EXISTING ISSUE REOFFERED

In connection with a modification of the terms of the Bonds on March 25, 2019, Norton Rose Fulbright US LLP delivered its opinion that interest on the Bonds would be exempt from personal income taxes imposed by the State of New York or any political subdivision thereof, including the City, and assuming continuing compliance with the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), interest on the Bonds is not includable in the gross income of the owners thereof for federal income tax purposes. In the opinion of Norton Rose Fulbright US LLP and Bryant Rabbino LLP, Co-Bond Counsel, certain actions described herein will not in and of themselves adversely affect the exclusion of interest on the Bonds from gross income for purposes of federal income taxation. See "SECTION III: MISCELLANEOUS—Tax Matters" for further information.

$200,000,000

The City of New York

General Obligation Bonds, Fiscal 2014 Series I
Subseries I-3

ADJUSTABLE RATE BONDS

Reoffering Date: August 13, 2019 Due: March 1, 2044

The Bonds are registered in the nominee name of The Depository Trust Company, New York, New York, which acts as securities depository for the Bonds.

On August 13, 2019, the Bonds will bear interest at the Initial Rate and on August 14, 2019 and thereafter will bear interest in the Weekly Rate Mode. The first interest payment date is September 3, 2019. Citigroup Global Markets Inc. is the Remarketing Agent. The Bonds are subject to redemption and to optional and mandatory tender under the circumstances described herein. Following the Reoffering Date, payment of the Purchase Price of the Bonds tendered for purchase as described herein and not remarketed will be made pursuant and subject to the terms of the Credit Facility described herein provided by Citibank, N.A. (the "Bank"), which is scheduled to terminate on August 12, 2022. In the event of a failure to remarket the Bonds and a failure by the Bank to purchase such Bonds, the City may, but is not obligated to, purchase such Bonds. Upon any such failure, such Bonds, if not purchased by the City, will continue to be held by the tendering holders and will bear interest at the Maximum Rate.

The Bonds will be issued initially in Authorized Denominations of $100,000 or any integral multiple of $5,000 in excess of $100,000. Other terms of the Bonds including interest rates, interest payment dates, mandatory and optional redemption and tender provisions are described herein.

In connection with the reoffering of the Bonds, certain legal matters will be passed upon by Norton Rose Fulbright US LLP, New York, New York, and Bryant Rabbino LLP, New York, New York, Co-Bond Counsel. Certain legal matters will be passed upon for the City by its Corporation Counsel. Certain legal matters in connection with the preparation of this Reoffering Circular will be passed upon for the City by Orrick, Herrington & Sutcliffe LLP, New York, New York, and Law Offices of Joseph C. Reid, P.A., New York, New York, Co-Special Disclosure Counsel to the City. Certain legal matters will be passed upon for the Remarketing Agent by Bracewell LLP, New York, New York, and Hardwick Law Firm, LLC, New York, New York, Co-Counsel to the Remarketing Agent. It is expected that the Bonds will be available for delivery in New York, New York, on their date of reoffering which is expected to be August 13, 2019.

Citigroup

August 5, 2019

$200,000,000 General Obligation Bonds, Fiscal 2014 Series I
Subseries I-3

Adjustable Rate Bonds
Price: 100%

Rate Mode at Delivery Date: Initial Rate (August 13, 2019 only)
and Weekly (August 14, 2019 and thereafter)
First Interest Payment Date: September 3, 2019
Credit Facility Provider: Citibank, N.A.
Scheduled Expiration Date: August 12, 2022
Remarketing Agent: Citigroup Global Markets Inc.
CUSIP Number[(1)]: 64966QDZ0

---

(1) Copyright, American Bankers Association (the "ABA"). CUSIP data herein are provided by CUSIP Global Services, which is managed on behalf of the ABA by S&P Global Market Intelligence, a division of S&P Global Inc. The CUSIP number listed above is being provided solely for the convenience of Bondholders only at the time of issuance of the Bonds and the City makes no representation with respect to such number nor undertakes any responsibility for its accuracy now or at any time in the future. The CUSIP number is subject to being changed after the issuance of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of the Bonds 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 the Bonds.

No dealer, broker, salesperson or other person has been authorized by the City or the Remarketing Agent to give any information or to make any representations in connection with the Bonds or the matters described herein, other than those contained in this Reoffering Circular, and, if given or made, such other information or representations must not be relied upon as having been authorized by the City or the Remarketing Agent. This Reoffering Circular does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information and expressions of opinion contained herein are subject to change without notice, and neither the delivery of this Reoffering Circular, nor any sale made hereunder, shall, under any circumstances, create any implication that there has been no change in the matters described herein since the date hereof. This Reoffering Circular is submitted in connection with the sale of the Bonds referred to herein and may not be reproduced or used, in whole or in part, for any other purpose. The Remarketing Agent may reoffer and sell Bonds to certain dealers and others at prices lower than the reoffering price stated on the inside cover page hereof. The reoffering prices may be changed from time to time by the Remarketing Agent. No representations are made or implied by the City or the Remarketing Agent as to any offering of any derivative instruments.

The factors affecting the City's financial condition are complex. This Reoffering Circular should be considered in its entirety and no one factor considered less important than any other by reason of its location herein. Where agreements, reports or other documents are referred to herein, reference should be made to such agreements, reports or other documents for more complete information regarding the rights and obligations of parties thereto, facts and opinions contained therein and the subject matter thereof. Any electronic reproduction of this Reoffering Circular may contain computer-generated errors or other deviations from the printed Reoffering Circular. In any such case, the printed version controls.

This Reoffering Circular includes by specific reference 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 by specific reference in this Reoffering Circular of such forecasts, projections and estimates should not be regarded as a representation by the City, its independent auditors or the Underwriter 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 by specific reference in this Reoffering Circular, 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 included herein by specific reference 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.

Grant Thornton LLP, the City's independent auditor, has not reviewed, commented on or approved, and is not associated with, this Reoffering Circular. The report of Grant Thornton LLP relating to the City's financial statements for the fiscal years ended June 30, 2018 and 2017, which is a matter of public record, is included in the CAFR for the fiscal year ended June 30, 2018, which is included by specific reference in this Reoffering Circular. 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, or included by specific reference, in this Reoffering Circular, since the date of such report and has not been asked to consent to the inclusion of its report by specific reference in this Reoffering Circular.

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 Reoffering Circular for purposes of Rule 15c2-12 adopted by the United States Securities and Exchange Commission under the Securities Exchange Act of 1934.

REOFFERING CIRCULAR OF THE CITY OF NEW YORK
TABLE OF CONTENTS

IN CONNECTION WITH THIS REOFFERING, THE REMARKETING AGENT MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN MARKET PRICES OF THE BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THESE SECURITIES HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. 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 MAKING AN INVESTMENT DECISION INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THIS REOFFERING CIRCULAR AND THE TERMS OF THE REOFFERING, INCLUDING THE MERITS AND RISKS INVOLVED.

RATE PERIOD TABLE
FOR ADJUSTABLE RATE BONDS

	Daily Rate	**Two-Day Rate**	**Weekly Rate**	**Commercial Paper Rate**
Interest Payment Date	First Business Day of each calendar month	First Business Day of each calendar month	First Business Day of each calendar month	First Business Day of each calendar month and the Business Day following the last day of the Rate Period
Record Date	Business Day preceding each Interest Payment Date	Business Day preceding each Interest Payment Date	Business Day preceding each Interest Payment Date	Business Day preceding each Interest Payment Date
Reset Date	Not later than 10:00 a.m. on each Business Day	Not later than 10:00 a.m. on the first day of the Rate Period and, thereafter, on each Monday, Wednesday and Friday that is a Business Day	Not later than 10:00 a.m. on the first day of the Rate Period	No later than 12:30 p.m. on the first day of each Commercial Paper Rate Period
Rate Periods	Commencing on one Business Day extending to, but not including, the next succeeding Business Day	Commencing on a Monday, Wednesday or Friday that is a Business Day and extending to, but not including, the next day on which a Two-Day Rate is required to be reset	The Rate Period will be a period of seven days beginning on Wednesday or other day of the week specified therefor	A period of 1 to 365 days
Notice Period for Optional Tenders	Written notice not later than 10:30 a.m. on the Optional Tender Date	Written notice by 3:00 p.m. on a Business Day not less than two Business Days prior to the Optional Tender Date	Written notice by 5:00 p.m. on a Business Day not less than seven days prior to the Optional Tender Date	Not subject to optional tender
Optional Tender Date and Time (after Initial Period)	On any Business Day not later than 1:00 p.m.	On any Business Day not later than 1:00 p.m.	On any Business Day not later than 1:00 p.m.	Not subject to optional tender
Payment Date for Bonds subject to optional tender	Not later than 3:00 p.m. on the Optional Tender Date	Not later than 3:00 p.m. on the Optional Tender Date	Not later than 3:00 p.m. on the Optional Tender Date	Not subject to optional tender
Payment Date for Tendered Bonds upon Mandatory Tender	Not later than 3:00 p.m. on the Mandatory Tender Date	Not later than 3:00 p.m. on the Mandatory Tender Date	Not later than 3:00 p.m. on the Mandatory Tender Date	Not later than 3:00 p.m. on the Mandatory Tender Date

Note: All time references given above refer to New York City time.

The information in this Rate Period Table is provided for the convenience of the Bondholders and is not meant to be comprehensive. See "APPENDIX B—MULTI-MODAL BONDS" for a description of the Adjustable Rate Bonds.

