923 square feet on the first floor and 16,383 square feet on the second floor) at 250 East 57 th Street for Pre-K space. The new Pre-K at PS 59 is anticipated to have a capacity of 144 seats, with 8 classrooms and 18 students per classroom.

In April 2017, the Fund signed a term sheet with the developer for a new project at the Khalil Gibran School/362 Schermerhorn in Brooklyn and is continuing to work through the approval process. The full New York City Council uniform land use review procedure ("ULURP") vote on this project is anticipated to take place in late September 2018. The City Council approved the Fund's project at Coop Tech on 96th Street in Manhattan in August 2017, but the project has been delayed by legal and legislative procedures that the Fund anticipates will be resolved in fiscal year 2019. In fiscal year 2018, the Fund capitalized $\$ 594,148$ of site evaluation and development costs, including legal expenses, associated with these two projects.

The Fund coordinated with its tenant to complete roof HVAC work at the former IS 195 Manhattan (Terence Tolbert campus). The fiscal year 2017 statement of net position included a $\$ 1.3$ million payable and receivable for this project. In fiscal year 2018, the Fund paid the invoice and was reimbursed by the SCA, thus clearing the payable and receivable.

Advanced rental receipts increased by $\$ 2.9$ million with more tenants having prepaid their rent and tax equivalency as of June 30, 2018, compared to the prior year. Advanced rental receipts are now being presented as a deferred inflow of resources, rather than as a liability, starting with the fiscal year 2017 amounts presented on the following page.

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) <br> JUNE 30, 2018 AND 2017

## FINANCIAL HIGHLIGHTS (Continued)

Below is a summary of the changes in total assets, deferred outflows of resources, liabilities, deferred inflows of resources and net position:

Summary of Statements of Net Position as of June 30, (\$ in Thousands):

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASSETS: |  |  |  |  |  |  |
| Capital assets | \$ | 251,602 | \$ | 259,713 | \$ | 266,013 |
| Other assets |  | 126,003 |  | 95,912 |  | 78,865 |
| Total assets |  | 377,605 |  | 355,625 |  | 344,878 |
| Deferred outflows of resources |  | 163 |  | 99 |  | 305 |
| LIABILITIES: |  |  |  |  |  |  |
| Current liabilities |  | 8,182 |  | 9,409 |  | 12,143 |
| Long-term liabilities |  | 231,728 |  | 236,540 |  | 239,798 |
| Total liabilities |  | 239,910 |  | 245,949 |  | 251,941 |
| Deferred inflows of resources |  | 6,728 |  | 3,652 |  | 46 |
| NET POSITION: |  |  |  |  |  |  |
| Invested in capital assets, net of related debt |  | 18,960 |  | 22,189 |  | 23,771 |
| Restricted for capital projects |  | - |  | 7,245 |  | 9,658 |
| Restricted for debt service |  | 29,317 |  | 24,938 |  | 30,677 |
| Unrestricted |  | 82,853 |  | 51,751 |  | 29,090 |
| Total net position | \$ | 131,130 | \$ | 106,123 | \$ | 93,196 |

Below is a summary of the revenues, expenses and changes in net position for the years ended June 30:

## Summary of Statements of Activities for the Years Ended June 30, (\$ in Thousands):

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue: |  |  |  |  |  |  |
| Operating revenue | \$ | 28,231 | \$ | 24,403 | \$ | 21,947 |
| Other revenue |  | 18,760 |  | 10,021 |  | - |
| Total revenue |  | 46,991 |  | 34,424 |  | 21,947 |
| Expenses |  | 21,984 |  | 21,497 |  | 19,460 |
| Change in net position |  | 25,007 |  | 12,927 |  | 2,487 |
| Net position, beginning of year |  | 106,123 |  | 93,196 |  | 90,709 |
| Net position, end of year | \$ | 131,130 | \$ | 106,123 | \$ | 93,196 |

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2018 AND 2017



Ratios relating to operating revenues, as well as debt coverage, increased significantly due to the rise in rent and tax equivalency revenues in fiscal year 2018, especially the additional rent from the $57^{\text {th }}$ Street condominium sales participation.

## CURRENT NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND COMPLETED PROJECTS

| PS 126 | 175 West 166 ${ }^{\text {th }}$ Street | Bronx |
| :---: | :---: | :---: |
| Murry Bergtraum HS ${ }^{1}$ | 411 Pearl Street | Manhattan |
| Early Childhood Center | 577 East 139 ${ }^{\text {th }}$ Street | Bronx |
| PS 169 | 110 East 88 ${ }^{\text {th }}$ Street | Manhattan |
| Early Childhood Center | 234 Herkimer Street | Brooklyn |
| PS 99 Annex | 82-37 Kew Gardens Road | Queens |
| Norman Thomas HS ${ }^{2}$ | 111 East 33 ${ }^{\text {rd }}$ Street | Manhattan |
| PS 205 | 2475 and 2375 Southern Boulevard | Bronx |
| American Sign Language and |  |  |
| English School (J47) Annex | 225 East 23 ${ }^{\text {rd }}$ Street | Manhattan |
| Terence D. Tolbert Campus | 625 West 133 ${ }^{\text {rd }}$ Street | Manhattan |
| PS 124 | 40 Division Street | Manhattan |
| Park West Campus HS | 525 West 50 ${ }^{\text {th }}$ Street | Manhattan |
| PS 89/IS 289 | 201 Warren Street | Manhattan |
| PS 267 | 213 East 63 ${ }^{\text {rd }}$ Street | Manhattan |
| MS 114 | 331 East 91 ${ }^{\text {st }}$ Street | Manhattan |
| PS 59/HS of Art and Design | 250 East $57^{\text {th }}$ Street | Manhattan |

[^43]
## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2018 AND 2017

## ECONOMIC FACTORS AND FUTURE RESULTS

As previously noted, the Fund is continuing to work toward the approval and development of its $96^{\text {th }}$ Street project in Manhattan and its 362 Schermerhorn (also known as 80 Flatbush) project in Brooklyn.

In fiscal year 2019, the Fund expects rental and tax equivalency revenues to continue to grow. However, the Fund will receive a significantly smaller condominium participation payment for 250 East $57^{\text {th }}$ Street in fiscal year 2019, as condominium sales should be completed in the coming months. The Fund plans to apply these funds toward the costs of future Fund projects.

Management expects a moderate increase to fiscal year 2019 expenses from 2018 levels with the potential hire of one community relations staff and an increase in insurance costs.

The Fund has been approved by New York City Office of Management and Budget and the Office of the New York City Comptroller for a refunding of its 2007 bonds in fiscal year 2019. In October 2018, new bonds will be issued to replace the old bonds at an expected lower interest rate, thereby achieving annual savings of around $\$ 600,000$ and total present value savings of about $\$ 7$ million.

## Contact Information

This financial report is designed to provide a general overview of the New York City Educational Construction Fund's finances. Questions concerning any data provided in this report or request for additional information should be directed to Cynthia Wong, Director of Finance, New York City Educational Construction Fund, 3030 Thomson Avenue, 6th Floor, Long Island City, New York 11101.

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> STATEMENTS OF NET POSITION <br> AS OF JUNE 30, 2018 AND 2017

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |  |
| Cash and cash equivalents (Notes 2C and 3) | \$ | 8,850,958 | \$ | 10,443,070 |
| Investments (Notes 2D and 3) |  | 74,545,560 |  | 27,554,664 |
| Restricted investments (Notes 2D, 2E and 3) |  | 37,404,765 |  | 40,160,433 |
| Additional rent receivable (Note 4) |  | 1,711,147 |  | 10,021,002 |
| Prepaid expenses and other current assets |  | 150,171 |  | 150,912 |
| Interest receivable on investments |  | 669,812 |  | 274,968 |
| Interest subsidy receivable (Note 5) |  | 241,551 |  | 246,441 |
| Due from developer (Note 2F) |  | - |  | 3,894,793 |
| Reimbursement receivable (Note 5) |  | - |  | 1,331,500 |
| Site evaluation and development costs (Note 2G) |  | 2,428,816 |  | 1,834,668 |
| Capital assets: school buildings, net of accumulated depreciation (Notes 2H and 6) |  | 251,601,815 |  | 259,712,605 |
| TOTAL ASSETS |  | 377,604,595 |  | 355,625,056 |
| DEFERRED OUTFLOWS OF RESOURCES |  |  |  |  |
| Deferred outflows - pension (Notes 2M and 9) |  | 136,344 |  | 99,575 |
| Deferred outflows - other postemployment benefits (Notes 2N and 10) |  | 26,549 |  | - |
| TOTAL DEFERRED OUTFLOWS OF RESOURCES |  | 162,893 |  | 99,575 |
| LIABILITIES |  |  |  |  |
| Accrued interest on revenue bonds (Note 7) |  | 3,242,412 |  | 3,290,942 |
| Accrued expenses and other liabilities (Note 2K) |  |  |  |  |
| Due within one year |  | 94,097 |  | 106,221 |
| Reimbursable expense (Note 5) |  | - |  | 1,331,500 |
| Other postemployment benefits liability (Notes 2 N and 10) |  | 3,879,030 |  | 3,541,815 |
| Net pension liability (Notes 2M and 9) |  | 51,877 |  | 155,053 |
| Revenue bonds, net of unamortized bond premium (Notes 2 J and 7) |  |  |  |  |
| Due within one year |  | 4,845,000 |  | 4,680,000 |
| Due in more than one year |  | 227,797,143 |  | 232,843,611 |
| TOTAL LIABILITIES |  | 239,909,559 |  | 245,949,142 |
| DEFERRED INFLOWS OF RESOURCES |  |  |  |  |
| Advance rental and tax equivalency receipts (Note 2L) |  | 6,540,709 |  | 3,609,516 |
| Deferred inflows - pension (Notes 2M and 9) |  | 187,561 |  | 42,713 |
| TOTAL DEFERRED INFLOWS OF RESOURCES |  | 6,728,270 |  | 3,652,229 |
| COMMITMENTS AND CONTINGENCIES (Note 11) |  |  |  |  |
| NET POSITION (Notes 20 and 8) |  |  |  |  |
| Invested in capital assets, net of related debt |  | 18,959,672 |  | 22,188,994 |
| Restricted for: |  |  |  |  |
| Capital projects |  | - |  | 7,245,605 |
| Debt service |  | 29,317,353 |  | 24,937,991 |
| Unrestricted |  | 82,852,634 |  | 51,750,670 |
| TOTAL NET POSITION | \$ | 131,129,659 | \$ | 106,123,260 |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> STATEMENTS OF ACTIVITIES <br> FOR THE YEARS ENDED JUNE 30, 2018 AND 2017 

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| REVENUE: |  |  |  |  |
| Rental income and tax equivalency payments, net of refunds (Note 2L) | \$ | 26,967,965 | \$ | 23,297,847 |
| Additional rent (Note 4) |  | 18,759,956 |  | 10,021,002 |
| Investment and interest income |  | 1,262,943 |  | 1,104,806 |
| TOTAL REVENUE |  | 46,990,864 |  | 34,423,655 |
| EXPENSES: |  |  |  |  |
| General and administrative expenses, including depreciation expense of $\$ 8,134,620$ and $\$ 6,333,917$, respectively |  | 10,053,158 |  | 9,399,601 |
| Interest on bonds (Note 7) |  | 11,931,307 |  | 12,096,573 |
| TOTAL EXPENSES |  | 21,984,465 |  | 21,496,174 |
| CHANGE IN TOTAL NET POSITION |  | 25,006,399 |  | 12,927,481 |
| NET POSITION - BEGINNING OF YEAR |  | 106,123,260 |  | 93,195,779 |
| NET POSITION - END OF YEAR | \$ | 131,129,659 | \$ | 106,123,260 |

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND

 GOVERNMENTAL FUNDS - BALANCE SHEETJUNE 30, 2018

|  | General |  | Capital Projects |  | Debt Service |  | Total Governmental Funds |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASSETS: |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | 8,850,958 | \$ | - | \$ | - | \$ | 8,850,958 |
| Investments |  | 74,545,560 |  | - |  | - |  | 74,545,560 |
| Restricted investments |  | - |  | - |  | 37,404,765 |  | 37,404,765 |
| Additional rent receivable |  | 1,711,147 |  | - |  | - |  | 1,711,147 |
| Prepaid expenses |  | 150,171 |  | - |  | - |  | 150,171 |
| Interest receivable on investments |  | 12,026 |  | - |  | - |  | 12,026 |
| TOTAL ASSETS | \$ | 85,269,862 | \$ | - | \$ | 37,404,765 | \$ | 122,674,627 |
| LIABILITIES: |  |  |  |  |  |  |  |  |
| Accrued expenses and other liabilities | \$ | 33,847 | \$ | - | \$ | - | \$ | 33,847 |
| TOTAL LIABILITIES |  | 33,847 |  | - |  | - |  | 33,847 |
| DEFERRED INFLOWS OF RESOURCES: |  |  |  |  |  |  |  |  |
| Advance rental receipts |  | 6,540,709 |  | - |  | - |  | 6,540,709 |
| TOTAL DEFERRED INFLOWS OF RESOURCES |  | 6,540,709 |  | - |  | - |  | 6,540,709 |
| FUND BALANCES (Note 20): |  |  |  |  |  |  |  |  |
| Nonspendable |  | 150,171 |  | - |  | - |  | 150,171 |
| Spendable: |  |  |  |  |  |  |  |  |
| Restricted |  | - |  | - |  | 37,404,765 |  | 37,404,765 |
| Unassigned |  | 78,545,135 |  | - |  | - |  | 78,545,135 |
| TOTAL FUND BALANCES |  | 78,695,306 |  | - |  | 37,404,765 |  | 116,100,071 |
| TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES | \$ | 85,269,862 | \$ | - | \$ | 37,404,765 | \$ | 122,674,627 |

NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND GOVERNMENTAL FUNDS - BALANCE SHEET

JUNE 30, 2017

|  | General |  | Capital Projects |  | Debt Service |  | Total Governmental Funds |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASSETS: |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | 10,443,070 | \$ | - | \$ | - | \$ | 10,443,070 |
| Investments |  | 27,554,664 |  | - |  | - |  | 27,554,664 |
| Restricted investments |  | - |  | 7,251,500 |  | 32,908,933 |  | 40,160,433 |
| Additional rent receivable |  | 10,021,002 |  | - |  | - |  | 10,021,002 |
| Reimbursement receivable - IS 195 project |  | 1,331,500 |  | - |  | - |  | 1,331,500 |
| Prepaid expenses |  | 150,912 |  | - |  | - |  | 150,912 |
| Interest receivable on investments |  | 3,035 |  | - |  | - |  | 3,035 |
| TOTAL ASSETS | \$ | 49,504,183 | \$ | 7,251,500 | \$ | 32,908,933 | \$ | 89,664,616 |
| LIABILITIES: |  |  |  |  |  |  |  |  |
| Accrued expenses and other liabilities | \$ | 49,078 | \$ | 5,895 | \$ | - | \$ | 54,973 |
| Accounts payable - IS 195 project |  | 1,331,500 |  | - |  | - |  | 1,331,500 |
| TOTAL LIABILITIES |  | 1,380,578 |  | 5,895 |  | - |  | 1,386,473 |
| DEFERRED INFLOWS OF RESOURCES: |  |  |  |  |  |  |  |  |
| Advance rental receipts |  | 3,609,516 |  | - |  | - |  | 3,609,516 |
| TOTAL DEFERRED INFLOWS OF RESOURCES |  | 3,609,516 |  | - |  | - |  | 3,609,516 |
| FUND BALANCES (Note 20): |  |  |  |  |  |  |  |  |
| Nonspendable |  | 150,912 |  | - |  | - |  | 150,912 |
| Spendable: |  |  |  |  |  |  |  |  |
| Restricted |  | - |  | 7,245,605 |  | 32,908,933 |  | 40,154,538 |
| Unassigned |  | 44,363,177 |  | - |  | - |  | 44,363,177 |
| TOTAL FUND BALANCES |  | 44,514,089 |  | 7,245,605 |  | 32,908,933 |  | 84,668,627 |
| TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES | \$ | 49,504,183 | \$ | 7,251,500 | \$ | 32,908,933 | \$ | 89,664,616 |

NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND RECONCILIATIONS OF THE GOVERNMENTAL FUNDS BALANCE SHEETS TO THE STATEMENTS OF NET POSITION

JUNE 30, 2018 AND 2017

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total fund balances - governmental funds | \$ | 116,100,071 | \$ | 84,668,627 |
| Amounts reported for governmental activities in the statements of net position are different because: |  |  |  |  |
| School property and related costs used in governmental activities are not financial resources and therefore, are not reported in the governmental funds. |  | 251,601,815 |  | 259,712,605 |
| Bond premiums/discounts are reported as other financing sources in the governmental funds financial statements. However, in the statements of net position, bond premiums/discounts are reported as a component of bonds payable and amortized over the lives of the related debt. |  | $(1,442,143)$ |  | $(1,643,616)$ |
| Assets that are not measurable or will not become available to finance expenditures in the current fiscal period are not reported in the governmental funds financial statements. These assets include: |  |  |  |  |
| Interest receivable on investments |  | 657,786 |  | 271,933 |
| Interest subsidy receivable |  | 241,551 |  | 246,441 |
| Due from developer |  | - |  | 3,894,793 |
| Site evaluation and development costs |  | 2,428,816 |  | 1,834,668 |
| Long-term liabilities are not due and payable in the current period from currently available financial resources and are therefore not reported in the governmental funds financial statements. |  |  |  |  |
| These liabilities include: |  |  |  |  |
| Revenue bonds |  | (231,200,000) |  | $(235,880,000)$ |
| Accrued interest on revenue bonds |  | $(3,242,412)$ |  | $(3,290,942)$ |
| Accrued vacation and sick pay |  | $(60,250)$ |  | $(51,243)$ |
| Net pension liability |  | $(51,877)$ |  | $(155,053)$ |
| Other postemployment benefits liability |  | $(3,879,030)$ |  | $(3,541,815)$ |
| Deferred inflows/outflows of resources: |  |  |  |  |
| Pension |  | $(51,217)$ |  | 56,862 |
| Other postemployment benefits |  | 26,549 |  | - |
| Net position of governmental activities | \$ | 131,129,659 | \$ | 106,123,260 |

NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND GOVERNMENTAL FUNDS - STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
FOR THE YEAR ENDED JUNE 30, 2018

|  | General |  | Capital <br> Projects |  | Debt Service |  | Total Governmental Funds |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUES: |  |  |  |  |  |  |  |  |
| Rental income and tax equivalency payments, net of refunds | \$ | 26,967,965 | \$ | - | \$ | - | \$ | 26,967,965 |
| Additional rent |  | 18,759,956 |  | - |  | - |  | 18,759,956 |
| Investment and interest income |  | $(26,850)$ |  | 10,195 |  | 893,759 |  | 877,104 |
| total revenues |  | 45,701,071 |  | 10,195 |  | 893,759 |  | 46,605,025 |
| OTHER FINANCING SOURCES: |  |  |  |  |  |  |  |  |
| Repayments on developer loan receivable |  | 3,894,794 |  | - |  | - |  | 3,894,794 |
| TOTAL REVENUES AND OTHER FINANCING SOURCES |  | 49,595,865 |  | 10,195 |  | 893,759 |  | 50,499,819 |
| EXPENDITURES: |  |  |  |  |  |  |  |  |
| General and administrative |  | 2,188,122 |  | - |  | - |  | 2,188,122 |
| Capital project expenses |  | - |  | 23,830 |  | - |  | 23,830 |
| Bond principal payments |  | - |  | - |  | 4,680,000 |  | 4,680,000 |
| Interest expense |  | - |  | - |  | 12,176,423 |  | 12,176,423 |
| TOTAL EXPENDITURES |  | 2,188,122 |  | 23,830 |  | 16,856,423 |  | 19,068,375 |
| EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES |  | 47,407,743 |  | $(13,635)$ |  | $(15,962,664)$ |  | 31,431,444 |
| OTHER FUNDING SOURCES (USES): |  |  |  |  |  |  |  |  |
| FUND BALANCES - BEGINNING OF YEAR |  | 44,514,089 |  | 7,245,605 |  | 32,908,933 |  | 84,668,627 |
| FUND BALANCES - END OF YEAR | \$ | 78,695,306 | \$ | - | \$ | 37,404,765 | \$ | 116,100,071 |

NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND

## GOVERNMENTAL FUNDS - STATEMENT OF REVENUES, EXPENDITURES

AND CHANGES IN FUND BALANCES
FOR THE YEAR ENDED JUNE 30, 2017

|  | General |  | Capital <br> Projects |  | Debt Service |  | Total Governmental Funds |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUES: |  |  |  |  |  |  |  |  |
| Rental income and tax equivalency payments, net of refunds | \$ | 23,297,847 | \$ | - | \$ | - | \$ | 23,297,847 |
| Additional rent |  | 10,021,002 |  | - |  | - |  | 10,021,002 |
| Investment and interest income |  | 141,605 |  | 5,475 |  | 822,310 |  | 969,390 |
| TOTAL REVENUES |  | 33,460,454 |  | 5,475 |  | 822,310 |  | 34,288,239 |
| EXPENDITURES: |  |  |  |  |  |  |  |  |
| General and administrative |  | 2,621,582 |  | 12 |  | - |  | 2,621,594 |
| Capital project expenses |  | - |  | 33,473 |  | - |  | 33,473 |
| Bond principal payments |  | - |  | - |  | 4,525,000 |  | 4,525,000 |
| Interest expense |  | - |  | - |  | 12,327,457 |  | 12,327,457 |
| TOTAL EXPENDITURES |  | 2,621,582 |  | 33,485 |  | 16,852,457 |  | 19,507,524 |
| EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES |  | 30,838,872 |  | $(28,010)$ |  | $(16,030,147)$ |  | 14,780,715 |
| OTHER FINANCING SOURCES (USES): |  |  |  |  |  |  |  |  |
| INTER-FUND TRANSFERS |  | $(15,877,336)$ |  | (2,384,888) |  | 18,262,224 |  | - |
| FUND BALANCES - BEGINNING OF YEAR |  | 29,552,553 |  | 9,658,503 |  | 30,676,856 |  | 69,887,912 |
| FUND BALANCES - END OF YEAR | \$ | 44,514,089 | \$ | 7,245,605 | \$ | 32,908,933 | \$ | 84,668,627 |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> RECONCILIATIONS OF THE GOVERNMENTAL FUNDS STATEMENTS OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES TO THE STATEMENTS OF ACTIVITIES FOR THE YEARS ENDED JUNE 30, 2018 AND 2017 

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Net changes in fund balances - governmental funds | \$ | 31,431,444 | \$ | 14,780,715 |
| Amounts reported for governmental activities in the statements of activities are different because: |  |  |  |  |
| Governmental funds report capital outlays as expenditures. However, in the statements of activities, the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlays exceeded depreciation in the period. <br> Capital outlays <br> Depreciation expense |  | $\begin{gathered} 23,830 \\ (8,134,620) \end{gathered}$ |  | $\begin{gathered} 33,473 \\ (6,333,917) \end{gathered}$ |
| The issuance of long-term debt (ex. bonds) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report the effect of issuance costs, premiums, discounts and similar items when the debt is first issued, whereas these amounts are deferred and and amortized in the statement of activities (except effects of issuance costs). This amount is the net effect of these differences in the treatment of long-term debt and related items. |  |  |  |  |
| Principal payments of bonds Interest subsidy receivable |  | $\begin{array}{r} 4,680,000 \\ (4,890) \end{array}$ |  | $\begin{array}{r} 4,525,000 \\ (5,531) \end{array}$ |
| Repayments of the developer loan receivable are reported as other financing sources in the governmental funds financial statements, but the repayments reduce the asset in the statement of net position. |  | $(3,894,794)$ |  | - |
| Investment and interest income |  | 385,848 |  | 135,425 |
| Some net expenses reported in the statement of activities do not require the use of current financial resources and therefore, are not reported as expenditures in governmental funds. |  | 519,581 |  | $(207,684)$ |
| Change in net position of governmental activities | \$ | 25,006,399 | \$ | $\underline{\text { 12,927,481 }}$ |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 1 - ORGANIZATION AND NATURE OF ACTIVITIES

The New York City Educational Construction Fund (the "Fund") was created in 1967 as a New York State (the "State") public benefit corporation by Article 10 of the Education Law of the State. The Fund was established to develop combined occupancy structures, containing school and non-school portions and is authorized to issue bonds, notes or other obligations to finance those projects. Although legally separate from the City, the Fund is a component unit of The City of New York (the "City") and is included in the City's financial statements as a blended component unit in accordance with Governmental Accounting Standards Board ("GASB") standards.

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## A. Basis of Accounting

The government-wide financial statements of the Fund, which include the statements of net position and the statements of activities, are presented to display information about the reporting entity as a whole, in accordance with GASB standards. The government-wide financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

The Fund's governmental funds financial statements are presented using the current financial resources measurement focus and the modified accrual basis of accounting. Revenue is recognized when it becomes susceptible to accrual, which is when it becomes both measurable and available to finance expenditures in the current fiscal year. Revenues are generally considered available if expected to be received within 60 days after the fiscal year-end. Expenditures are recognized when the related liability is incurred, except for principal and interest on long-term debt and estimated arbitrage rebate liability, which are recognized when due.