WHILE THE ADJUSTABLE RATE BONDS MAY IN THE FUTURE BE CONVERTED TO AUCTION RATE BONDS, TERM RATE BONDS, FIXED RATE BONDS, INDEX RATE BONDS OR STEPPED COUPON BONDS, THIS REOFFERING CIRCULAR DOES NOT DESCRIBE TERMS SPECIFICALLY APPLICABLE TO BONDS BEARING INTEREST AT RATES OTHER THAN THE DAILY RATE, TWO-DAY RATE, WEEKLY RATE OR COMMERCIAL PAPER RATE, NOR DOES IT DESCRIBE ADJUSTABLE RATE BONDS HELD BY A BANK OR BY ANY REGISTERED OWNER OTHER THAN DTC.

[THIS PAGE INTENTIONALLY LEFT BLANK]

REOFFERING CIRCULAR
OF
THE CITY OF NEW YORK

This Reoffering Circular provides certain information concerning The City of New York (the "City") in connection with the reoffering by the City of its $200,000,000 tax-exempt General Obligation Bonds, Fiscal 2014 Series I, Subseries I-3 (the "Adjustable Rate Bonds" or the "Bonds"). Such Bonds are expected to be delivered to their purchasers on the Reoffering Date set forth on the cover page hereof (the "Reoffering Date").

The Bonds are general obligations of the City for the payment of which the City has pledged its faith and credit. All real property subject to taxation by the City is subject to the levy of *ad valorem* taxes, without limitation as to rate or amount, to pay the principal of and interest on the Bonds.

The factors affecting the City's financial condition described throughout this Reoffering Circular, including information included by specific reference as described below, 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 financial, social, economic, geo-political, environmental and other factors which could have a material effect on the City. This Reoffering Circular (including the information referred to in "Section I: Inclusion By Specific Reference") should be read in its entirety.

Neither this Reoffering Circular nor any statement which may have been made orally or in writing shall be construed as a contract or as a part of a contract with the original purchaser or any holders of the Bonds. Any terms used in this Reoffering Circular and not defined herein or in Appendix A hereto shall have the meanings ascribed to them in the City's Fixed Rate Official Statement referred to in the first paragraph under "Section I: Inclusion by Specific Reference" below.

SECTION I: INCLUSION BY SPECIFIC REFERENCE

Portions of the City's Official Statement dated July 24, 2019 (the "Fixed Rate Official Statement"), delivered herewith and relating to the General Obligation Bonds, Fiscal 2020 Series A, Subseries A-1, A-2 and A-3 (collectively, the "Fixed Rate Bonds"), subject to the information contained elsewhere herein, are included herein by specific reference, namely the information under the captions:

Introductory Statement (excluding the first paragraph thereof)
Section I: Recent Financial Developments
Section III: Government and Financial Controls
Section IV: Sources of City Revenues
Section V: City Services and Expenditures
Section VI: Financial Operations
Section VII: Financial Plan (the description of the Control Board report under the section entitled "Certain Reports" has been updated herein under "Section III: Miscellaneous")
Section VIII: Indebtedness
Section IX: Pension Systems and OPEB
Section X: Other Information
- Litigation
- Environmental Matters
- Cybersecurity
- Continuing Disclosure Undertaking (except that any reference therein to "Bonds" or "Bondholders" will be deemed to be a reference to Bonds and Bondholders as used in this Reoffering Circular)
- Financial Advisors
- Financial Statements
- Further Information (excluding the last paragraph thereof)

Appendix A—Economic and Demographic Information
Appendix B—Comprehensive Annual Financial Report
Appendix D—Variable Rate Bonds

The Fixed Rate Bonds described in the Fixed Rate Official Statement are not offered by this Reoffering Circular.

SECTION II: THE BONDS

General

The Bonds are general obligations of the City issued pursuant to the Constitution and laws of the State, including the Local Finance Law (the "LFL"), and the New York City Charter (the "City Charter"), and in accordance with bond resolutions of the Mayor and a certificate of the Deputy Comptroller for Public Finance (the "Certificate"). The Bonds mature and bear interest as described on the cover page and inside cover page of this Reoffering Circular and contain a pledge of the City's faith and credit for the payment of the principal of, redemption premium, if any, and interest on the Bonds. All real property subject to taxation by the City is subject to the levy of *ad valorem* taxes, without limitation as to rate or amount, to pay the principal of and interest on the Bonds.

Adjustable Rate Bonds

For additional terms of the Bonds not included in this SECTION II see the cover page, the inside cover page, "APPENDIX A—DEFINITIONS" and "APPENDIX B—MULTI-MODAL BONDS." All or a portion of the Bonds may be converted to other Rate Modes as described in "APPENDIX B—MULTI-MODAL BONDS—Conversion to an Alternate Rate Mode." Any such Conversion, except with respect to Conversions of all (but not less than all) of the Bonds between the Daily Rate Mode, Two-Day Mode and Weekly Rate Mode, would result in a mandatory tender of the Bonds being so converted. This Reoffering Circular only describes the Bonds bearing interest at a Daily Rate, Two-Day Rate, Weekly Rate or Commercial Paper Rate. The Credit Facility only supports the Bonds bearing interest in a Weekly Rate Mode. Under the Certificate, it is a condition for Conversion to a Daily Rate Mode, Weekly Rate Mode, Two-Day Mode or Commercial Paper Mode that the City have in place a liquidity facility covering the Bonds in such Mode. It is currently anticipated that, should any Bonds be Converted to a Term Rate, Fixed Rate, Stepped Coupon Rate, Index Rate or Auction Rate, a remarketing circular will be distributed describing such Term Rate, Fixed Rate, Stepped Coupon Rate, Index Rate or Auction Rate.

Payment Mechanism

Pursuant to the New York State Financial Emergency Act For The City of New York (the "Financial Emergency Act" or the "Act"), a general debt service fund (the "General Debt Service Fund" or the "Fund") has been established for City bonds and certain City notes. Pursuant to the Act, payments of the City real estate tax must be deposited upon receipt in the Fund, and retained under a statutory formula, for the payment of debt service (with exceptions for debt service, such as principal of seasonal borrowings, that is set aside under other procedures). The statutory formula has in recent years resulted in retention of sufficient real estate taxes to comply with the City Covenants (as defined in "Certain Covenants and Agreements" below). If the statutory formula does not result in retention of sufficient real estate taxes to comply with the City Covenants, the City will comply with the City Covenants either by providing for early retention of real estate taxes or by making cash payments into the Fund. The principal of and interest on the Bonds will be paid from the Fund until the Act expires, and thereafter from a separate fund maintained in accordance with the City Covenants. Since its inception in 1978, the Fund has been fully funded at the beginning of each payment period.

If the Control Board determines that retentions in the Fund are likely to be insufficient to provide for the debt service payable therefrom, it must require that additional real estate tax revenues be retained or other cash resources of the City be paid into the Fund. In addition, the Control Board is required to take such action as it determines to be necessary so that the money in the Fund is adequate to meet debt service requirements. For information regarding the termination date of the Act, see "SECTION III: GOVERNMENT AND FINANCIAL CONTROLS—City Financial Management, Budgeting and Controls—*Financial Emergency Act and City Charter*" included by specific reference herein.

Enforceability of City Obligations

As required by the State Constitution and applicable law, the City pledges its faith and credit for the payment of the principal of and interest on all City indebtedness. Holders of City debt obligations have a contractual right to full payment of principal and interest when due. If the City fails to pay principal or interest, the holder has the right to sue and is entitled to the full amount due. Interest accruing to maturity is payable at the stated rate and, thereafter, would be payable at the rate authorized under the General Municipal Law until paid. Also, under the General Municipal Law, if the City fails to pay any money judgment, it is the duty of the City to assess, levy and cause to be collected amounts sufficient to pay the judgment. Decisions indicate that judicial enforcement of statutes such as this provision in the General Municipal Law is within the discretion of a court. Other judicial decisions also indicate that a money judgment against a municipality may not be enforceable against municipal property devoted to public use.

The rights of the owners of Bonds to receive interest, principal and redemption premium, if any, from the City could be adversely affected by a restructuring of the City's debt under Chapter 9 of the Federal Bankruptcy Code. No assurance can be given that any priority of holders of City securities (including the Bonds) to payment from money retained in the Fund or from other sources would be recognized if a petition were filed by or on behalf of the City under the Federal Bankruptcy Code or pursuant to other subsequently enacted laws relating to creditors' rights; such money might then be available for the payment of all City creditors generally. Judicial enforcement of the City's obligation to make payments into the Fund, of the obligation to retain money in the Fund, of the rights of holders of bonds and notes of the City to money in the Fund, of the obligations of the City under the City Covenants and of the State under the State Pledge and Agreement (in each case, as defined in "—Certain Covenants and Agreements") may be within the discretion of a court. For further information concerning rights of owners of Bonds against the City, see "SECTION VIII: INDEBTEDNESS—Indebtedness of the City and Certain Other Entities" included herein by specific reference.

Certain Covenants and Agreements

The City has covenanted that: (i) a separate fund or funds for the purpose of paying principal of and interest on bonds and interest on notes of the City (including required payments into, but not from, City sinking funds) shall be maintained by an officer or agency of the State or by a bank or trust company; and (ii) not later than the last day of each month, there shall be on deposit in a separate fund or funds an amount sufficient to pay principal of and interest on bonds and interest on notes of the City due and payable in the next succeeding month. The City currently uses the debt service payment mechanism described above to perform these covenants. The City will further covenant in the Bonds to provide a general reserve for each fiscal year to cover potential reductions in its projected revenues or increases in its projected expenditures during each such fiscal year, to comply with the financial reporting requirements of the Act, as in effect from time to time, to limit its issuance of bond anticipation notes and tax anticipation notes as required by the Act, as in effect from time to time, to include as terms of the Adjustable Rate Bonds the applicable variable rate provisions and to comply with such provisions and with the statutory restrictions on variable rate bonds in effect from time to time.