The reconciliations of the governmental funds balance sheets to the statements of net position and the reconciliations of the governmental funds statements of revenues, expenditures, and changes in the fund balances to the statements of activities are presented to assist the reader in understanding the differences between the government-wide and governmental funds financial statements.

## B. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates include depreciable lives of school buildings, other postemployment healthcare benefit ("OPEB") obligations and contingencies. Actual results could differ from those estimates.

## C. Cash and Cash Equivalents

Cash and cash equivalents consist of money market funds as well as highly liquid debt investments with a maturity of three months or less from date of purchase. Cash equivalents are normally held to maturity and are carried at cost plus accrued interest. The Fund's policy is to invest idle cash balances (see Note 3 for details).

## D. Investments

Investments are generally limited to: obligations of government sponsored agencies, U.S. Treasury obligations or repurchase agreements collateralized by U.S. Treasury obligations or other government or government sponsored agencies in accordance with the terms of the Fund's Revenue Bond Resolution and the Fund's Policy on Investments. Short-term investments are reported at cost plus accrued interest, which approximates fair value due to the short maturities of these instruments. Long-term investments are reported at fair value.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

JUNE 30, 2018 AND 2017

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

## E. Restricted Assets

Restricted assets represent cash and investments maintained in accordance with bond resolutions for the purpose of funding certain debt service payments and construction spending.

## F. Due from Developer

As per the Second Amendment of the Construction Agreement dated December 27, 2013 between the Fund and the developer of 250 East $57^{\text {th }}$ Street, the Fund was to be reimbursed for various advanced soft costs incurred (e.g. architectural fees). The agreement set repayments of principal $(\$ 3,056,744)$ and interest over a five-year period beginning in fiscal year 2026. However, the principal and accrued interest thereon were fully repaid by the Developer in the amount of $\$ 3,975,212$ in March 2018. Interest accrued at a rate of $3.810721 \%$ per annum. Accrued interest receivable as of June 30, 2018 and 2017 was $\$ 0$ and $\$ 838,049$, respectively.

## G. Site Evaluation and Development Costs

The Fund capitalizes site evaluation and development costs. When the Fund determines that a project is not feasible, all related costs are charged to operations. When the Fund commences construction, all related costs are added to the cost of construction.

## H. School Property and Related Costs

Buildings are carried at depreciated cost. Depreciation expense is calculated using the straight-line method based upon the estimated useful lives of the buildings, which is between 45 and 75 years.

## I. Bond Issuance Costs

Bond issuance costs are recognized as costs in the period incurred.

## J. Unamortized Bond Premium/Discount

Bond premiums and discounts are being amortized over the life of the bonds using the effective-interest method.

## K. Compensated Absences

Compensated absences for the Fund represent both vacation and sick pay earned by employees. Compensated absences are based on an employee's length of employment and is earned ratably during the span of employment. Upon termination, employees are paid for up to four years of accrued vacation depending upon their length of service and are paid for half of their accrued sick leave up to a maximum of 200 days. Accordingly, the maximum sick leave payment at termination is for 100 days.

Amounts of accumulated compensated absences that are not expected to be liquidated with expendable available financial resources are maintained separately and represent a reconciling item between the governmental fund financial statements and government-wide financial statements.

## L. Rental and Tax Equivalency Payments

Rental income and tax equivalency payments are recognized as earned in accordance with the contractual terms of the lease to which it relates. Advance rental receipts consist of advance rental and tax equivalency payments for the non-school portion of the projects. Such amounts are reported as deferred inflows of resources in the statements of net position and in the governmental funds balance sheets.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

JUNE 30, 2018 AND 2017

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

## M. Net Pension Liability

The net pension liability represents the Fund's proportionate share of the net pension liability of the New York State and Local Employees' Retirement System ("ERS"). Pension liability, expense, deferred outflows of resources and deferred inflows of resources are recognized by the Fund for its proportionate share of the collective amounts within the ERS plan, measured based on an allocation methodology (see Note 9).

## N. Other Postemployment Benefits

The Fund provides health insurance coverage for retired employees and their spouses All of the Fund's employees become eligible for these benefits when they reach normal retirement age while working for the Fund. Health care benefits are provided through an insurance company. See Note 10 for additional information on other postemployment benefits ("OPEB").

## O. Net Position/Fund Balances

The Fund's net position is reported in the statements of net position as follows:

- Invested in capital assets, net of related debt
- Restricted for:
- Capital projects
- Debt service
- Unrestricted

Invested in capital assets, net of related debt, includes capital assets net of accumulated depreciation and liabilities for related revenue bonds.

Restricted net position includes net position restricted for capital projects and debt service. Capital project funds can only be used for specific capital purposes.

Unrestricted net position includes all net position not classified as either net investment in capital assets or restricted net position.

The Fund uses three governmental funds for reporting its activities. The following accounts and funds have been established in accordance with the Fund's Revenue Bond Resolution:

General Fund: The General Fund is the principal operating fund. It is used to account for all financial resources except those required to be accounted for in another fund.

Capital Projects Fund: The Capital Projects Fund was established to pay bond issuance and project costs. Separate accounts may be established within the Fund for each project.

Debt Service Fund: The Debt Service Fund consists mainly of two accounts for each debt issuance (Series 2007A, 2010A and 2011A). Amounts on deposit in the Debt Service Account are used for the payment of debt service on the Fund's bonds. The Debt Service Reserve Fund is required to maintain a balance equal to the maximum annual debt service on the bonds.

As of June 30, 2018 and 2017, the balances in the debt service reserve accounts totaled $\$ 19,893,730$ and $\$ 20,380,091$, respectively, to meet the required minimum.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The Debt Service Fund is funded by specific proceeds from the Revenue Bonds, Series 2007A, 2010A and 2011A. There is one account for each bond established in the Debt Service Reserve Fund. All revenues are deposited in the operating account. Revenues are required to be disbursed in accordance with the priority set forth in the Series Bond Resolutions.

Fund balances are classified as either: 1) nonspendable, 2) restricted, 3) committed, 4) assigned, or 5) unassigned in accordance with GASB standards.

The Fund reported the following fund balances in its governmental funds balance sheets:

- Nonspendable
- Spendable:
- Restricted
- Unassigned

Nonspendable includes amounts that cannot be spent because they are either in a nonspendable form or legally or contractually required to be maintained intact. This includes fund balance related to prepaid expenses.

Restricted includes amounts that can be spent only for a specific purpose stipulated by a bond resolution. Restricted balances are restricted for capital spending and debt service.

Unassigned includes the residual classification of the general fund and includes all spendable amounts not contained in other classifications.

The Board of Trustees (the "Board") of the Fund constitutes the Fund's highest level of decision-making authority. If and when resolutions are adopted by the Board that constrain fund balances for a specific purpose, such resources are accounted for and reported as committed for such purpose unless and until a subsequent resolution altering the commitment is adopted by the Board.

If and when fund balances are constrained for use for a specific purpose based on the direction of any officer of the Fund who is duly authorized to direct the movement of such funds are accounted for and reported as assigned for such purpose, unless or until a subsequent authorized action by the same or another duly authorized officer, or by the Board, is taken which removes or changes the assignment.

Resources that are not constrained are reported as unrestricted in the statement of net position and unassigned in the governmental fund balance sheets.

When both restricted and unrestricted resources are available for use for a specific purpose, it is the Fund's policy to use restricted resources first then unrestricted resources as they are needed. When committed, assigned, or unassigned resources are available for use for a specific purpose, it is the Fund's policy to use committed resources first, then assigned resources, and then unassigned resources as they are needed.

## JUNE 30, 2018 AND 2017

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

## P. Recent Accounting Pronouncements

As a component unit of the City, the Fund implements new GASB standards in the same fiscal year as they are implemented by the City. The following are discussions of the standards requiring implementation in the current year and standards which may impact the Fund in the future years.

- In November 2016, GASB issued Statement No. 83, Certain Asset Retirement Obligations, ("GASB 83"). GASB 83 addresses accounting and financial reporting for certain asset retirement obligations. This statement establishes criteria for determining the timing and pattern of recognition of a liability and corresponding deferred outflow of resources for asset retirement obligations. The requirements of GASB 83 are effective for fiscal years beginning after June 15, 2018, but was adopted in the current fiscal year. The adoption of GASB 83 did not have an impact on the Fund's financial statements as it has no such obligations.
- In January 2017, GASB issued Statement No. 84, Fiduciary Activities, ("GASB 84"). The objective of GASB 84 is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of GASB 84 are effective for fiscal years beginning after December 15, 2018. The Fund has not completed the process of evaluating GASB 84 but does not expect it to have an impact on the Fund's financial statements, as it does not enter into fiduciary activities.
- In May 2017, GASB issued Statement No. 86, Certain Debt Extinguishment Issues, ("GASB 86"). The primary objective of GASB 86 is to improve consistency in accounting and financial reporting for insubstance 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. This statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished. The requirements of GASB 86 are effective for fiscal years beginning after June 15, 2017. The adoption of GASB 86 did not have an impact on the Fund's financial statements as it has not entered into such defeasances.
- In June 2017, GASB issued Statement No. 87, Leases, ("GASB 87"). The objective of GASB 87 is to improve accounting and financial reporting for leases by governments. This statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of GASB 87 are effective for fiscal years beginning after December 15, 2019. The Fund has not completed the process of evaluating GASB 87's impact on its financial statements.
- In March 2018, GASB issued Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, ("GASB 88"). The objective of GASB 88 is to improve consistency in the information that is disclosed in notes to government financial statements related to debt by defining debt for the purpose of note disclosure and establishes additional note disclosure requirements related to debt obligations of governments, including direct borrowing and direct placements. The requirements of GASB 88 are effective for fiscal years beginning after June 15, 2018. The Fund has not completed the process of evaluating GASB 88 's impact on its financial statements.


# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- In June 2018, GASB issued Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period, ("GASB 89"). The objectives of GASB 89 are to enhance the relevance and comparability of information about capital assets and cost of borrowing for a reporting period and to simplify accounting for certain interest costs by requiring interest costs incurred before the end of a construction period to be recognized as an expense/expenditure in governmental fund and government-wide financial statements. The requirements of GASB 89 are effective for fiscal years beginning after December 15, 2019. The Fund has not completed the process of evaluating GASB 89's impact on its financial statements.
- In September 2018, GASB issued Statement No. 90, Majority Equity Interests, ("GASB 90"). GASB 90 clarifies the accounting and financial reporting requirements for a state or local government's majority equity interest in an organization that remains legally separate after acquisition. The requirements of GASB 90 are effective for reporting periods beginning after December 15, 2018. The Fund has not completed the process of evaluating GASB 90 but does not expect it to have an impact on the Fund's financial statements.


## NOTE 3 - CASH AND CASH EQUIVALENTS AND INVESTMENTS

The Fund invests monies held in any funds or accounts not required for immediate use or disbursement. Such funds are invested in obligations of the State or the United States government or obligations the principal of and interest on which are guaranteed by the City, the State or the United States government or obligations of agencies or instrumentalities of the United States government which may from time to time be legally purchased by savings banks of the State as investments of funds belonging to them or in their control.

The Fund maintains cash balances at several banks. Accounts at each bank are insured by the Federal Deposit Insurance Corporation ("FDIC") up to $\$ 250,000$. At June 30, 2018 and 2017, uninsured bank balances of approximately $\$ 2,200,000$ and $\$ 9,900,000$, respectively, were collateralized with securities held by several banks in the Fund's name.

The Fund's total cash, cash equivalents and investments at June 30, 2018 and 2017 were $\$ 120,801,283$ ( $\$ 83,396,518$ unrestricted and $\$ 37,404,765$ restricted, of which $\$ 0$ was remaining in the 250 East $57^{\text {th }}$ Street construction account) and $\$ 78,158,167$ ( $\$ 37,997,734$ unrestricted and $\$ 40,160,433$ restricted, of which $\$ 7,251,500$ was remaining in the 250 East $57^{\text {th }}$ Street construction account), respectively. Investments consisted primarily of U.S. treasury bills and notes and U.S. government agency securities.

Yields on non-restricted investments ranged from 0\% to $2.25 \%$ for the years ended June 30, 2018 and 2017, respectively.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 3 - CASH AND CASH EQUIVALENTS AND INVESTMENTS (Continued)

Cash, cash equivalents and investments were as follows as of June 30:

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Insured | \$ | 88,484 | \$ | 86,184 |
| Collateralized: |  |  |  |  |
| Bank of NY Investment Surplus |  | 74,545,560 |  | 31,668,664 |
| Chase Investment Administrative |  | 1,564,859 |  | 1,650,260 |
| Bank of NY - Cash Surplus |  | 2,549,311 |  | 406 |
| Bank of NY - Operating Account |  | 3,886,317 |  | 3,047,085 |
| Bank of NY Debt Service 2007A |  | 4,562,040 |  | 6,661,679 |
| Bank of NY Debt Service Reserve 2007A |  | 5,612,336 |  | 5,615,422 |
| Bank of NY Debt Service 2010A |  | 1,477,826 |  | 2,016,010 |
| Bank of NY Debt Service Reserve 2010A |  | 4,367,000 |  | 4,334,458 |
| Bank of NY Debt Service 2011A |  | 11,471,169 |  | 3,851,153 |
| Bank of NY Debt Service Reserve 2011A |  | 9,914,394 |  | 10,430,211 |
| Chase Construction Account 2011 |  | - |  | 7,251,500 |
| Chase Investment 96th Street |  | 761,987 |  | 1,545,135 |
| Total Deposits | \$ | 120,801,283 | \$ | 78,158,167 |

Custodial Credit Risk - Deposits/Investments. Custodial credit risk for deposits exists when, in the event of the failure of a depository financial institution, a government entity may be unable to recover deposits or recover collateral securities that are in possession of an outside agency. All deposits/investments are registered and are held by the Fund's agent in the Fund's name.

Credit Risk. New York State Education Law authorizes the Fund to invest in obligations of the U.S. Treasury and federal agencies along with municipal obligations, commercial or finance company paper, repurchase obligations, securities bearing interest or sold at a discount that are issued by domestic corporations, and units of taxable money market funds rated in the highest rating category by Standard \& Poor's and Moody's, and investment agreements or guaranteed investment contracts with a financial institution, corporation, registered broker/dealer or domestic commercial bank whose senior long-term debt obligations are rated in one of the two highest long-term rating categories by at least two rating services.

Concentration of Credit Risk. The Fund places no limit on the amount invested in any one issuer. As of June 30, 2018 and 2017, all investments were in obligations of the U.S. Treasury and federal agencies.

Interest Rate Risk. The Fund manages its exposure to declines in fair values of its investment portfolio due to increases in interest rates by limiting the weighted average maturity of its non-restricted investments to less than one year. As of June 30, 2018 and 2017, all non-restricted investment maturities were less than one year, except for a U.S. Treasury note held at June 30, 2018 and 2017 which matures in March 2021.

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND NOTES TO FINANCIAL STATEMENTS

## JUNE 30, 2018 AND 2017

## NOTE 3 - CASH AND CASH EQUIVALENTS AND INVESTMENTS (Continued)

Information about the carrying values and fair values of restricted investments by type of investment as of June 30, 2018 and 2017 was as follows:

|  | June 30, 2018 |  |  |  | June 30, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Carrying Value |  | Fair Value |  | Carrying Value |  | Fair Value |  |
| U.S. Government securities | \$ | 34,721,573 | \$ | 34,921,016 | \$ | 23,312,550 |  | 23,184,921 |
| U.S. Government agency obligations |  | 2,677,740 |  | 2,744,210 |  | 9,919,399 |  | 10,099,012 |
| Cash |  | 5,452 |  | 5,452 |  | 6,928,484 |  | 6,928,484 |
| Total restricted investments | \$ | 37,404,765 | \$ | 37,670,678 | \$ | 40,160,433 |  | 40,212,417 |

The Fund 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 Fund had the following recurring fair value measurements as of June 30, 2018 and 2017:

- U.S. Treasury notes of approximately $\$ 9.9$ million and $\$ 10.2$ million, respectively, were valued using quoted market prices (Level 1 inputs).


## NOTE 4 - ADDITIONAL RENT

Under the terms of the lease for the non-school portion of its $57^{\text {th }}$ Street project the Fund is to receive a percentage of the gross sales price, above a threshold price per square foot, for any units sold by the developer, sponsor or tenant to third parties in arm's-length transfers. The Fund's income from those sales was $\$ 18,759,956$ and $\$ 10,021,002$ for the years ended June 30, 2018 and 2017, respectively, and is reported as additional rent in the accompanying financial statements. As of June 30, 2018 and 2017, additional rent receivable amounted to $\$ 1,711,147$ and $\$ 10,021,002$, respectively, and such amounts were collected in full subsequent to the fiscal year-end.

## NOTE 5 - REIMBURSEMENT RECEIVABLE - IS 195 PROJECT

The Fund entered into an agreement to have roof work done at the former IS 195 Manhattan (Terence Tolbert campus). The location is currently operated by the New York City Department of Education and, accordingly, the New York City School Construction Authority ("SCA") reimburses the Fund for its expenditure. Reimbursement of $\$ 1,331,500$ was received from SCA in fiscal year 2018 and the related liability was paid by the Fund.

## NOTE 6 - SCHOOL BUILDINGS

The City conveyed land to the Fund at no cost for the development of seventeen schools. The land for fourteen schools is being used for combined schools and housing units and the land for two schools is being used for combined schools and commercial buildings. One building was sold in 2012. All of the schools are completed, in use, and classified as school buildings. Of the seventeen schools, seven were financed by the 1972 Series A Revenue Bonds, which have been defeased; eight were financed by the 1989 Series A Revenue Bonds, which were refunded with the 1994 Series Revenue Bonds (1994 Bonds); one was financed by the 2007A Series Revenue Bonds; and one was financed by the 2010A and 2011A Series Revenue Bonds. The 2005A Series Bonds, which have been defeased, were used to refinance the 1994 and 1996 Series Revenue Bonds.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 6 - SCHOOL BUILDINGS (Continued)

The school's portion of these locations has been leased by the Fund to the City for a period of 30 or 40 years. The leases expire on various dates between 2017 and 2052. In the event that the Fund's revenues from the non-school portion of the properties are not sufficient to pay the debt service requirements of the 2007A, 2010A and 2011A Series Bonds, then the school leases provide for payments from the City sufficient to support payment of an allocable portion of the debt service requirements of the 2007A, 2010A and 2011A Bonds. The Fund has derived sufficient revenue from the non-school portion, combined with investment income, to meet the debt service requirements of the 2007A, 2010A and 2011A Series Bonds. Accordingly, the City has not been required to make payments under the school leases.

The Fund has agreed to re-convey to the City, the land and improvements relating to assets classified as school property financed by the bonds without consideration at various dates pursuant to the lease agreements with the City.

A summary of the changes in school buildings is as follows for the years ended June 30:

|  | June 30, 2017 |  | Additions |  | June 30, 2018 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School buildings, at cost | \$ | 400,708,747 | \$ | 23,830 | \$ | 400,732,577 |
| Less: accumulated depreciation |  | 140,996,142 |  | 8,134,620 |  | 149,130,762 |
| School buildings, net | \$ | 259,712,605 |  | (8,110,790) | \$ | 251,601,815 |
|  | June 30, 2016 |  | Additions |  | June 30, 2017 |  |
| School buildings, at cost | \$ | 400,675,274 | \$ | 33,473 | \$ | 400,708,747 |
| Less: accumulated depreciation |  | 134,662,225 |  | 6,333,917 |  | 140,996,142 |
| School buildings, net | \$ | 266,013,049 |  | $(6,300,444)$ | \$ | 259,712,605 |

Depreciation expense for the years ended June 30, 2018 and 2017 was $\$ 8,134,620$ and $\$ 6,333,917$, respectively.

## NOTE 7 - REVENUE BONDS

The 2005A Bonds were issued pursuant to the New York City Educational Construction Fund Act, which is Article 10 of the New York State Education Law, as amended (the "Act") and pursuant to the Fund's Revenue Bond Resolution adopted by the Fund on December 20, 2004 (the "General Resolution"), and a Series Resolution authorizing the 2005A Bonds (the "2005 Series A Resolution") adopted by the Fund on December 20, 2004 (the General Resolution and the 2005 Series A Resolution are referred to herein collectively as the "Resolution").

On January 6, 2005, the 2005A Bonds were issued for the purposes of (i) providing, together with other funds available to the Fund, the funds necessary to accomplish the refunding of all the Fund's outstanding bonds and (ii) paying Costs of Issuance of the 2005A Bonds. The Fund's outstanding bonds as of January 6, 2005 were comprised of: (1) $\$ 17,510,000$ of Senior Revenue Bonds, Series 1994, originally issued in the aggregate principal amount of $\$ 69,320,000$; (2) $\$ 19,065,000$ Senior Subordinated Revenue Bonds, Series 1994, originally issued in the aggregate principal amount of $\$ 19,065,000$; (3) $\$ 25,935,000$ Junior Subordinated Revenue Bonds, Series 1994, originally issued in the aggregate principal amount of $\$ 49,365,000$; and (4) $\$ 39,820,000$ Junior Subordinated Revenue Bonds, Series 1996, originally issued in the aggregate principal amount of $\$ 44,880,000$ (collectively the "Refunded Bonds").

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 7 - REVENUE BONDS (Continued)

On January 18, 2007, the Fund issued the 2007A Bond series in the amount of $\$ 51,340,000$ to finance the construction of MS 114 located at 1765 1st $^{\text {st }}$ Avenue, New York, New York. The 2007A Bonds were issued pursuant to the Act and the Resolution, and to the Fund's Revenue Bond resolution adopted by the Fund on December 8,2006 , for the purposes of (i) financing the costs of constructing the school portion of a combined occupancy structure; (ii) funding the Debt Service Reserve Fund; and (iii) paying the Costs of Issuance of the 2007A Bonds, all as described herein.

On April 28, 2010, the Fund issued the 2010A Bond series in the amount of $\$ 53,810,000$ to finance phase 1 of the construction of PS 59/HS of Art and Design located at 250 East $57^{\text {th }}$ Street, New York, New York. The 2010A Bonds were issued pursuant to the Act and the Resolution, and to the Fund's Revenue Bond resolution adopted by the Fund on February 26, 2010, for the purpose of (i) financing the costs of constructing the school portion of a combined occupancy structure; (ii) funding the Debt Service Reserve Fund; and (iii) paying the Costs of Issuance of the 2010A Bonds, all as described herein.

The 2010A bonds were issued as "Build America Bonds" and the Fund elected to receive cash subsidy payments from the United States Treasury equal to $35 \%$ of the interest payable on the bonds. The payments from the United States Treasury were reduced by budget sequestration cuts ranging from $6.6 \%$ to $8.7 \%$ from 2013 through 2018. For 2019, the sequestration rate reduction will be $6.2 \%$.

On January 25, 2011, the Fund issued the 2011A Bond series in the amount of $\$ 137,525,000$ to finance phase 2 of the construction of 250 East $57^{\text {th }}$ Street. The 2011A Bonds were used pursuant to the Act and the Resolution, and to the Fund's Revenue Bond resolution adopted by the Fund on December 23, 2010 for the purpose of (i) financing the costs of constructing the school portion of a combined occupancy structure; (ii) funding the Debt Service Reserve Fund; and (iii) paying the Costs of Issuance of the 2011A Bonds, all as described herein.

As of June 30, 2018 and 2017 the Fund recorded accrued interest on revenue bonds of $\$ 3,242,412$ and $\$ 3,290,942$ representing interest for the periods from April 1 to June 30, 2018 and 2017 due to be paid in October 2018 and 2017, respectively.