The State pledges and agrees in the Financial Emergency Act that the State will not take any action that will impair the power of the City to comply with the covenants described in the preceding paragraph (the "City Covenants") or any right or remedy of any owner of the Bonds to enforce the City Covenants (the "State Pledge and Agreement"). The City will covenant to make continuing disclosure with respect to the Bonds (the "Undertaking") to the extent summarized in "SECTION X: OTHER INFORMATION—Continuing Disclosure Undertaking" included herein by specific reference. In the opinion of Co-Bond Counsel, the enforceability of the City Covenants, the Undertaking and the State Pledge and Agreement may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted and may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases. The City Covenants, the Undertaking and the State Pledge and Agreement shall be of no force and effect with respect to any Bond if there is a deposit in trust with a bank or trust company of sufficient cash or cash equivalents to pay when due all principal of, applicable redemption premium, if any, and interest on such Bond.

Credit Facility

Citibank, N.A., has agreed to provide a Credit Facility in the form of an irrevocable letter of credit with respect to the Bonds. The Credit Facility provides coverage for the principal of the tendered Bonds and up to 35 days accrued interest on such Bonds at a maximum interest rate of 9%. The Bonds are subject to mandatory tender upon a failure by the City to pay the principal or interest on such Bonds when due. The scheduled expiration date for the Credit Facility is listed on the cover page hereof. For a description of certain provisions of the Credit Facility, see "APPENDIX B—MULTI-MODAL BONDS." The form of the Letter of Credit issued pursuant to the terms and conditions of the Reimbursement Agreement, dated as of August 1, 2019, between the City and the Bank is attached hereto as "APPENDIX F—THE CREDIT FACILITY." The Credit Facility, in draft form and final form (when available), will be available on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System (www.emma.msrb.org) or may be obtained from the Remarketing Agent. For information regarding the Bank, see "APPENDIX E—THE BANK."

Optional Redemption

The Bonds are subject to redemption (or purchase in lieu thereof if permitted by the Certificate) prior to maturity, at a redemption price equal to the principal amount thereof, plus accrued interest, without premium, at the option of the City, in whole or in part, on any Optional Redemption Date, which, for Bonds in the Daily Rate Mode, Two-Day Mode or the Weekly Rate Mode is any Business Day, upon 30 days' written notice to Bondholders.

The City may select the amount of Bonds for optional redemption in its sole discretion. In the event that less than all the Bonds are to be redeemed, the Bonds shall be selected for redemption as prescribed by the Certificate.

On and after any redemption date, interest will cease to accrue on the Bonds called for redemption.

Mandatory Redemption

The Bonds are Term Bonds subject to mandatory redemption upon 30 days' (but not more than 60 days') notice to Bondholders, by lot within each stated maturity, on each March 1 (or other Mandatory Redemption Date specified for the applicable Rate Mode) at a redemption price equal to the principal amount thereof, plus accrued interest, without premium, in the amounts set forth below:

March 1	Amount
2041	$45,605,000
2042	47,565,000
2043	52,290,000
2044*	54,540,000

* *Stated maturity.*

At the option of the City, there shall be applied to or credited against any of the required amounts the principal amount of any such Term Bonds that have been defeased, purchased or redeemed and not previously so applied or credited.

Defeased Term Bonds shall, at the option of the City, no longer be entitled, but may be subject, to the provisions thereof for mandatory redemption.

Notice of Redemption

When Bonds are redeemed, the City will give notice of redemption only to DTC (not to the Beneficial Owners of the Bonds) not less than 30 or more than 60 days prior to the date fixed for redemption.

Mandatory and Optional Tender

The Bonds are subject to mandatory and optional tender as described in "APPENDIX B—MULTI-MODAL BONDS."

Special Considerations Relating to the Bonds

The information under this caption "Special Considerations Relating to the Bonds" was provided by the Remarketing Agent and is not the responsibility of the City.

The Remarketing Agent is Paid By the City. The responsibilities of the Remarketing Agent include determining the interest rate from time to time and remarketing the Bonds that are optionally or mandatorily tendered by the owners thereof (subject, in each case, to the terms of the Certificate and the Remarketing

Agreement), all as further described in this Reoffering Circular. The Remarketing Agent is appointed by the City and is paid by the City for its services. As a result, the interests of the Remarketing Agent may differ from those of existing Holders and potential purchasers of Bonds.

The Remarketing Agent Routinely Purchases Bonds for its Own Account. The Remarketing Agent acts as remarketing agent for a variety of variable rate demand obligations and, in its sole discretion, routinely purchases such obligations for its own account. The Remarketing Agent is permitted, but not obligated, to purchase tendered Bonds for its own account and, in its sole discretion, may routinely acquire such tendered Bonds in order to achieve a successful remarketing of the Bonds (i.e., because there otherwise are not enough buyers to purchase the Bonds) or for other reasons. However, the Remarketing Agent is not obligated to purchase Bonds, and may cease doing so at any time without notice. The Remarketing Agent may also make a market in the Bonds by routinely purchasing and selling Bonds other than in connection with an optional or mandatory tender and remarketing. Such purchases and sales may be at or below par. However, the Remarketing Agent is not required to make a market in the Bonds. The Remarketing Agent may also sell any Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure to the Bonds. The purchase of Bonds by the Remarketing Agent may create the appearance that there is greater third party demand for the Bonds in the market than is actually the case. The practices described above also may result in fewer Bonds being tendered in a remarketing.

Bonds May be Offered at Different Prices on Any Date Including an Interest Rate Determination Date. Pursuant to the Certificate and the Remarketing Agreement, the Remarketing Agent is required to determine the applicable rate of interest that, in its judgment, is the lowest rate that would permit the sale of the Bonds it remarkets at par plus accrued interest, if any, on the applicable interest rate determination date. The interest rate will reflect, among other factors, the level of market demand for such Bonds (including whether the Remarketing Agent is willing to purchase Bonds for its own account). There may or may not be Bonds tendered and remarketed on an interest rate determination date, the Remarketing Agent may or may not be able to remarket any Bonds tendered for purchase on such date at par and the Remarketing Agent may sell Bonds at varying prices to different investors on such date or any other date. The Remarketing Agent is not obligated to advise purchasers in a remarketing if it does not have third party buyers for all of the Bonds it remarkets at the remarketing price. In the event the Remarketing Agent owns any Bonds for its own account, it may, in its sole discretion, in a secondary market transaction outside the tender process, offer such Bonds on any date, including the interest rate determination date, at a discount to par to some investors.

The Ability to Sell the Bonds Other Than Through the Tender Process May Be Limited. The Remarketing Agent may buy and sell Bonds other than through the tender process. However, it is not obligated to do so and may cease doing so at any time without notice and may require Holders that wish to tender their Bonds to do so through the Tender Agent with appropriate notice. Thus, investors who purchase the Bonds, whether in a remarketing or otherwise, should not assume that they will be able to sell their Bonds other than by tendering the Bonds in accordance with the tender process. The Credit Facility is only available to purchase Bonds tendered in accordance with the tender process.

The Remarketing Agent May Cease Remarketing the Bonds. Under certain circumstances the Remarketing Agent may cease remarketing the Bonds, subject to the terms of the Remarketing Agreement.

Book-Entry Only System

The Depository Trust Company ("DTC"), New York, New York, acts as securities depository for the Bonds. Reference to the Bonds under this caption "Book-Entry Only System" shall mean all Bonds held through DTC. The Bonds will be issued as fully-registered bonds 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 subseries and maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC 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, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("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, thereby eliminating 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 ("Indirect Participants"). The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond (under this caption, *"Book-Entry Only System,"* a "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, but Beneficial Owners are 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 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 the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct 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.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Bonds unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an omnibus proxy (the "Omnibus Proxy") to the City 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 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

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

Payment of redemption proceeds and principal and interest on and Purchase Price of the 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 the City or its Fiscal Agent, The Bank of New York Mellon, on the payment 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 Fiscal Agent, or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds and principal and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Fiscal Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its Bonds purchased or tendered, through its Participant, to the Tender Agent and the Remarketing Agent, and shall effect delivery of such Bonds by causing the Direct Participant to transfer the Participant's interest in the Bonds, on DTC's records, to the Tender Agent. The requirement for physical delivery of Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Bonds are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered Bonds to the Tender Agent's DTC account.

The services of DTC as securities depository with respect to the Bonds of a Subseries may be discontinued at any time by giving reasonable notice to the City or the Fiscal Agent. Under such circumstances, in the event that a successor securities depository is not obtained, Bond certificates of such Subseries will be printed and delivered.

No assurance can be given by the City that DTC will make prompt transfer of payments to the Participants or that Participants will make prompt transfer of payments to Beneficial Owners. The City is not responsible or liable for payment by DTC or Participants or for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or Participants.

For every transfer and exchange of the Bonds, the Beneficial Owners may be charged a sum sufficient to cover any tax, fee or other charge that may be imposed in relation thereto.

Unless otherwise noted, certain of the information contained under this caption "Book-Entry Only System" has been extracted from information furnished by DTC. Neither the City nor the Underwriter of the Bonds makes 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 hereof.