The following is a summary of changes in serial bonds payable for the year ended June 30, 2018:

|  | June 30, 2017 |  | Principal Payments |  | June 30, 2018 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue Bonds 2007A issued January 18, 2007 (3.75\% to 5\%) maturity dates 2009 to |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Revenue Bonds 2010A issued April 28, 2010 (4.5\% to 6.2\%) maturity dates 2017 to 2040. |  |  |  |  |  |  |
| Payments due April and October. |  | 52,375,000 |  | 1,480,000 |  | 50,895,000 |
| Revenue Bonds 2011A issued January 25, 2011 (3.25\% to 6.5\%) maturity dates 2017 to 2041. Payments due April and October. |  |  |  |  |  |  |
|  |  | 134,780,000 |  | 2,835,000 |  | 131,945,000 |
|  |  | 235,880,000 | \$ | 4,680,000 |  | 231,200,000 |
| Less/add: unamortized bond |  |  |  |  |  |  |
| discount/premium |  | 1,643,611 |  |  |  | 1,442,143 |
| Current portion |  | $(4,680,000)$ |  |  |  | $(4,845,000)$ |
| Long-term portion | \$ | 232,843,611 |  |  | \$ | 227,797,143 |

## NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS <br> JUNE 30, 2018 AND 2017

## NOTE 7 - REVENUE BONDS (Continued)

The following is a summary of changes in serial bonds payable for the year ended June 30, 2017:

|  | June 30, 2016 |  | Principal Payments |  | June 30, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue Bonds 2007A issued January 18, 2007 (3.75\% to 5\%) maturity dates 2009 to 2037. Payments due April and October. | \$ | 49,070,000 | \$ | 345,000 | \$ | 48,725,000 |
| Revenue Bonds 2010A issued April 28, 2010 (4.5\% to 6.2\%) maturity dates 2017 to 2040. Payments due April and October. |  | 53,810,000 |  | 1,435,000 |  | 52,375,000 |
| Revenue Bonds 2011A issued January 25, 2011 (3.25\% to 6.5\%) maturity dates 2017 to 2041. Payments due April and October. |  | 137,525,000 |  | 2,745,000 |  | 134,780,000 |
|  |  | 240,405,000 | \$ | 4,525,000 |  | 235,880,000 |
| Less/add: unamortized bond discount/premium |  | 1,837,269 |  |  |  | 1,643,611 |
| Current portion |  | $(4,525,000)$ |  |  |  | $(4,680,000)$ |
| Long-term portion | \$ | 237,717,269 |  |  | \$ | 232,843,611 |

Debt service requirements on bond indebtedness at June 30, 2018 were as follows:

| Fiscal Years | 2007A Bonds |  |  | 2010A Bonds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principal | Interest | Total | Principal | Interest | Total |
| 2019 | \$ 380,000 | \$ 2,418,000 | \$ 2,798,000 | \$ 1,525,000 | \$ 2,955,653 | \$ 4,480,653 |
| 2020 | 400,000 | 2,399,000 | 2,799,000 | 1,575,000 | 2,880,928 | 4,455,928 |
| 2021 | 420,000 | 2,379,000 | 2,799,000 | 1,630,000 | 2,802,178 | 4,432,178 |
| 2022 | 440,000 | 2,358,000 | 2,798,000 | 1,685,000 | 2,719,048 | 4,404,048 |
| 2023 | 2,165,000 | 2,336,000 | 4,501,000 | 1,745,000 | 2,633,955 | 4,378,955 |
| 2024-2028 | 12,560,000 | 9,944,000 | 22,504,000 | 9,750,000 | 11,706,427 | 21,456,427 |
| 2029-2033 | 16,030,000 | 6,474,000 | 22,504,000 | 11,870,000 | 8,679,430 | 20,549,430 |
| 2034-2038 | 15,965,000 | 2,044,000 | 18,009,000 | 14,470,000 | 4,806,230 | 19,276,230 |
| 2039-2041 | - | - | - | 6,645,000 | 622,170 | 7,267,170 |
|  | \$ 48,360,000 | \$ 30,352,000 | \$ 78,712,000 | \$ 50,895,000 | \$ 39,806,019 | \$ 90,701,019 |
|  |  | 2011A Bonds |  |  | Total |  |
| Fiscal Years | Principal | Interest | Total | Principal | Interest | Total |
| 2019 | \$ 2,940,000 | \$ 7,595,994 | \$ 10,535,994 | \$ 4,845,000 | \$ 12,969,647 | \$ 17,814,647 |
| 2020 | 3,060,000 | 7,478,394 | 10,538,394 | 5,035,000 | 12,758,322 | 17,793,322 |
| 2021 | 3,185,000 | 7,352,169 | 10,537,169 | 5,235,000 | 12,533,347 | 17,768,347 |
| 2022 | 3,325,000 | 7,212,825 | 10,537,825 | 5,450,000 | 12,289,873 | 17,739,873 |
| 2023 | 3,540,000 | 6,996,700 | 10,536,700 | 7,450,000 | 11,966,655 | 19,416,655 |
| 2024-2028 | 21,225,000 | 31,466,350 | 52,691,350 | 43,535,000 | 53,116,777 | 96,651,777 |
| 2029-2033 | 28,575,000 | 24,114,639 | 52,689,639 | 56,475,000 | 39,268,069 | 95,743,069 |
| 2034-2038 | 37,795,000 | 14,898,252 | 52,693,252 | 68,230,000 | 21,748,482 | 89,978,482 |
| 2039-2041 | 28,300,000 | 3,315,163 | 31,615,163 | 34,945,000 | 3,937,333 | 38,882,333 |
|  | \$ 131,945,000 | \$ 110,430,486 | \$ 242,375,486 | \$ 231,200,000 | \$ 180,588,505 | \$411,788,505 |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

JUNE 30, 2018 AND 2017

## NOTE 8 - NET POSITION

The Fund's net investment in capital assets category of net position and the net position restricted for debt service and capital projects consisted of the following as of June 30:

Invested in capital assets, net of related debt<br>School property, net<br>Less: Revenue bonds payable, net<br>Invested in capital assets, net of related debt

|  | 2018 | 2017 |  |
| :---: | :---: | :---: | :---: |
| \$ | $\begin{gathered} 251,601,815 \\ (232,642,143) \end{gathered}$ | \$ | $\begin{aligned} & 259,712,605 \\ & 237,523,611) \end{aligned}$ |
| \$ | 18,959,672 | \$ | 22,188,994 |
| \$ | $37,404,765$ | \$ | $\begin{aligned} & 40,160,433 \\ & (7,251,500) \end{aligned}$ |
|  | $\begin{aligned} & (3,242,412) \\ & (4,845,000) \end{aligned}$ |  | $\begin{aligned} & (3,290,942) \\ & (4,680,000) \end{aligned}$ |
| \$ | 29,317,353 | \$ | 24,937,991 |

Restricted for capital projects
Restricted assets

| $\$$ | - | $\$$ | $7,251,500$ |
| :--- | :--- | :--- | ---: |
|  | - |  | $(5,895)$ |
| $\$$ | - |  |  |

## NOTE 9 - PENSION PLAN

## PLAN DESCRIPTION

The Fund participates in the ERS (see Note 2M). This is a cost-sharing multiple-employer defined benefit retirement system. The ERS provides retirement benefits as well as death and disability benefits.

As set forth in the New York State Retirement and Social Security Law ("NYSRSSL"), the Comptroller of the State of New York (the "Comptroller") serves as sole trustee and administrative head of the ERS. The Comptroller adopts and may amend rules and regulations for the administration and transaction of the business of the ERS and for the custody and control of their funds.

A publicly available annual report containing financial statements and required supplemental information for the ERS may be obtained by writing to The New York State Retirement System, Office of The State Comptroller, State Office Building, 110 State Street, Albany, New York 12236.

## BENEFITS

The benefits employees will receive are governed by the NYSRSSL. Employees are placed in tiers depending on when they last became members. The benefits in all tiers are $1.67 \%$ of the final average salary for each year of service if members retire with less than 20 years. If members retire with more than 20 years of service, the percentages vary according to the tier they are in. The minimum service requirements and minimum age requirement varies according to the tier the employee is in.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS <br> <br> JUNE 30, 2018 AND 2017 

 <br> <br> JUNE 30, 2018 AND 2017}

## NOTE 9 - PENSION PLAN (Continued)

Annual cost of living adjustments are provided to pensioners after waiting periods defined in the plan. The adjustments are a percentage of the annual retirement benefit as computed on a base benefit amount not to exceed $\$ 18,000$ of the annual retirement benefit. The cost of living percentage is $50 \%$ of the Consumer Price Index but not less than $1 \%$ or more than $3 \%$.

Ordinary disability benefits are usually one third of salary and are provided to eligible members after ten years or, in some cases, five years of service. Accidental disability benefits are either $75 \%$ of salary with an offset for any workers' compensation benefits received or the ordinary disability benefit with the year of service eligibility requirement dropped, depending on the tier. Death benefits are payable upon the death, before retirement, of a member who meets the eligibility requirements as set forth by law. The benefit is generally three times the member's annual salary.

## CONTRIBUTIONS

For employees who joined the ERS after July 27, 1979, the system requires a 3\% contribution of their salaries until employees are vested. Under the authority of the NYSRSSL, the Comptroller shall certify annually the rates expressed as a percentage of payroll of members, which shall be used in computing the contributions required to be made by employers to the pension accumulation fund.

The Fund is required to contribute at an actuarially determined rate. The actual contributions were equal to the actuarially required amounts. The required contributions to the ERS for the fiscal years ended June 30, 2018 and 2017 were $\$ 53,039$ and $\$ 64,406$ respectively. The total pension expense for the fiscal years ended June 30,2018 and 2017 was $\$ 57,385$ and $\$ 97,566$, respectively.

## ACTUARIAL ASSUMPTIONS

The total pension liability for the March 31, 2018 and 2017 valuation dates were determined by using actuarial valuations as of April 1, 2017 and 2016, with update procedures used to roll forward the total pension liability to March 31, 2018 and 2017. The actuarial valuations used the following actuarial assumptions:

|  | April 1, 2017 |  | April 1, 2016 |
| :--- | :--- | :--- | :--- |
|  |  | $2.5 \%$ | $2.5 \%$ |
| Inflation | $3.8 \%$ | $3.8 \%$ |  |
| Salary increases |  |  |  |
| Investment rate of return (net of investment | $7.0 \%$ | $7.0 \%$ |  |
| $\quad$ expense, including inflation) | $1.3 \%$ | $1.3 \%$ |  |

Annuitant mortality rates for the April 1, 2017 and 2016 valuations were based on the April 1, 2010 through March 31, 2015 ERS experience with adjustments for mortality improvements using the Society of Actuaries' Scale MP-2014. The actuarial assumptions used in the April 1, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from April 1, 2010 through March 31, 2015.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS <br> JUNE 30, 2018 AND 2017 

## NOTE 9 - PENSION PLAN (Continued)

## SENSITIVITY OF THE EMPLOYER'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY DUE TO CHANGES IN THE DISCOUNT RATE

The following presents the employer's proportionate share of the net pension liability calculated using the discount rate of $7.0 \%$, as well as what the employer's proportionate share of net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.0\%) or one percentage point higher (8.0\%) than the current rate as of June 30, 2018:

|  | $\begin{gathered} \text { 1\% Decrease } \\ (6.0 \%) \\ \hline \end{gathered}$ | Current Discount Rate (7.0\%) | $\begin{aligned} & \text { 1\% Increase } \\ & (8.0 \%) \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Employer's proportionate share of net pension liability (asset) | \$ 392,517 | \$ 51,877 | \$ $(236,290)$ |

The following presents the employer's proportionate share of the net pension liability calculated using the discount rate of $7.0 \%$, as well as what the employer's proportionate share of net pension liability would be if it were calculated using a discount rate that is one percentage point lower ( $6.0 \%$ ) or one percentage point higher (8.0\%) than the current rate as of June 30, 2017:

Current
Discount

| $1 \%$ Decrease | Rate | 1\% Increase |
| :---: | :---: | :---: |
| $(6.0 \%)$ | $(7.0 \%)$ | $(8.0 \%)$ |

Employer's proportionate share of net pension liability (asset)
\$ 495,208
\$ 155,053
\$ $(132,548)$

DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES
Balances of deferred outflows of resources were as follows at June 30:

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Differences between expected and actual experience | \$ | 18,503 | \$ | 3,885 |
| Changes of assumptions |  | 34,399 |  | 52,972 |
| Net difference between projected and actual investment earnings on pension plan investments |  | 75,348 |  | 30,970 |
| Changes in proportion and differences between employer contributions and proportionate share of contributions |  | 6,192 |  | 9,288 |
| Employer contributions subsequent to the measurement date |  | 1,902 |  | 2,460 |
|  | \$ | 136,344 | \$ | 99,575 |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 9 - PENSION PLAN (Continued)

Balances of deferred inflows of resources were as follows at June 30:

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Differences between expected and actual experience | \$ | 15,290 | \$ | 23,546 |
| Net difference between projected and actual investment earnings on pension plan investments |  | 148,729 |  | - |
| Changes in proportion and differences between employer contributions and proportionate share of contributions |  | 23,542 |  | 19,167 |
|  | \$ | 187,561 | \$ | 42,713 |

The amounts of deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows for years ended June 30:

| 2019 | $\$$ |
| :---: | :---: |
| 2020 | 5,075 |
| 2021 |  |
| 2022 | $(43,877)$ |
|  |  |
|  | $(20,016)$ |

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

|  | March 31, 2018 |  |  | March 31, 2017 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

The real rate of return is net of the long-term inflation assumption of $2.50 \%$.
(1) Excludes equity-oriented and long-only funds. For investment management purposes, these funds are included in domestic equity and international equity.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

## JUNE 30, 2018 AND 2017

## NOTE 9 - PENSION PLAN (Continued)

The discount rate used to calculate the total pension liability was $7.0 \%$. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based upon those assumptions, ERS's fiduciary net position was projected to be available to make all projected future benefit payments of current 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.