SECTION III: MISCELLANEOUS

Certain Reports

On August 1, 2019, the staff of the Control Board issued a report reviewing the Financial Plan. The report states that over the course of fiscal year 2019, the City's operating budget increased by $4.3 billion to $93.4 billion, while City-fund revenue rose by almost $2.5 billion, mostly from increased nonproperty taxes and largely one-time miscellaneous revenues. The report notes that the City was able to use the higher revenues, together with agency and debt service savings and the drawdown of reserves, to build a surplus of over $4.2 billion and add $100 million to the Retiree Health Benefits Trust. The report states that outyear budget gaps exist because recurring expenditures continue to outpace recurring revenues and cites higher costs for wages and fringe benefits and debt service costs as drivers of expenditure growth over the Financial Plan years. The report notes that this increase in spending is affordable in the short term but may not be sustainable in the long term.

The report identifies net risks to the February Financial Plan of $22 million, $122 million and $122 million in fiscal years 2021 through 2023, respectively, and a net offset of $224 million in fiscal year 2020, resulting in estimated gaps of $3.53 billion, $3 billion and $3.26 billion in fiscal years 2021 through 2023, respectively, and an estimated surplus of $224 million in fiscal year 2020. Such net risks and offsets result from: (i) increased tax revenues of $200 million, $200 million, $100 million and $100 million in fiscal years 2020 through 2023, respectively; (ii) increased miscellaneous revenues of $100 million in each of fiscal years 2020 through 2023; (iii) increased expenditures to fund the Fair Fares program of $212 million in each of fiscal years 2021 through 2023; and (iv) increased uniformed services overtime costs of $76 million in fiscal year 2020 and $110 million in each of fiscal years 2021 through 2023.

Supplemental Certificates

For any one or more of the following purposes and at any time or from time to time, the City may enter into a supplement to the Certificate:

(a) to cure any ambiguity, supply any omission or cure or correct any defect or inconsistent provision relating to the Bonds;

(b) to identify particular Bonds for purposes not inconsistent with the Certificate, including credit or liquidity support, remarketing, serialization and defeasance; or

(c) to insert such provisions with respect to the Bonds as are necessary or desirable and are not to the prejudice of the Bondholders.

Each supplement is conditioned upon delivery to the City of a Favorable Opinion of Bond Counsel.

Tax Matters

On the original issuance date of the Bonds, Sidley Austin LLP ("Sidley Austin") delivered its approving opinion in the form attached hereto in Appendix C (the "Original Opinion"). In connection with a modification of the terms of the Bonds on March 25, 2019, Norton Rose Fulbright US LLP delivered its opinion in the form attached hereto in Appendix C (the "Tax Opinion") as to the exclusion of interest on the Bonds from gross income for federal income tax purposes. The Tax Opinion concluded that, under then-existing law, interest on the Bonds would not be includable in the gross income of the owners thereof for purposes of federal income taxation, assuming continuous compliance by the City with covenants to comply with certain provisions of the Internal Revenue Code of 1986, as amended (the "Code") relating to the exclusion from gross income of the interest on such Bonds. The Tax Opinion further concluded that, under then-existing law, interest on the Bonds would not be a specific preference item for purposes of the federal alternative minimum tax. In addition, the Tax Opinion concluded that, under then-existing law, interest on the Bonds would be exempt from personal income taxes of the State of New York and its political subdivisions, including the City.

The Bonds are being reoffered in the Weekly Rate Mode pursuant to a Supplemental Certificate of the Deputy Comptroller for Public Finance, dated August 13, 2019. On the Reoffering Date of the Bonds, as herein contemplated, Co-Bond Counsel will deliver their opinions (the "No-Adverse-Effect Opinions") to the effect that the adoption of the Supplemental Certificate will not in and of itself adversely affect any exclusion of interest on the Bonds from gross income for purposes of federal income taxation. The forms of the No-Adverse Effect Opinions are contained in Appendix D to this Reoffering Circular.

In rendering the No-Adverse-Effect Opinions, Co-Bond Counsel will assume the correctness of certain opinions referred to therein. Except as set forth in the No-Adverse-Effect Opinions, Co-Bond Counsel will express no opinion as to the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

General

Except as described above, Co-Bond Counsel express no opinion with respect to any federal, state or local tax consequences under present law, or proposed legislation, resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Prospective purchasers of the Bonds should be aware that the ownership of tax-exempt obligations such as the Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain foreign corporations doing business in the United States, S corporations with subchapter C earnings and profits, individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise qualifying for the earned income tax credit, owners of an interest in a financial asset securitization investment trust, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations. Prospective purchasers should consult their own tax advisors as to the applicability of these consequences to their particular circumstances.

The opinions of Co-Bond Counsel are not a guarantee of result, but represent their legal judgment based upon their review of existing statutes, regulations, published rulings and court decisions and certain covenants of the City. No ruling has been sought from the Internal Revenue Service (the "IRS") with respect to the matters addressed in the opinions of Co-Bond Counsel, and such opinions are not binding on the IRS. The IRS has an ongoing program of auditing the tax-exempt status of the interest on tax-exempt obligations. If an audit of the Bonds is commenced, under current procedures the IRS is likely to treat the City as the "taxpayer," and the owners of the Bonds would have no right to participate in the audit process. In responding to or defending an audit of the tax-exempt status of the interest on the Bonds, the City may have different or conflicting interests from the owners of the Bonds. Public awareness of any future audit of the Bonds could adversely affect the value and liquidity of the Bonds during the pendency of the audit, regardless of its ultimate outcome.

Existing law may change so as to reduce or eliminate the benefit to holders of the Bonds of the exclusion of interest thereon from gross income for federal income tax purposes. Proposed legislative or administrative action, whether or not taken, could also affect the value and marketability of the Bonds. Prospective purchasers of the Bonds should consult with their own tax advisors with respect to any proposed changes in tax law.

Legal Opinions

The Original Opinion and the Tax Opinion are attached hereto in APPENDIX C.

The opinions of Norton Rose Fulbright US LLP and Bryant Rabbino LLP, Co-Bond Counsel to the City, with respect to the Bonds will be substantially in the forms attached hereto as APPENDIX D. Reference should be made to the forms of such opinions for the matters covered by such opinions and the scope of Co-Bond Counsel's engagement in relation to the issuance of the Bonds.

Certain legal matters will be passed upon for the City by its Corporation Counsel.

Orrick, Herrington & Sutcliffe LLP, New York, New York, and Law Offices of Joseph C. Reid, P.A., New York, New York, Co-Special Disclosure Counsel to the City, will pass upon certain legal matters in connection with the preparation of this Reoffering Circular. A description of those matters and the nature of the review conducted by those firms is set forth in their opinions which are on file at the office of the Corporation Counsel.

Certain legal matters will be passed upon by Bracewell LLP, New York, New York, and Hardwick Law Firm, LLC, New York, New York, Co-Counsel to the Remarketing Agent.

Certain legal matters for the Bank will be passed upon by its special counsel.

Reoffering

The Bonds are being purchased for reoffering by Citigroup Global Markets Inc. Citigroup Global Markets Inc. will be reimbursed for certain expenses in connection with the reoffering.

The Remarketing Agent and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The Remarketing Agent and its affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the City for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Remarketing Agent and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the City.

THE CITY OF NEW YORK

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX A

DEFINITIONS

"Adjustable Rate Bonds" means the Multi-Modal Bonds that are not Auction Rate Bonds.

"Authorized Denominations" means during any Daily Rate Period, Two-Day Rate Period, Commercial Paper Rate Period, or Weekly Rate Period, $100,000 or any integral multiple of $5,000 in excess of $100,000.

"Authorized Officer" means the Deputy Comptroller for Public Finance of the City and, when used with reference to the performance of any act, the discharge of any duty or the execution of any certificate or other document, any officer, employee or other person authorized to perform such act, discharge such duty or execute such certificate or other document.

"Authorizing Document" means the Supplemental Certificate of the Deputy Comptroller for Public Finance of the City of New York With Respect to the Bonds, dated August 13, 2019.

"Bank Bond" or *"Purchased Bond"* means any Multi-Modal Bond purchased and held pursuant to a Standby Agreement. The terms of Purchased Bonds are not described in detail in this Reoffering Circular.

"Bondholder" or *"Holder"* or *"Owner"* means any person who shall be the registered owner of any Multi-Modal Bonds.

"Bonds" means the City's General Obligation Bonds, Fiscal 2014 Series I, Subseries I-3.

"Book Entry Form" or *"Book Entry System"* means a form or system under which physical Multi-Modal Bond certificates in fully registered form are registered only in the name of the Securities Depository, with the physical certificates "immobilized" in the custody of the Securities Depository.

"Business Day" means a day other than (i) a Saturday and Sunday or (ii) a day on which the City, the New York Stock Exchange, the Federal Reserve Bank of New York, the Fiscal Agent, the Tender Agent, the Remarketing Agent or banks and trust companies in New York, New York, or any city where draws upon a Credit Facility or Liquidity Facility will be made, are authorized or required to remain closed.

"Certificate" means the Authorizing Document with all Exhibits, Schedules, appendices and related proceedings, including the Bonds and all supplemental certificates.

"City Account" means the account so designated in each Purchase and Remarketing Fund.

"Commercial Paper Mode" means a Rate Mode in which a Multi-Modal Bond for its Commercial Paper Rate Period bears interest at a Commercial Paper Rate.

"Commercial Paper Rate" means each rate at which a Multi-Modal Bond bears interest during a Commercial Paper Rate Period.

"Commercial Paper Rate Period" means, with respect to a particular Multi-Modal Bond, a period of one to 365 days during which such Bond bears interest at a Commercial Paper Rate; and the first day immediately following the last day of each Commercial Paper Rate Period shall be a Business Day and, with respect to at least the amount of such Bonds to be redeemed by mandatory redemption, shall be not later than the redemption date.

"Conversion" means a change in the Rate Mode of a Multi-Modal Bond. To "Convert" is the act of Conversion.

"Conversion Date" means the Business Day of a Conversion or proposed Conversion, which shall be an eligible Optional Redemption Date for the Rate Mode in effect.

"Conversion Notice" means a notice of a change in the Rate Mode.

"Credit Facility" means a Standby Agreement that specifies no Liquidity Conditions and provides for the purchase of Bonds in the event of the City's failure to pay interest or principal when due.

"Daily Rate" means the rate at which Multi-Modal Bonds bear interest during a Daily Rate Period.

"Daily Rate Mode" means a Rate Mode in which Multi-Modal Bonds bear interest at a Daily Rate.

"Daily Rate Period" means a period commencing on one Business Day and extending to, but not including, the next succeeding Business Day, during which Multi-Modal Bonds bear interest at the Daily Rate.

"Default Notice" means a notice given by a Standby Purchaser pursuant to a Standby Agreement to the effect that an event of default thereunder has occurred and that the Standby Agreement issued by such Standby Purchaser will terminate on the date specified in such notice or any comparable notice.

"Direct Participant" means a participant in the book-entry system of recording ownership interests in the Multi-Modal Bonds.

"DTC" means The Depository Trust Company, New York, New York, a limited purpose trust company organized under the laws of the State of New York, in its capacity as Depository for the Multi-Modal Bonds, or any successor Depository for any Multi-Modal Bonds; and includes each nominee thereof.

"Electronic Means" means facsimile transmission, email transmission or other similar electronic means of communication providing evidence of transmission, including a telephone communication confirmed by any other Electronic Means.

"Expiration Date" means the fixed date on which a Standby Agreement will expire, as such date may be extended from time to time; and includes the date of an early termination of a Standby Agreement caused by the City (excluding a Termination Date).

"Favorable Opinion of Bond Counsel" shall mean an opinion or opinions of nationally recognized bond counsel to the effect that the action proposed to be taken is authorized or permitted by the Certificate and will not adversely affect the exclusion of interest on the Bonds from gross income for purposes of federal income taxation.

"Fiduciary" means each Fiscal Agent, Paying Agent or Tender Agent.

"Fiscal Agent" means The Bank of New York Mellon and its successors as the City's fiscal agent.

"Fitch" means Fitch Ratings, Inc., and its successors and assigns; references to Fitch are effective so long as Fitch is a Rating Agency.

"Initial Period" means a period specified by the City, beginning on the Issue Date or a Conversion Date. The day following an Initial Period shall be a Business Day and shall not be treated as a Conversion Date.

"Initial Rate" means each rate of interest to be paid in an Initial Period as set forth in the Certificate.

"Interest Payment Date" means with respect to (a) any Daily Rate Period, any Two-Day Rate Period, any Weekly Rate Period, or any case not specified, the first Business Day of each month; (b) any Commercial Paper Rate Period, the first Business Day of each month and the Business Day following the last day of the Rate Period; or (c) any Rate Period, as may be specified by the City. With respect to all Multi-Modal Bonds, interest shall be payable on each Mandatory Tender Date, redemption date or maturity date.

"Issue Date" means the date of initial delivery of the Bonds.

"LFL" means the Local Finance Law of the State, as in effect from time to time.

"Liquidity Condition" means an event of immediate termination or suspension as specified in a Liquidity Facility, upon the occurrence of which the Standby Purchaser is not obligated to purchase Multi-Modal Bonds, and, accordingly, such Bonds are not subject to tender for purchase.

"Liquidity Enhanced Bonds" means the Multi-Modal Bonds bearing interest in the Daily Rate Mode, Two-Day Mode, Weekly Rate Mode or Commercial Paper Mode.

"Liquidity Facility" means a Standby Agreement that is not a Credit Facility.

"Mandatory Redemption Date" means, unless otherwise specified by the City, in each year so specified in the Bonds in the Daily Rate Mode, the Two-Day Mode, the Weekly Rate Mode or the Commercial Paper Mode, or in any case not specified, the first Business Day in the Maturity Month (which will be an Interest Payment Date).

"Mandatory Tender Date" means any date on which a Multi-Modal Bond is subject to mandatory tender in accordance with the Certificate.

"Maturity Month" and *"Opposite Month"* mean the respective months indicated below:

Maturity Month	Opposite Month
March	September

"Maximum Rate" means, with respect to the Bonds, 9%, or such Maximum Rate not exceeding 25% as may be specified by the City.

"Moody's" means Moody's Investors Service Inc., and its successors and assigns; references to Moody's are effective so long as Moody's is a Rating Agency.

"Multi-Modal Bonds" means the Bonds.

"Optional Redemption Date" means: (i) for Bonds in the Daily Rate Mode, Weekly Rate Mode or Two-Day Mode, any Business Day and (ii) for Bonds in the Commercial Paper Mode, each Mandatory Tender Date.

"Optional Tender Date" means any Business Day during a Daily Rate Period, Two-Day Rate Period or Weekly Rate Period.

"Paying Agent" means the Fiscal Agent and any additional paying agent for the Multi-Modal Bonds designated by the City.

*"Purchase Account" m*eans the account so designated in each Purchase and Remarketing Fund.

"Purchase and Remarketing Fund" means the Purchase and Remarketing Fund maintained for each Subseries of Liquidity Enhanced Bonds pursuant to the Certificate.

"Purchase Price" means, on any Tender Date, 100% of the principal amount of any Tendered Bond, plus (if not otherwise provided for) accrued and unpaid interest thereon.

"Rate" means each Initial Rate, Daily Rate, Two-Day Rate, Commercial Paper Rate, Weekly Rate, or Bank Rate.

"Rate Mode" or *"Mode"* means the Daily Rate Mode, Two-Day Mode, Commercial Paper Rate Mode or Weekly Rate Mode.

"Rate Period" means any Initial Period, Daily Rate Period, Two-Day Rate Period, Commercial Paper Rate Period or Weekly Rate Period.

"Rating Agency" means each nationally recognized statistical rating organization that has, at the request of the City, a short-term rating in effect for the Multi-Modal Bonds.

"Rating Confirmation" means a written notice from each Rating Agency that its rating on the Multi-Modal Bonds will not be suspended, withdrawn or reduced solely as a result of action proposed to be taken under the Certificate.

"Record Date" means, with respect to each Interest Payment Date (unless otherwise specified by the City), for each Initial Period, Daily Rate Period, Two-Day Rate Period, Commercial Paper Rate Period or Weekly Rate Period, the close of business on the Business Day preceding such Interest Payment Date.

"Remarketing Agent" means each remarketing agent appointed and serving in such capacity.

"Remarketing Agreement" means each Remarketing Agreement between the City and the Remarketing Agent, as in effect from time to time.

"Remarketing Proceeds Account" means the account so designated in the Purchase and Remarketing Fund which may consist of one or more accounts established for the deposit of remarketing proceeds from the remarketing of one or more subseries of the City's bonds into which such remarketing proceeds may be deposited prior to the withdrawal of such proceeds to pay the purchase price of tendered bonds of that subseries.

"Reset Date" means the date on which the interest rate on a Multi-Modal Bond is to be reset.

"S&P" means S&P Global Ratings and its successors and assigns; references to S&P are effective so long as S&P is a Rating Agency.

"Securities Depository" or *"Depository"* or *"DTC"* means The Depository Trust Company and its nominees, successors and assigns or any other securities depository selected by the City which agrees to follow the procedures required to be followed by such securities depository in connection with the Multi-Modal Bonds.

"Standby Agreement" means an agreement providing, to the extent required by the LFL, for the purchase of any Multi-Modal Bonds, as in effect from time to time.

"Standby Purchaser," "Credit Facility Provider," "Liquidity Provider," "Provider," "Subseries Bank," or *"Bank"* means any provider of a Standby Agreement then in effect.

"Subseries" shall mean the Subseries I-3 Bonds.

"Tender Agent" means the Fiscal Agent and any additional Tender Agent appointed by the City.

"Tender Date" means each Optional Tender Date or Mandatory Tender Date.

"Tender Notice" means the notice delivered by the Holder of a Bond subject to optional tender pursuant to the Certificate.

"Tendered Bond" means a Bond mandatorily tendered or tendered at the option of the Holder thereof for purchase in accordance with the Certificate, including a Bond deemed tendered, but not surrendered on the applicable Tender Date.

"Termination Date" means the date on which a Standby Agreement will terminate as set forth in a Default Notice delivered by the Standby Purchaser in accordance with the Standby Agreement.

"Two-Day Mode" means a Rate Mode in which Multi-Modal Bonds bear interest at a Two-Day Rate.

"Two-Day Rate" means the rate at which Multi-Modal Bonds bear interest during a Two-Day Rate Period.

"Two-Day Rate Period" means a period during which Multi-Modal Bonds bear interest at the Two-Day Rate.

"Weekly Rate" means the rate at which Multi-Modal Bonds bear interest during a Weekly Rate Period.

"Weekly Rate Mode" means a Rate Mode in which a Multi-Modal Bonds bear interest at a Weekly Rate.

"Weekly Rate Period" means a period of 7 days commencing on the Issue Date, on a Conversion Date or on the date (Wednesday unless otherwise specified by the City) following an Initial Period or a Weekly Rate Period.

"Written Notice," "written notice," or "notice in writing" means notice in writing which may be delivered by hand or first class mail and includes Electronic Means.