The components of the collective net pension liability of ERS were as follows as of the measurement dates ended March 31:

|  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total pension liability | \$ | 183,400,590 | \$ 177,400,586 |  |
| Fiduciary net position |  | $(180,173,145)$ | (168,004,363) |  |
| Employers' net pension liability | \$ | 3,227,445 | \$ | 9,396,223 |
| ERS fiduciary net position as a percentage |  |  |  |  |

## NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS

## PLAN DESCRIPTION

The Fund's defined benefit post-employment healthcare plan (the "Plan") which is provided under the New York State Health Insurance Program (the "NYSHIP"), provides medical and dental insurance benefits to eligible employees, retirees and their dependents. As of June 30, 2018, three active employees, one deferred retiree and five retirees were eligible to receive benefits under the Plan. As of June 30, 2017, three active employees, one deferred retiree and six retirees were eligible to receive benefits under the Plan. NYSHIP is administered by the Department of Civil Service of the State of New York. According to the Department of Civil Service, NYSHIP is a cost sharing multiple-employer healthcare plan that is not administered as a trust or trust equivalent and is therefore treated as an agent multiple-employer plan for purposes of analysis of postemployment benefit costs. The Fund has the authority to establish and amend benefit provisions of the Plan. NYSHIP issues a publicly available financial report that includes financial statements and required supplementary information. The report may be obtained by writing to The Department of Civil Service, The State Campus, Albany, New York 12239.

## FUNDING POLICY

The combined contribution requirements of Plan members and the Fund are established and may be amended by the Department of Civil Service. The Fund determines the portion of contributions required by retirees, subject to maximum limits established by the Department of Civil Service. The Fund currently provides coverage under the Plan at no cost to its retired members.

At this time, there is no New York State statute providing local governments with the requisite authority for establishing another postemployment benefits trust; therefore, the benefits are funded on a pay-as-you-go basis. No assets are accumulated for payment of OPEB benefits. The total OPEB expense represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize any unfunded actuarial liabilities (or funding excess).

## JUNE 30, 2018 AND 2017

## NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

## ANNUAL OTHER POSTEMPLOYMENT BENEFITS COST AND NET OBLIGATION

For the years ended June 30, 2018 and 2017, the Fund's OPEB expense was $\$ 369,123$ and $\$ 1,542,384$, respectively, and the Fund made $\$ 58,457$ and $\$ 59,650$, respectively in pay-as-you-go employer contributions.

## ACTUARIAL METHODS AND ASSUMPTIONS

An actuarial valuation of an ongoing plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided as of the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point.

The OPEB liability as of June 30, 2018 was determined by using an actuarial valuation as of June 30, 2017, with update procedures used to roll forward the total OPEB liability to June 30, 2018. The actuarial valuation used the following actuarial assumptions:

| Actuarial cost method | Entry Age Normal cost method, level percent of pay calculated on an individual basis. |
| :---: | :---: |
| Discount rate | $2.98 \%$ - Since the OPEB plan is not pre-funded, the discount rate was obtained by discounting future benefit payments funded on a pay-as-you-go basis at the Municipal Bond 20-year Index Rate. |
| Salary increases | $3.00 \%$ per annum which includes an inflation rate of $2.50 \%$ and a general wage increase rate of $0.50 \%$. |
| General inflation | 2.50\% assumed long-term inflation. |
| Mortality | MP-2015 applied on a generational basis. |
| Healthcare cost trend | Annual healthcare cost trend rate for medical coverage of 6.25 percent initially, reduced by decrements to a rate of 4.5 percent after 8 years. |

The OPEB liability as of June 30, 2017 was determined by using an actuarial valuation as of June 30, 2016, with update procedures used to roll forward the total OPEB liability to June 30, 2017. The actuarial valuation used the following actuarial assumptions:

| Actuarial cost method | Entry Age Normal cost method, level percent of pay calculated on an individual basis. |
| :--- | :--- |
| Discount rate | $3.13 \%$ - Since the OPEB plan is not pre-funded, the discount rate was obtained by <br> discounting future benefit payments funded on a pay-as-you-go basis at the Municipal <br> Bond 20-year Index Rate. |
| Salary increases | $3.00 \%$ per annum which includes an inflation rate of $2.50 \%$ and a general wage <br> increase rate of $0.50 \%$. |
| General inflation | $2.50 \%$ assumed long-term inflation. |
| Mortality | MP-2015 applied on a generational basis. <br> Annual healthcare cost trend rate for medical coverage of 6.75 percent initially, <br> Healthcare cost trend <br> reduced by decrements to a rate of 4.75 percent after 7 years. |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS <br> JUNE 30, 2018 AND 2017 

## NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

The actuarial valuations assumed that no assets will be set aside by the Fund to prefund its retiree medical liabilities.

## SENSITIVITY OF NET OPEB LIABILITY TO CHANGES IN HEALTHCARE COST TREND RATE AND DISCOUNT RATE

The following shows how net OPEB liability at June 30, 2018 would change based on changes in the discount rate and healthcare cost trend rate:

|  | $1 \%$ Decrease |  | Current Rate |  | $1 \%$ Increase |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Discount rate | $\$ 5,348,840$ |  | $\$ 3,879,030$ |  | $\$ 2,931,784$ |
| Healthcare cost trend rate | $2,721,122$ |  | $3,879,030$ |  | $5,637,725$ |

The following shows how net OPEB liability at June 30, 2017 would change based on changes in the discount rate and healthcare cost trend rate:

|  | $1 \%$ Decrease |  | Current Rate |  | $1 \%$ Increase |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Discount rate | $\$ 4,865,812$ |  | $\$ 3,541,815$ |  | $\$ 2,688,327$ |
| Healthcare cost trend rate | $2,496,872$ |  | $3,541,815$ |  | $5,129,604$ |

## CHANGES IN NET OPEB LIABILITY AND ADDITIONAL INFORMATION

The following shows the changes in the net OPEB liability in the years ended June 30:

|  | 2018 | 2017 |
| :---: | :---: | :---: |
| Net OPEB liability - beginning of year | \$ 3,541,815 | \$ 1,747,963 |
| Changes in net OPEB liability: |  |  |
| Service cost | 78,627 | 76,223 |
| Interest | 113,500 | 108,370 |
| Differences between expected and actual experience | 37,345 | 2,178,629 |
| Changes in assumptions | 166,200 | $(509,720)$ |
| Benefit payments | $(58,457)$ | $(59,650)$ |
| Net OPEB liability - end of year | \$ 3,879,030 | \$3,541,815 |

Changes in assumptions were primarily changes in the discount rate. The Fund is required to use a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). Discount rates of $2.98 \%$ and $3.13 \%$ were applied to June 30, 2018 and 2017, respectively.

Balances of deferred outflows of resources related to OPEB were as follows at June 30, 2018:

| Differences between expected and actual experience | $\$$4,871 <br> Changes of assumptions |
| :--- | ---: |
| 21,678 |  |

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

JUNE 30, 2018 AND 2017

## NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS (CONTINUED)

The amounts of deferred outflows of resources related to OPEB will be recognized in pension expense during the year ended June 30, 2019.

The Fund had no deferred outflows of resources or deferred inflows of resources related to OPEB as of June 30, 2017.

## NOTE 11 - COMMITMENTS AND CONTINGENCIES

## A. Tax Equivalency Adjustments

Individual tenants may receive tax equivalency adjustments as a result of filing for assessment reductions with the City. Additionally, residences may receive shelter rent adjustments. The result of these adjustments, if any, cannot be estimated until settlement is made and, accordingly, no provisions can made.

## B. Rent

The Fund occupies, rent free, office space located in a building owned by the City. The fair market value of the rent is not considered material and therefore rent expense has not been recorded for the years ended June 30, 2018 and 2017, respectively.

## C. Litigation

The Fund experiences routine litigation and claims incidental to the construction of its projects, the conduct of its affairs and the ownership of its properties. Such litigation is being defended either by insurance companies on behalf of the Fund or other counsel retained by the Fund. As of June 30, 2018 the probable recoveries and the estimated costs and expenses of the defense of such litigation will, in the opinion of the Fund, be entirely within the Fund's applicable insurance policy limits (subject to applicable deductibles) and, accordingly, will not have a material adverse effect on the Fund's operations or financial condition.

A crane subcontracted by the developer collapsed on May 20, 2008 at the site of the MS 114 project. The accident resulted in two deaths, several injuries and property damage. The Fund is contractually indemnified by the developer and the construction manager and indirectly by the crane owner. Claims asserted against the Fund, to date, have been tendered to the Fund's insurer as well as to the developer. In addition, the Fund also tendered claims to those insurance companies whose policies were procured by the developer and construction manager for the project.

On January 30, 2015, all claims and cross claims against the Fund in the wrongful death cases were dismissed. The plaintiffs did not file notices of appeal regarding the Fund's dismissal, and the time to take the necessary steps to appeal has since elapsed. On January 5, 2016, judgments exceeding $\$ 96$ million dollars were awarded in these cases against the crane owner. That same day, the crane owner filed a notice of appeal, but not against the Fund. The appeal reduced the amount of damages to $\$ 35$ million, and the action was later settled, and this matter was closed without further exposure to the Fund.

At June 30, 2018, the Fund does not anticipate incurring losses in excess of its available insurance coverage.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND <br> NOTES TO FINANCIAL STATEMENTS 

JUNE 30, 2018 AND 2017

## NOTE 12 - ARBITRAGE REBATE PROGRAM

In accordance with the Internal Revenue Code of 1986, as amended, the Fund is required to pay the United States Treasury certain amounts related to the Fund's tax-exempt bond issues. The estimated amount of nonpurpose arbitrage payable represents the excess of amounts earned on "taxable" investments over the interest cost of the tax-exempt borrowing, plus income attributable to the excess. Rebate payments are due 60 days after January 18, 2017 for the Series 2007A Bonds, 60 days after April 28, 2020 for the Series 2010A and 60 days after January 25, 2021 for the Series 2011A. At June 30, 2018 and 2017, the estimated liability for nonpurpose interest arbitrage rebate was $\$ 0$ for each bond series.

## NOTE 13 - TAX ABATEMENT

By setting aside at least $20 \%$ of their units as affordable, the Fund's tenant at 331 East $91^{\text {st }}$ Street applied for a 421(a) tax abatement, which was approved by the NYC Department of Finance starting in fiscal year 2012. During the years ended June 30, 2018 and 2017, actual taxes for the property would have been $\$ 2,136,092$ and $\$ 1,485,134$, respectively with the 421(a) abatement. In accordance with the lease, the tenant pays tax equivalency to the Fund that is the greater of (a) the minimum payment set forth in the lease schedule, or (b) what the actual taxes would have been with the abatement. During the years ended June 30, 2018 and 2017, total tax equivalency paid for 331 East 91 st Street was $\$ 2,983,437$ and $\$ 2,666,959$, respectively, which is greater than or equal to the abated amount.

## NOTE 14 - RECLASSIFICATIONS

Certain line items in the June 30, 2017 financial statements have been reclassified to conform to the June 30, 2018 financial statement presentation.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF THE FUND'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS OF JUNE 30, 

## New York State and Local Employees' Retirement System

|  |  | 2018 |  | 2017 |  | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The Fund's proportion of the net pension liability (asset) | 0.00160740\% |  | 0.00165020\% |  | 0.00207120\% |  |
| The Fund's proportionate share of the net pension liability (asset) | \$ | 51,877 | \$ | 155,053 | \$ | 332,440 |
| The Fund's covered employee payroll | \$ | 277,315 | \$ | 273,033 | \$ | 261,656 |
| The Fund's proportionate share of the net pension liability (asset) as a percentage of covered employee payroll |  | 18.71\% |  | 56.79\% |  | 127.05\% |
| Plan fiduciary net position as a percentage of the total pension liability |  | 98.24\% |  | 94.70\% |  | 90.68\% |

NOTES TO THE SChEDULE:
(1) This schedule is intended to present the 10 most current fiscal years of data. However, information for fiscal year 2015 and prior years is not available prior to the implementation of GASB Statement No. 68, Accounting and Financial Reporting for Pensions.

NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS

FOR THE YEARS ENDED JUNE 30,

## New York State and Local Retirement System

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The Fund's actuarially determined contribution (2) | \$ | 53,039 | \$ | 64,406 | \$ | 88,712 |
| The Fund's contribution in relation to the actuarially determined contribution (3) |  | 53,039 |  | 64,406 |  | 88,712 |
| The Fund's contribution deficiency (excess) | \$ | - | \$ | - | \$ | - |
| The Fund's covered employee payroll (4) | \$ | 277,315 | \$ | 273,033 | \$ | 261,656 |
| The Fund's contribution as a percentage of covered employee payroll |  | 19.13\% |  | 23.59\% |  | 33.90\% |

## NOTES TO THE SCHEDULE:

(1) This schedule is intended to present the 10 most current fiscal years of data. However, information for fiscal year 2015 and prior years is not available prior to the implementation of GASB Statement No. 68, Accounting and Financial Reporting for Pensions .
(2) The actuarially determined contribution includes normal costs, adjustments made to record the reconciliation of projected salary to actual salary and other adjustments.
(3) The contributions in relation to the actuarially determined contribution reflects the actual payments made during the fiscal year.
(4) In accordance with GASB Statement No. 82, Pension Issues, which was adopted by the Fund in fiscal year 2016, covered payroll is defined as the payroll on which contributions to a pension plan are based. Prior to the issuance of GASB Statement No. 82, the GASB required presentation of covered employee payroll, which is defined as the payroll of employees that are provided with pensions through the pension plan.