MULTI-MODAL BONDS

The Multi-Modal Bonds are subject to the provisions summarized below. Capitalized terms used in this "APPENDIX B—MULTI-MODAL BONDS" which are not otherwise defined in the Reoffering Circular are defined in "APPENDIX A—DEFINITIONS."

General

The Multi-Modal Bonds are subject to mandatory tender for purchase as described under "Mandatory Tender for Purchase" and, if such Bonds are in a Daily Rate Mode, Two-Day Mode or Weekly Rate Mode, are subject to optional tender for purchase as described under "Optional Tender for Purchase." The Multi-Modal Bonds of a Subseries will continue in a Rate Mode until converted to another Rate Mode and will bear interest at a rate determined in accordance with the procedures for determining the interest rate during such Rate Mode. See "Conversion to an Alternate Rate Mode" and "Interest Rates and Reset Dates" below.

During any Initial Period for the Liquidity Enhanced Bonds, a Daily Rate Period, a Two-Day Rate Period, a Commercial Paper Rate Period or a Weekly Rate Period, interest will be computed on the basis of a 365-day or 366-day year for the actual number of days elapsed.

Interest on the Multi-Modal Bonds will be the interest accruing and unpaid through and including the day preceding the Interest Payment Date and will be payable on each Interest Payment Date to the registered owner thereof as shown on the registration books kept by the Fiscal Agent at the close of business on the applicable Record Date.

Conversion to an Alternate Rate Mode

Subject to the conditions in the Certificate, the City may convert all or a portion of the Multi-Modal Bonds in one Rate Mode to a different Rate Mode by delivering a Conversion Notice to, as applicable, the Remarketing Agent, the applicable Standby Purchaser, DTC, the Fiscal Agent and the Tender Agent specifying the Subseries of Multi-Modal Bonds to be converted, the Conversion Date and the Rate Mode expected to be effective on the Conversion Date. The City must deliver such Conversion Notice not less than 15 days prior to the Conversion Date.

The Tender Agent, no later than one Business Day after receipt of the Conversion Notice, is to give Written Notice to the Holders of the Bonds to be converted, which notice must state (i) the Conversion Date; (ii) that the Rate Mode will not be converted unless the City receives on the Conversion Date a Favorable Opinion of Bond Counsel; (iii) the name and address of the principal corporate trust offices of the Fiscal Agent and Tender Agent; (iv) whether the Bonds to be converted will be subject to mandatory tender for purchase on the Conversion Date; and (v) that upon the Conversion, if there is on deposit with the Tender Agent on the Conversion Date an amount sufficient to pay the Purchase Price of the Multi-Modal Bonds so tendered and converted, such Bonds not delivered to the Tender Agent on the Conversion Date will be deemed to have been properly tendered for purchase and will cease to represent a right on behalf of the Holder thereof to the payment of principal of or interest thereon and shall represent only the right to payment of the Purchase Price on deposit with the Tender Agent, without interest accruing thereon from and after the Conversion Date.

If less than all of the Multi-Modal Bonds of a Subseries then subject to a particular Rate Mode are to be converted to a new Rate Mode, the particular Multi-Modal Bonds which are to be converted to a new Rate Mode will be selected by the Fiscal Agent (or, if the City so elects, the City) subject to the provisions of the Certificate regarding Authorized Denominations.

If a Favorable Opinion of Bond Counsel cannot be obtained, or if the election to convert was withdrawn by the City, or if the Remarketing Agent has notified the Fiscal Agent, the City and the applicable Standby

Purchaser that it has been unable to remarket the Multi-Modal Bonds on the Conversion Date, the affected Multi-Modal Bonds will bear interest in the Rate Mode previously in effect or, with a Favorable Opinion of Bond Counsel, any other Rate Mode selected by the City to which such Bonds are duly converted.

Interest Rates and Reset Dates

General. The rate at which the Adjustable Rate Bonds will bear interest during any Rate Period will be the rate of interest that, if borne by the Adjustable Rate Bonds for such Rate Period, in the judgment of the Remarketing Agent, having due regard for the prevailing financial market conditions for bonds or other securities which are comparable as to federal income tax treatment, credit and maturity or tender dates with the federal income tax treatment, credit and maturity or tender dates of the Adjustable Rate Bonds, would be the lowest interest rate that would enable the Adjustable Rate Bonds to be sold at a price equal to the principal amount thereof, plus accrued interest thereon, if any. No Rate Period for Liquidity Enhanced Bonds of a Subseries will extend beyond the scheduled Expiration Date of the Standby Agreement then in effect.

Maximum Rate. The Bonds may not bear interest at a rate greater than the Maximum Rate.

Daily Rate. The Daily Rate for any Business Day is to be determined by the Remarketing Agent and announced by 10:00 a.m., New York City time, on such Business Day. For any day which is not a Business Day, the Daily Rate will be the Daily Rate for the immediately preceding Business Day.

If (i) a Daily Rate for a Daily Rate Period has not been determined by the Remarketing Agent, (ii) no Remarketing Agent is serving under the Certificate, (iii) the Daily Rate so established is held to be invalid or unenforceable with respect to a Daily Rate Period, or (iv) pursuant to the Remarketing Agreement the Remarketing Agent is not then required to establish a Daily Rate, then the Daily Rate for such Daily Rate Period shall continue in effect for two weeks, and thereafter such Bonds shall bear interest at the Maximum Rate until a Rate has been duly established by the Remarketing Agent.

Two-Day Rate. When interest on a Subseries of Adjustable Rate Bonds is payable at a Two-Day Rate, the Remarketing Agent will set a Two-Day Rate on or before 10:00 a.m., New York City time, on the first day of a period during which such Bonds bear interest at a Two-Day Rate and on each Monday, Wednesday and Friday thereafter so long as interest on such Bonds is to be payable at a Two-Day Rate or, if any Monday, Wednesday or Friday is not a Business Day, on the next Monday, Wednesday or Friday that is a Business Day. The Two-Day Rate set on any Business Day will be effective as of such Business Day and will remain in effect until the next day on which a Two-Day Rate is required to be set in accordance with the preceding sentence.

If (i) a Two-Day Rate for a Two-Day Rate Period has not been determined by the Remarketing Agent, (ii) no Remarketing Agent is serving under the Certificate, (iii) the Two-Day Rate determined by the Remarketing Agent is held to be invalid or unenforceable or (iv) pursuant to the Remarketing Agreement the Remarketing Agent is not then required to establish a Two-Day Rate, then the Two-Day Rate for such Two-Day Rate Period shall continue in effect for two weeks, and thereafter such Bonds shall bear interest at the Maximum Rate until a Rate has been duly established by the Remarketing Agent.

Weekly Rate. Unless otherwise provided by the City pursuant to the Certificate, the Weekly Rate is to be determined by the Remarketing Agent and announced by 10:00 a.m., New York City time, on the first day of the Weekly Rate Period. The Weekly Rate Period means a period commencing on the day specified by the City and extending to and including the sixth day thereafter, e.g. if commencing on a Wednesday then extending to and including the next Tuesday.

If (i) a Weekly Rate has not been determined by the Remarketing Agent, (ii) no Remarketing Agent is serving under the Certificate, (iii) the Weekly Rate determined by the Remarketing Agent is held to be invalid or unenforceable with respect to a Weekly Rate Period, or (iv) pursuant to the Remarketing Agreement, the Remarketing Agent is not then required to establish a Weekly Rate, then the Weekly Rate for such Weekly Rate Period shall continue in effect for two weeks, and thereafter, such Bonds will bear interest at the Maximum Rate until a Rate has been duly established by the Remarketing Agent.

Commercial Paper Rate. The Commercial Paper Rate Period for each Adjustable Rate Bond in a Commercial Paper Rate Mode is to be determined by the Remarketing Agent and announced by 12:30 p.m., New York City time, on the first day of each Commercial Paper Rate Period. Commercial Paper Rate Periods may be from 1 to 365 days. If the Remarketing Agent fails to specify the next succeeding Commercial Paper Rate Period, such Commercial Paper Rate Period will be the shorter of (i) seven days or (ii) the period remaining to but not including the maturity or redemption date of such Bond. Each Adjustable Rate Bond in a Commercial Paper Mode is to bear interest during a particular Commercial Paper Rate Period at a rate per annum equal to the interest rate determined above corresponding to the Commercial Paper Rate Period. An Adjustable Rate Bond can have a Commercial Paper Rate Period and bear interest at a Commercial Paper Rate that differs from other Adjustable Rate Bonds in the Commercial Paper Rate Mode.

If (i) a Commercial Paper Rate for a Commercial Paper Rate Period has not been determined by the Remarketing Agent, (ii) no Remarketing Agent is serving under the Certificate, (iii) the Commercial Paper Rate determined by the Remarketing Agent is held to be invalid or unenforceable with respect to a Commercial Paper Rate Period, or (iv) pursuant to the Remarketing Agreement, the Remarketing Agent is not then required to establish a Commercial Paper Rate, the Commercial Paper Rate for such Commercial Paper Rate Period will continue in effect on such Bonds for two weeks, and thereafter, such Bonds will bear interest at the Maximum Rate until a Rate has been duly established by the Remarketing Agent.

Optional Tender for Purchase

If a Subseries of Adjustable Rate Bonds is supported by a Credit Facility, or by a Liquidity Facility and no Liquidity Condition is in effect, an Adjustable Rate Bond of such Subseries or any portion thereof equal to an Authorized Denomination may be tendered for purchase, at the Purchase Price, at the option of its registered owner on any Business Day during a Daily Rate Mode, Two-Day Mode or Weekly Rate Mode upon giving notice of the registered owner's election to tender in the manner and at the times described below. Notice of an election to tender an Adjustable Rate Bond registered in the name of DTC is to be given by the Direct Participant on behalf of the Beneficial Owner of the Adjustable Rate Bond and will not be given by DTC. Notice of the election to tender for purchase of an Adjustable Rate Bond registered in any other name is to be given by the registered owner of such Adjustable Rate Bond or its attorney-in-fact.

A Direct Participant or the registered owner of an Adjustable Rate Bond must give written notice of its irrevocable election to tender such Adjustable Rate Bond or a portion thereof for purchase at its option to the Tender Agent with a copy to the Remarketing Agent at their respective principal offices, in the case of Adjustable Rate Bonds bearing interest in a Daily Rate Mode, by no later than 10:30 a.m. on the Optional Tender Date, in the case of Adjustable Rate Bonds bearing interest in a Two-Day Mode, not later than 3:00 p.m. on a Business Day at least two Business Days prior to the Optional Tender Date, and in the case of Adjustable Rate Bonds bearing interest in a Weekly Rate Mode, by no later than 5:00 p.m., New York City time, on a Business Day at least seven days prior to the Optional Tender Date. In addition, the registered owner of an Adjustable Rate Bond is required to deliver such Bond to the Tender Agent at its principal corporate trust office at or prior to 1:00 p.m., New York City time, on such Optional Tender Date.

Mandatory Tender for Purchase

If a Credit Facility is in effect (or if Bonds of a Subseries are supported by a Liquidity Facility and there is no existing Liquidity Condition), the Bonds which are affected by the following actions are subject to mandatory tender and purchase at the Purchase Price on the following dates (each, a "Mandatory Tender Date"):

(a) on each Conversion Date except a Conversion of all (but not less than all) of a Subseries between Daily Rates, Two-Day Rates and Weekly Rates;

(b) on the Business Day following each Rate Period for the Adjustable Rate Bonds of such Subseries in the Commercial Paper Mode;

(c) on a Business Day specified by the Tender Agent, at the direction of the City, but in any event not less than one Business Day prior to the substitution of a Standby Agreement (including assignments) or the Expiration

Date of any Standby Agreement prior to the maturity of the related Bonds (which Standby Agreement will be drawn upon to pay the Purchase Price of unremarketed Tendered Bonds), unless a substitution is occurring and Rating Confirmation has been received from each Rating Agency;

(d) on a Business Day that is not less than one Business Day prior to the Termination Date of a Standby Agreement relating to a Subseries of Adjustable Rate Bonds specified in a Default Notice delivered in accordance with the Standby Agreement.

Should a Credit Facility be in effect for a Subseries of Bonds, in addition to the preceding, upon any failure by the City to provide funds to the Fiscal Agent for the timely payment of principal or interest on the maturity or mandatory redemption date or Interest Payment Date for such Subseries of Bonds, the Tender Agent shall cause a draw to be made upon such Credit Facility for the immediate purchase of the applicable Bonds and notice of mandatory tender to be given to each Holder of such Bonds.

The Adjustable Rate Bonds of a Subseries are also subject to mandatory tender for purchase on any Optional Redemption Date, upon 10 days' notice to Holders of such Bonds, if the City has provided a source of payment therefor in accordance with the Certificate and State law; under such circumstances, the Purchase Price is not payable by the Liquidity Facility or Credit Facility.

Whenever Adjustable Rate Bonds are to be tendered for purchase in accordance with (a) above, the Tender Agent is to give notice to the Holders of such Adjustable Rate Bonds indicating that such Bonds are subject to mandatory tender for purchase on the date specified in such notice. The failure of any Holder of any portion of Adjustable Rate Bonds to receive such notice will not affect the validity of such Conversion to a new Rate Mode.

Whenever Adjustable Rate Bonds are to be tendered for purchase in accordance with (c) or (d) above, the Tender Agent is to give notice to the Holders of such Adjustable Rate Bonds indicating that such Bonds are subject to mandatory tender for purchase on the date specified in such notice. The Tender Agent is to give such notice by first-class mail and not less than five calendar days prior to the Expiration Date or Termination Date. The failure of any Holder of any portion of such Adjustable Rate Bonds to receive such notice will not affect the validity of the proceedings in connection with the effectiveness of the affected Standby Agreement.

Bonds Deemed Purchased

The Adjustable Rate Bonds or portions thereof required to be purchased upon a tender at the option of the registered owner thereof or upon a mandatory tender will be deemed to have been tendered and purchased for all purposes of the Certificate, irrespective of whether such Adjustable Rate Bonds have been presented and surrendered to the Tender Agent, if on the Tender Date money sufficient to pay the Purchase Price thereof is held by the Tender Agent. The former registered owner of a Tendered Bond or an Adjustable Rate Bond deemed to have been tendered and purchased will have no claim thereunder or under the Certificate or otherwise for payment of any amount other than the Purchase Price.

Purchase Price and Payment

On each Tender Date, a Tendered Bond will be purchased at the applicable Purchase Price. The Purchase Price of a Tendered Bond is the principal amount of the Adjustable Rate Bond to be tendered or the amount payable to the registered owner of a Bank Bond following receipt by such owner of a purchase notice from the Remarketing Agent, plus accrued and unpaid interest from the immediately preceding Interest Payment Date.

The Purchase Price of a Tendered Bond held in a book-entry-only system will be paid, in same-day funds, to DTC in accordance with DTC's standard procedures for effecting same-day payments, as described herein under the heading "Book-Entry Only System." Payment will be made without presentation and surrender of the Tendered Bonds to the Tender Agent and DTC will be responsible for effecting payment of the Purchase Price to the DTC Participants.

The Purchase Price of any other Adjustable Rate Bond will be paid, in same-day funds, only after presentation and surrender of the Adjustable Rate Bond to the Tender Agent at its designated office. Payment will be made by 3:00 p.m., New York City time, on the Tender Date on which an Adjustable Rate Bond is presented and surrendered to the Tender Agent.

The Purchase Price is payable solely from, and in the following order of priority, the proceeds of the remarketing of Adjustable Rate Bonds tendered for purchase, money made available by the Standby Purchaser under the Standby Agreement then in effect, and money furnished by or on behalf of the City (which has no obligation to do so).

No Extinguishment

Adjustable Rate Bonds held by any Standby Purchaser or by a Fiduciary for the account of any Standby Purchaser following payment of the Purchase Price of such Bonds by the Fiduciary with money provided by any Standby Purchaser shall not be deemed to be retired, extinguished or paid and shall for all purposes remain outstanding.

Liquidity Conditions

Upon the occurrence of a suspension condition, as specified in a Liquidity Facility, the Standby Purchaser's obligations to purchase the related Bonds shall immediately be suspended (but not terminated) without notice or demand to any person and thereafter the Standby Purchaser shall be under no obligation to purchase such Bonds (nor shall such Bonds be subject to optional or mandatory tender for purchase) unless and until the Standby Purchaser's commitment is reinstated pursuant to the related Liquidity Facility. Promptly upon the occurrence of such suspension condition, the Standby Purchaser shall notify the City, the Tender Agent and the Remarketing Agent of such suspension in writing and the Tender Agent shall promptly relay such notice to the affected Bondholders upon receipt; but the Standby Purchaser shall incur no liability or responsibility whatsoever by reason of its failure to give such notice and such failure shall in no way affect the suspension of its obligation to purchase such Bonds. If the suspension condition shall be cured as described in the related Liquidity Facility, the obligations of the Standby Purchaser under such Liquidity Facility shall be reinstated (unless the Standby Purchaser's obligations shall have expired or shall otherwise have been terminated or suspended as provided in such Liquidity Facility).

Upon the occurrence of an event of immediate termination, as specified in a Liquidity Facility, a Standby Purchaser's obligation under such Liquidity Facility to purchase the related Bonds shall immediately terminate without notice or demand to any person, and thereafter the Standby Purchaser shall be under no obligation to purchase such Bonds (nor shall such Bonds be subject to optional or mandatory tender for purchase). Promptly upon the occurrence of such event the affected Standby Purchaser shall give written notice of the same to the City, the Tender Agent and the Remarketing Agent and the Tender Agent shall promptly relay such notice to the affected Bondholders upon receipt; but the affected Standby Purchaser shall incur no liability or responsibility whatsoever by reason of its failure to give such notice and such failure shall in no way affect the termination of its obligation to purchase such Bonds.

Inadequate Funds for Tender

If the funds available for purchase of Tendered Bonds are inadequate for the purchase of all such Bonds tendered on any Tender Date, or a Liquidity Condition shall exist under a Liquidity Facility, then the affected Holders shall not have the right to require the City or other persons to repurchase such Bonds and the Tender Agent shall give written notice to all affected Bondholders. However, such Holders may submit their Bonds for remarketing pursuant to the procedures described herein and the Certificate and Remarketing Agreement. Any such Bonds that cannot be remarketed shall immediately be returned to the owners thereof and shall bear interest from such Tender Date at the Maximum Rate payable on the first Business Day of each month. Under a Credit Facility, or a Liquidity Facility as long as no Liquidity Condition exists, the obligation to deposit funds in sufficient amounts to purchase such Bonds pursuant to the applicable Standby Agreement shall remain enforceable, and shall only be discharged at such time as funds are deposited with the Tender Agent in an amount sufficient, with the proceeds of remarketing, to purchase all such Bonds that were required to be purchased on such Tender Date, together with any interest which has accrued to the subsequent purchase date.

Remarketing of Bonds Upon Tender

Pursuant to the Remarketing Agreement, the Remarketing Agent is required to use its best efforts to remarket a Tendered Bond on its Tender Date at a price equal to the Purchase Price. The Remarketing Agreement sets forth, among other things, certain conditions to the Remarketing Agent's obligation to remarket Tendered Bonds.