# NEW YORK CITY EDUCATIONAL CONSTRUCTION FUND REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS FOR THE YEARS ENDED JUNE 30, 

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total OPEB liability - beginning of year (2) | \$ | 3,541,815 | \$ | 1,747,963 | \$ | 1,953,942 |
| Changes in total OPEB liability: |  |  |  |  |  |  |
| Service cost |  | 78,627 |  | 76,223 |  | 92,498 |
| Interest |  | 113,500 |  | 108,370 |  | 54,890 |
| Differences between expected and actual experience |  | 37,345 |  | 2,178,629 |  | 20,054 |
| Changes in assumptions (3) |  | 166,200 |  | $(509,720)$ |  | $(311,118)$ |
| Benefit payments |  | $(58,457)$ |  | $(59,650)$ |  | $(62,303)$ |
| Net change in total OPEB liability |  | 337,215 |  | 1,793,852 |  | $(205,979)$ |
| Total OPEB liability - end of year (2) | \$ | 3,879,030 | \$ | 3,541,815 | \$ | 1,747,963 |
| Covered employee payroll (4) | \$ | - | \$ | - | \$ | 483,451 |
| Total OPEB liability as a percentage of covered employee payroll (4) |  |  |  | - |  | 362\% |

## NOTES TO THE SCHEDULE:

(1) This schedule is intended to present the 10 most current fiscal years of data. However, information for fiscal year 2015 and prior years is not available prior to the implementation of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions .
(2) No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.
(3) Changes in assumptions were primarily changes in the discount rate. The Fund is required to use a yield or index rate for 20year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). Discount rates were as follows for the years ended June 30:

| 2018 | 2017 | 2016 |
| :---: | :---: | :---: |
| 2.98\% | 3.13\% |  |

(4) As per GASB Statement No. 85 which was adopted by the Fund in fiscal year 2017, the definition of covered payroll is the "payroll on which contributions to the OPEB plan are based." However, "if contributions to the OPEB plan are not based on a measure of pay, no measure of payroll should be presented." The Fund funds OPEB benefits on a pay-as-you-go basis and contributions are not based on payroll. Payments are only made to the OPEB plan as benefit payments are made to the retirees (or their spouses or dependents). Therefore, the Fund has omitted the disclosure of covered payroll in the above schedule for fiscal years 2017 and subsequent years.
(5) The Fund funds OPEB benefits on a pay-as-you-go basis and contributions are not actuarially determined. Therefore, the required supplementary information related to actuarially determined contributions for the 10 most current fiscal years is not applicable.

## APPENDIX D - FORM OF OPINION OF BOND COUNSEL

[Date of Delivery]
New York City Educational
Construction Fund
52 Chambers Street
New York, New York 10007

Ladies and Gentlemen:

We have examined a record of proceedings relating to the issuance of $\$ 40,350,000$ aggregate principal amount of Revenue Bonds, 2018 Series A (the " 2018 Series A Bonds"), by the New York City Educational Construction Fund (the "Fund"), a body corporate and politic constituting a public benefit corporation of the State of New York, created and existing under and pursuant to the Constitution and statutes of the State of New York, including the New York City Educational Construction Fund Act, being Article 10 of the Education Law of the State of New York, as amended to the date hereof (the "Act").

The 2018 Series A Bonds are issued under and pursuant to the Act and the Revenue Bond Resolution of the Fund, adopted December 20, 2004 (the "Resolution") and the 2018 Series A Resolution Authorizing Up To $\$ 48,000,000$ New York City Educational Construction Fund Revenue Bonds, 2018 Series A, adopted September 24, 2018 (the "2018 Series Resolution"). Said resolutions are herein collectively called the "Resolutions." Unless otherwise defined herein, capitalized terms used herein have the respective meanings given to them in the Resolutions.

The 2018 Series A Bonds are part of an issue of bonds of the Fund (the "Bonds") which the Fund has established and created under the terms of the Resolution and is authorized to issue from time to time for the purposes authorized by the Act and the Resolution, as then in effect, and without limitation as to amount, except as provided in the Resolutions or as may be limited by law.

The 2018 Series A Bonds are being issued for the purposes of (i) providing, together with other money available to the Fund, sufficient money to refund and redeem on November 29, 2018 all of the Fund's Outstanding Revenue Bonds, 2007 Series A and (ii) paying the costs of issuance of the 2018A Bonds, all as described herein. The Fund is authorized to issue Bonds, in addition to the 2018 Series A Bonds, only upon the terms and conditions set forth in the Resolution and such Bonds, when issued, will with the 2018 Series A Bonds be entitled to the equal benefit, protection and security of the provisions, covenants and agreements of the Resolution.

The 2018 Series A Bonds are issuable in the form of fully registered Bonds in the denomination of $\$ 5,000$ or integral multiples thereof. The 2018 Series A Bonds are each numbered consecutively from one upward in order of issuance.

The 2018 Series A Bonds are dated the date hereof and mature on April 1 and bear interest, payable April 1, 2019 and semiannually thereafter on October 1 and April 1, in each of the years and at the respective principal amounts and rates per annum set forth below:

| Year | Principal <br> Amount | Interest <br> Rate |
| :--- | ---: | :--- |
| 2019 | $\$ 370,000$ | $4.00 \%$ |
| 2020 | 205,000 | 4.00 |
| 2021 | 215,000 | 4.00 |
| 2022 | 220,000 | 4.00 |
| 2023 | $1,925,000$ | 4.00 |
| 2024 | $2,000,000$ | 4.00 |
| 2025 | $2,075,000$ | 4.00 |
| 2026 | $2,160,000$ | 4.00 |
| 2027 | $2,245,000$ | 4.00 |
| 2028 | $2,335,000$ | 4.00 |
| 2029 | $2,425,000$ | 4.00 |
| 2030 | $2,530,000$ | 5.00 |
| 2031 | $2,660,000$ | 5.00 |
| 2032 | $2,795,000$ | 5.00 |
| 2033 | $2,930,000$ | 5.00 |
| 2034 | $3,080,000$ | 5.00 |
| 2035 | $3,230,000$ | 5.00 |
| 2036 | $3,395,000$ | 5.00 |
| 2037 | $3,555,000$ | 5.00 |

The 2018 Series A Bonds are subject to redemption prior to maturity as set forth in the Resolutions and in the Series Certificate executed on behalf of the Fund in connection with the 2018 Series A Bonds.

The Fund has entered into certain Agreements of Lease with The City of New York (the "City"), pursuant to which the City leases the school portions of certain Combined Occupancy Structures. In addition, the Fund has entered into certain Non-School Portion Leases with certain corporate entities or partnerships relating to the non-school portions of certain Combined Occupancy Structures. The Annual Rentals derived under the Agreements of Lease and the Fund Income derived under the Non-School Portion Leases constitute part of the Revenues pledged by the Fund to the Trustee, pursuant and subject to the Resolution, to secure the payment of the principal and Sinking Fund Installments of and redemption premium, if any, and interest on the 2018 Series A Bonds.

We are of the opinion that:

1. The Fund is a body corporate and politic constituting a public benefit corporation of the State of New York, with the right and lawful authority and power to adopt the Resolutions and to issue the Bonds thereunder, including the 2018 Series A Bonds.
2. The Resolutions have been duly and lawfully adopted. The 2018 Series A Resolution has been duly adopted in accordance with the provisions of the Resolution and is authorized and permitted by the Resolution. The Resolutions are in full force and effect and are legal, valid and binding obligations of the Fund enforceable in accordance with their terms.
3. The 2018 Series A Bonds have been duly and validly authorized and issued in accordance with the Constitution and statutes of the State of New York, including the Act, and in accordance with the Resolutions. The 2018 Series A Bonds are legal, valid and binding special obligations of the Fund payable as provided in the Resolutions, are enforceable in accordance with their terms and the terms of the Resolutions and are entitled, together with all other Bonds issued under the Resolutions, to the equal benefits of the Resolutions and the Act.
4. The Agreements of Lease and the Non-School Portion Leases have been duly authorized, executed and delivered and constitute legal, valid and binding obligations of the Fund enforceable in accordance with their terms.
5. The Internal Revenue Code of 1986 (the "Code") sets forth certain requirements which must be met subsequent to the issuance and delivery of the 2018 Series A Bonds for interest thereon to be and remain excluded from gross income for federal income tax purposes. Noncompliance with such requirements could cause the interest on the 2018 Series A Bonds to be included in gross income for federal income tax purposes retroactive to the date of issue of the 2018 Series A Bonds. Pursuant to the Resolution and the Tax Certificate, the Fund and the City have covenanted to comply with the applicable requirements of the Code in order to maintain the exclusion of the interest on the 2018 Series A Bonds from gross income for federal income tax purposes pursuant to Section 103 of the Code. In addition, the Fund and the City have made certain representations and certifications in the Resolution and the Tax Certificate. We have not independently verified the accuracy of those certifications and representations.

Under existing law, assuming compliance with the tax covenants described herein and the accuracy of the aforementioned representations and certifications, interest on the 2018 Series A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Code. We are also of the opinion that such interest is not treated as a preference item in calculating the alternative minimum tax imposed under the Code.
6. Interest on the 2018 Series A Bonds is exempt, by virtue of the Act, from personal income taxes of the State of New York and its political subdivisions, including the City.

The opinions contained in paragraphs 2,3 and 4 above are qualified to the extent that the enforceability of the Resolutions, the 2018 Series A Bonds, the Agreements of Lease and the NonSchool Portion Leases may be limited by bankruptcy, insolvency, moratorium, reorganization or other laws affecting creditors' rights generally or as to the availability of any particular remedy.

Except as stated in paragraphs 5 and 6 above, we express no opinion as to any other federal, state, local or foreign tax consequences of the ownership or disposition of the 2018 Series A Bonds. Furthermore, we express no opinion as to any federal, state, local or foreign tax law consequences
with respect to the 2018 Series A Bonds, or the interest thereon, if any action is taken with respect to the 2018 Series A Bonds or the proceeds thereof upon the advice or approval of other counsel.

Very truly yours,

## APPENDIX E

## BONDS TO BE REFUNDED

ECF will use a portion of the proceeds from the sale of the 2018A Bonds together with certain amounts available under the Resolution, to refund, on a current basis, ECF's outstanding 2007 Series A Bonds, as specified below, on the redemption date of November 29, 2018. The refunding is contingent upon the delivery of the 2018A Bonds.

| Maturity <br> Date <br> (April 1) | $\underline{\text { CUSIP* }}$ | Outstanding <br> Principal Amount | Amount to be <br> (49670JP2 | $\$ 380,000$ |
| :---: | :---: | :---: | :---: | :---: |
| Refunded |  |  |  |  |$\quad$| Interest Rate |
| :---: |
| 2019 |

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[^0]:    * Copyright, American Bankers Association ("ABA"). CUSIP data herein are provided by CUSIP Global Services, operated on behalf of the ABA by S\&P Global Market Intelligence, a division of S\&P Global Inc. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders only at the time of issuance of the 2018A Bonds and neither ECF nor the underwriters make any representation with respect to such numbers and do not undertake any responsibility for their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the 2018A Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the 2018A Bonds.

[^1]:    * Totals may not add due to rounding.
    $\dagger$ Excludes debt service on the Refunded Bonds.

[^2]:    (1) Also assessed by the City, but excluded from the computation of taxable real estate, are various categories of property exempt from taxation under State law. For the 2018 fiscal year, the billable assessed value of all real estate (taxable and exempt) was $\$ 382.4$ billion, comprised of $\$ 174.3$ billion of fully exempt real estate, $\$ 73.9$ billion of partially taxable real estate and $\$ 134.2$ billion of fully taxable real estate.
    (2) Figures are based on estimates of the special equalization ratio which are revised annually. These figures are derived from official City Council Tax Resolutions adopted with respect to the 2019 fiscal year. These figures differ from the assessed and full valuation of taxable real estate reported in the CAFR, which excludes veterans' property subject to tax for school purposes and is based on estimates of the special equalization ratio which are not revised annually.

[^3]:    (1) As approved by the City Council.
    (2) Forecast.

[^4]:    Note: Totals may not add due to rounding.
    (1) Personal Income includes the personal income tax revenues of $\$ 1.006$ billion, $\$ 1.641$ billion, $\$ 556$ million, $\$ 180$ million and $\$ 297$ million in fiscal years 2013 through 2017, respectively, retained by the TFA for funding requirements associated with TFA Future Tax Secured Bonds. Personal income taxes flow directly from the State to the TFA, and from the TFA to the City only to the extent not required by the TFA for debt service, operating expenses and contractual and other obligations incurred pursuant to the TFA indenture. In fiscal years 2013 through 2017, Personal Income includes $\$ 610$ million, $\$ 613$ million, $\$ 635$ million, $\$ 607$ million and $\$ 166$ million, respectively, which was provided to the City by the State as a reimbursement for the reduced personal income tax revenues resulting from the STAR Program.
    (2) With the enactment of corporate tax reform that merged the general corporation tax with the banking corporation tax in 2015 , most banking corporation tax payments are now being reported as business corporation taxes. However, refunds arising from prior year returns filed as banking corporation taxes are still paid out as refunds under the banking corporation tax. In fiscal year 2017, the amount refunded exceeded the gross receipts resulting in net negative revenues for such fiscal year.
    (3) A portion of sales tax revenues payable to the City would be paid to the TFA if personal income tax revenues did not satisfy specified debt service ratios.
    (4) All Other includes, among others, beer and liquor taxes and the automobile use tax, but excludes the STAR Program aid of $\$ 829$ million, $\$ 838$ million, $\$ 835$ million, $\$ 814$ million and $\$ 340$ million in fiscal years 2013 through 2017 , respectively.

[^5]:    (1) The City's results of operations refer to the City's General Fund revenues and transfers reduced by expenditures and transfers. The revenues and assets of PBCs included in the City's audited financial statements do not constitute revenues and assets of the City's General Fund, and, accordingly, the revenues of such PBCs are not included in the City's results of operations. Expenditures required to be made and revenues earned by the City with respect to such PBCs are included in the City's results of operations. For further information regarding the particular PBCs included in the City's financial statements, see "Appendix B-Financial StatementsNotes to Financial Statements-Note A."
    (2) In fiscal years 2013 through 2017, Real Estate Tax includes $\$ 219.1$ million, $\$ 224.6$ million, $\$ 201$ million, $\$ 207$ million and $\$ 204$ million, respectively, which was provided to the City by the State as a reimbursement for the reduced property tax revenues resulting from the State's STAR Program.
    (3) Other Taxes includes as revenues to the City the personal income tax revenues retained by the TFA of $\$ 1.006$ billion, $\$ 1.641$ billion, $\$ 556$ million, $\$ 180$ million and $\$ 297$ million in fiscal years 2013 through 2017, respectively. Debt Service includes as a debt service expense the funding requirements associated with TFA Future Tax Secured Bonds of $\$ 1.006$ billion, $\$ 1.641$ billion, $\$ 556$ million, $\$ 180$ million and $\$ 297$ million in fiscal years 2013 through 2017, respectively. Debt Service does not include debt service on TSASC bonds. Miscellaneous Revenues includes TSRs that are not retained by TSASC for debt service and operating expenses.
    (4) Other Taxes includes tax audit revenues. For further information regarding the City's revenues from Other Taxes, see "Section IV: Sources of City Revenues-Other Taxes."
    (5) Total Revenues and Transfers and Total Expenditures and Transfers exclude Inter-Fund Revenues.
    (6) For information regarding pension expenditures, see "Section X: Other Information."
    (7) Debt Service includes discretionary transfers of $\$ 2.727$ billion, $\$ 621$ million, $\$ 1.976$ billion, $\$ 1.760$ billion, and $\$ 1.560$ billion into the General Debt Service Fund in fiscal years 2013 through 2017, respectively, and grants from the City to the TFA of $\$ 1.362$ billion, $\$ 1.578$ billion, $\$ 1.734$ billion and $\$ 1.909$ billion in fiscal years 2014, 2015, 2016 and 2017, respectively, which were used by the TFA to pay debt service in the following fiscal year thereby decreasing the TFA funding requirements.
    (8) All Other includes payments into the Retiree Health Benefits Trust Fund of $\$ 955$ million, $\$ 500$ million and $\$ 100$ million in fiscal years 2015, 2016 and 2017, respectively.
    (9) Surplus is the surplus after discretionary and other transfers and expenditures. The City had general fund operating revenues exceeding expenditures of $\$ 2.812$ billion, $\$ 2.011$ billion, $\$ 3.606$ billion, $\$ 4.043$ billion and $\$ 4.185$ billion before discretionary and other transfers and expenditures for the 2013 through 2017 fiscal years, respectively. Discretionary and other transfers are included in Debt Service and All Other.

[^6]:    Note: Totals may not add due to rounding.
    (1) Personal Income includes $\$ 187$ million, $\$ 674$ million, $\$ 3.071$ billion, $\$ 3.316$ billion and $\$ 3.677$ billion of personal income tax revenues projected to be retained by the TFA for debt service and other expenses in the 2018 through 2022 fiscal years, respectively. The State has amended the STAR Program such that starting in fiscal year 2018, the program will be a credit against State personal income taxes and will no longer be a tax rate reduction of City personal income taxes. As a result, there will be no STAR reimbursement payment from the State to the City starting in fiscal year 2018.
    (2) Sales tax includes the payment to the State pursuant to the State Enacted Budget of $\$ 150$ million in fiscal year 2018 and $\$ 200$ million in fiscal year 2019 that would otherwise be payable to the City, in order to provide the State with the benefit of savings from the refinancing of debt by STAR Corp.
    (3) Hotel includes the impact of an additional temporary hotel occupancy tax of 0.875 percent resulting in additional revenues of $\$ 85$ million, $\$ 89$ million, $\$ 92$ million, $\$ 92$ million and $\$ 92$ million in fiscal years 2018 through 2022, respectively.
    (4) All Other includes, among others, beer and liquor taxes and the automobile use tax. All Other also includes $\$ 189$ million, $\$ 185$ million, $\$ 182$ million, $\$ 180$ million and $\$ 178$ million in fiscal years 2018 through 2022, respectively, to be provided to the City by the State as reimbursement for the reduced property tax resulting from the STAR Program.

[^7]:    (1) Received from the Water Board. The City is no longer requesting the rental payment due to the City from the Water Board in the years of the Financial Plan. For further information regarding the Water Board, see "Section VII: Financial Plan-Financing Program."

[^8]:    (1) Reflects capital appreciation bonds at accreted values as of June 30, 2018.
    (2) Assets Held for Debt Service consists of General Debt Service Fund assets.

[^9]:    Source: NYC CAFRs
    (1) Data is aggregated across the five pension systems. Funding amounts and percentages vary between systems. Data for NYCERS, PPF and FPF includes the QPP and VSFs, and data for TRS and BRS is QPP only.
    (2) Membership data for fiscal year 2014 is as of June 30, 2012; for fiscal year 2015, as of June 30, 2013; for fiscal year 2016, as of June 30, 2014; and for fiscal year 2017, as of June 30, 2015.

[^10]:    Sources: U.S. Department of Commerce, Bureau of Economic Analysis and the Bureau of the Census.
    (1) In current dollars. Personal Income is based on the place of residence and is measured from income which includes wages and salaries, supplements to wages and salaries, proprietors' income, personal dividend income, personal interest income, rental income of persons, and transfer payments.

[^11]:    Source: State Department of Taxation and Finance publication "Taxable Sales and Purchases, County and Industry Data." Data are presented using NAICS.
    (1) The yearly data is for the period from March 1 of the year prior to the listed year through the last day of February of the listed year.
    (2) Retail sales include building materials, general merchandise, food, auto dealers/gas stations, apparel, furniture, eating and drinking and miscellaneous retail.
    (3) Utility and Communication sales include both residential and non-residential electric, and residential and non-residential gas and communication.
    (4) Services include business services, hotel occupancy services (stays for the first 90 days), and other services (auto repair, parking and others).
    (5) Other sales include construction, wholesale trade, arts, entertainment and recreation, and others. Also included in other are local tax base components of City taxable sales and purchases which include Manhattan parking services, hotel occupancy services (stays 91 to 180 days), and miscellaneous services (credit rating and reporting services, miscellaneous personal services, and other services). Other includes items previously identified as "City Other" except for residential utility, which is reflected in "Utility and Communication Sales."

[^12]:    Note: Figures do not include an undetermined number of undocumented aliens.
    Source: U.S. Department of Commerce, Bureau of the Census.

[^13]:    * Represents the unassigned fund balance of the Special Revenue Funds.

[^14]:    ${ }^{(1)}$ The City has five pay-fixed interest rate swaps, and one basis swap that is treated as investment derivative instruments. Additionally, the City had one payfixed swap (H) that is partially treated as an investment derivative instrument. One June 30,2017 , the swaps had fair values of $\$(7,751)$ thousand, $\$(2,584)$ thousand, $\$(2,584)$ thousand, $\$(2,583)$ thousand, $\$(10,637)$ thousand, $\$(7,527)$ thousand, and $\$(15,492)$, respectively.
    ${ }^{(2)}$ The City has five pay-fixed interest rate swaps and one basis swap that is treated as investment derivative instruments. Additionally, the City has one payfixed swap $(\mathrm{H})$ that is partially treated as an investment derivative instrument. On June 30,2016 , the swaps had fair values of $\$(14,229)$ thousand, $\$(4,743)$ thousand, $\$(4,743)$ thousand, $\$(4,743)$ thousand, $\$(16,077)$ thousand, $\$(7,719)$ thousand, and $\$(22,478)$ thousand, respectively.

[^15]:    ${ }^{(1)}$ Includes interest for general obligation bonds estimated at a $3 \%$ rate on tax-exempt adjustable rate bonds and at a $4 \%$ rate on taxable adjustable rate bonds.

[^16]:    ${ }^{(1)}$ Transfers are used to: (i) move unrestricted General Fund revenues to finance various programs that the City must account for in other funds in accordance with budgetary authorizations, including amounts provided as aid or matching funds for grant programs, (ii) move restricted amounts borrowed by authorized fund or component unit to finance Capital Projects Fund expenditures, (iii) move unrestricted surplus revenue from the General Fund to finance Capital Projects Fund expenditures and prepay debt service coming due in the next fiscal year, and (iv) move revenue from the fund with collection authorization to the Debt Service Fund as debt service principal and interest payments become due.

    In the fiscal year ended 2017, the City made the following transfer: A transfer from the General Fund in the amount of $\$ 1.9$ billion to TFA. The funds were used to fund debt service requirements for future tax secured debt during the fiscal year ending June 30, 2018.

    In the fiscal year ended 2016, the City made the following transfers: Transfers of unrestricted grants from the General Fund in the amount of $\$ 1.7$ billion to TFA. These funds were used to fund debt service requirements for future tax secured debt ( $\$ 1.6$ billion) and building aid revenue debt ( $\$ 76.8$ million) during the fiscal year ending June 30, 2017

[^17]:    (1) Stadia transactions are a unique subset within the Commercial Growth portfolio. There are only two such transactions and they relate to the construction of the Yankee and Mets baseball stadiums in the Bronx and Queens, respectively. These transactions are unique in that the related PILOT payments coincide with the underlying debt service related to the construction of the stadiums. As such, the length of these abatements related to the Yankee and Mets stadiums cover a 36 and 40 year period, respectively.
    (2) These businesses include Warehousing, Distribution Centers and Logistics. The FRESH projects are a subset of the Industrial Incentive Transactions and target food distribution companies.
    (3) City Charter 1301(1) (b) requires NYCEDC, NYCIDA and Build NYC to report on projects undertaken for the purposes of the creation or retention of jobs if, in connection with such projects, Financial Assistance was provided in the form of loans, grants or tax benefits. In compliance with this requirement, a detailed report is prepared annually and posted on the NYCEDC web site that lists both summary and transaction level detail for all active projects. This report can be accessed at www.nycedc.com/about-nycedc/financial-public-documents.
    Note: There were no amounts received or receivable from other governments; there were no government made commitments other than to reduce taxes; there were no abatements disclosed separately, and no information was omitted if required by GASB Statement No. 77.

[^18]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^19]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^20]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^21]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^22]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.
    ** Investment categories include fixed return funds and variable funds of the QPPs.

[^23]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY
    ** Investment categories include fixed return funds and variable funds of the QPPs.

[^24]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^25]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^26]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^27]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^28]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^29]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^30]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^31]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^32]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^33]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^34]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY

[^35]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^36]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^37]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^38]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^39]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^40]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^41]:    * Includes VSFs and TDAs, which are not pension funds or retirement systems under ACNY.

[^42]:    See footnotes on page C-2

[^43]:    ${ }^{1}$ Non-school portion is no longer Fund property.
    ${ }^{2}$ Non-school portion is no longer Fund property.

[^44]:    * CUSIP numbers have been assigned by an organization not affiliated with ECF and are included solely for the convenience of the holders of the 2007 Series A Bonds. ECF is not responsible for the selection or uses of these CUSIP numbers, nor is any representation made as to their correctness on the 2007 Series A Bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the issuance of the 2007 Series A Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the 2007 Series A Bonds.
    $\dagger$ Term Bonds.