On each Tender Date, the Remarketing Agent is to give notice by Electronic Means to the related Liquidity Provider, the Fiscal Agent, the Tender Agent and the City specifying the principal amount of Tendered Bonds for which it has arranged a remarketing, along with the principal amount of Tendered Bonds, if any, for which it has not arranged a remarketing, and shall transfer to the Tender Agent the proceeds of the remarketing of the Tendered Bonds. The Tender Agent is, on such Tender Date, to obtain funds under the applicable Standby Agreement in accordance with its terms in an amount equal to the difference between the Purchase Price of the Tendered Bonds subject to purchase and the remarketing proceeds available to the Tender Agent.

Defeasance

For the purpose of determining whether Multi-Modal Bonds shall be deemed to have been defeased, the interest to come due on such Multi-Modal Bonds shall be calculated at the Maximum Rate; and if, as a result of such Multi-Modal Bonds having borne interest at less than the Maximum Rate for any period, the total amount on deposit for the payment of interest on such Multi-Modal Bonds exceeds the total amount required, the balance shall be paid to the City. In addition, Multi-Modal Bonds shall be deemed defeased only if there shall have been deposited in trust money in an amount sufficient for the timely payment of the maximum Purchase Price that could become payable to the Bondholders upon the exercise of any applicable optional or mandatory tender for purchase.

Liquidity or Credit Facility

For each Subseries of Adjustable Rate Bonds that is not defeased and is subject to optional or mandatory tender for purchase, the City shall, as required by law, keep in effect one or more Standby Agreements for the benefit of the Bondholders of such Subseries, which shall require a financially responsible party or parties other than the City to purchase all or any portion of such Adjustable Rate Bonds duly tendered by the holders thereof for repurchase prior to the maturity of such Adjustable Rate Bonds. A financially responsible party or parties, for the purposes of this paragraph, shall mean a person or persons determined by the Mayor and the Comptroller of the City to have sufficient net worth and liquidity to purchase and pay for on a timely basis all of the Adjustable Rate Bonds which may be tendered for repurchase by the holders thereof.

Each owner of an Adjustable Rate Bond bearing interest at a Daily, Two-Day or Weekly Rate will be entitled to the benefits and subject to the terms of the Liquidity Facility or Credit Facility for such Bond. Under such Credit Facility or Liquidity Facility, the Bank agrees to make available to the Tender Agent, upon receipt of an appropriate demand for payment, the Purchase Price for Adjustable Rate Bonds of the stated Subseries.

Mandatory purchase by a Bank of Adjustable Rate Bonds shall occur under the circumstances provided therefor, including, so long as a Credit Facility is provided or no Liquidity Condition exists, failure to extend or replace the Credit Facility or Liquidity Facility relating to such Subseries of Adjustable Rate Bonds, and (at the option of the Bank) other events, including without limitation breaches of covenants, defaults on other bonds of the City or other entities, and events of insolvency. Notwithstanding the other provisions of the Adjustable Rate Bonds and the Certificate, upon the purchase of an Adjustable Rate Bond by a Bank, all interest accruing thereon from the last date for which interest was paid shall accrue for the benefit of and be payable to such Bank.

The City shall give Written Notice to each affected Bondholder (a) at least 10 days prior to the effective date of (i) an amendment to the Liquidity Conditions in a Liquidity Facility or (ii) the substitution of a Credit Facility or Liquidity Facility and (b) not later than 10 days after the execution of an extension of a Credit Facility or Liquidity Facility.

The obligation of the Bank to purchase Adjustable Rate Bonds pursuant and subject to the terms and conditions of the Credit Facility or Liquidity Facility for such Bonds is effective so long as a Credit Facility or Liquidity Facility is provided and, in the case of a Liquidity Facility, there exists no Liquidity Condition. The obligation of the City to repay amounts advanced by the Bank in respect of such Bank's purchase of Adjustable Rate Bonds shall be evidenced by the Bonds so purchased by such Bank.

The preceding is a summary of certain provisions expected to be included in the initial Credit Facility provided by Citibank, N.A., and proceedings under which the Multi-Modal Bonds are to be offered, and is subject in all respects to the underlying documents, copies of which will be available for inspection during business hours at the office of the Fiscal Agent. Information regarding the Bank is included herein as "APPENDIX E — THE BANK." Neither the City nor the Remarketing Agent makes any representation with respect to the information in "APPENDIX E — THE BANK."

[THIS PAGE INTENTIONALLY LEFT BLANK]

SIDLEY AUSTIN LLP
787 SEVENTH AVENUE
NEW YORK, NY 10019
(212) 839 5300
(212) 839 5599 FAX

BEIJING
BOSTON
BRUSSELS
CHICAGO
DALLAS
FRANKFURT
GENEVA
HONG KONG
HOUSTON
LONDON
LOS ANGELES
NEW YORK
PALO ALTO
SAN FRANCISCO
SHANGHAI
SINGAPORE
SYDNEY
TOKYO
WASHINGTON, D.C.

FOUNDED 1866

March 25, 2014

HONORABLE SCOTT M. STRINGER
COMPTROLLER
The City of New York
Municipal Building
New York, New York 10007

Dear Comptroller Stringer:

We have acted as counsel to The City of New York (the "City"), a municipal corporation of the State of New York (the "State"), in the issuance of its General Obligation Bonds, Fiscal 2014 Series I (the "Bonds").

The Bonds are issued pursuant to the Constitution of the State, the Local Finance Law of the State, and the Charter of the City, and in accordance with a certificate of the Deputy Comptroller for Public Finance and related proceedings. In rendering the opinions set forth herein, we reviewed certificates of the City and such other agreements, documents and matters to the extent we deemed necessary to render our opinions. We have not undertaken an independent audit or investigation of the matters described or contained in the foregoing certificates, agreements and documents. We have assumed, without undertaking to verify, the genuineness of all documents and signatures presented to us; the due and legal execution and delivery thereof by, and validity against, any parties other than the City; and the accuracy of the factual matters represented, warranted or certified therein.

Based on the foregoing and our examination of existing law, we are of the opinion that the Bonds have been duly authorized, executed and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City for the payment of which the City has validly pledged its faith and credit, and all real property within the City subject to taxation by the City is subject to the levy by the City of ad valorem taxes, without limit as to rate or amount, for payment of the principal of and interest on the Bonds.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted, to the extent constitutionally applicable, and the enforcement of related contractual and statutory covenants of the City and the State may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases.

The City has received the opinion of Fulbright & Jaworski LLP regarding certain federal, state and local tax consequences of ownership of or receipt or accrual of interest on the Bonds and we express no opinion as to such matters. We have not been engaged to investigate, examine, review or opine as to any matter relating to the federal, state or local tax consequences with respect to the Bonds (including the receipt of interest thereon) or the ownership or disposition thereof.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions. Such opinions may be adversely affected by actions taken or events occurring, including a change in law, regulation or ruling (or in the application or official interpretation of any law, regulation or ruling) after the date hereof. We have not undertaken to update this opinion in light of such actions or events.

Very truly yours,

Sidley Austin LLP

NORTON ROSE FULBRIGHT

March 25, 2019

Norton Rose Fulbright US LLP
1301 Avenue of the Americas
New York, New York 10019-6022
United States

Tel +1 212 318 3000
Fax +1 212 318 3400
nortonrosefulbright.com

Honorable Scott M. Stringer
Comptroller
The City of New York
Municipal Building
New York, New York 10007

Dear Comptroller Stringer:

We have acted as Bond Counsel to The City of New York (the "City"), a municipal corporation of the State of New York (the "State"), in connection with the adoption of the Supplemental Certificate of the Deputy Comptroller for Public Finance, dated March 25, 2019 (the "Supplemental Certificate"), with respect to the City's General Obligation Bonds, Fiscal 2014 Series I, Subseries 1-3 (the "Bonds"). The Supplemental Certificate supplements the original Certificate of the Deputy Comptroller for Public Finance identified therein (the "Certificate") to provide for the amendment of the Step-up Date applicable to the Bonds while bearing interest at an index rate. This letter is delivered pursuant to the Supplemental Certificate and the Certificate.

We have examined, and in expressing the opinions hereinafter described we rely upon, certificates of the City and such other agreements, documents and matters as we deem necessary to render our opinions. We have not undertaken an independent investigation of the matters described or contained in the foregoing certificates, agreements and documents. We have assumed, without undertaking to verify, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as certified copies, the genuineness of all signatures, the due and legal execution and delivery thereof by, and validity against, any parties other than the City, and the accuracy of the statements contained in such documents.

In rendering the opinions below, we have assumed the correctness of the approving opinion delivered by Sidley Austin LLP in connection with the issuance of the Bonds, which concluded that the Bonds are duly authorized and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City.

Based upon the foregoing and our examination of existing law, we are of the opinion that:

1. The Supplemental Certificate and the actions ordered thereby are authorized by law and the Certificate.

2. The Bonds have been duly authorized, executed and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City for the payment of which the City has validly pledged its faith and credit, and all real property within the City subject to taxation by the City is subject to the levy by the City of ad valorem taxes, without limit as to rate or amount, for payment of the principal of and interest on the Bonds.

3. Interest on the Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof, including the City.

4. The City has covenanted in a tax certificate dated the date hereof to comply with certain provisions of the Internal Revenue Code of 1986, as amended to the date hereof (the "Code"), relating to the exclusion from gross

NORTON ROSE FULBRIGHT

income of the interest on the Bonds for purposes of federal income taxation. Assuming compliance by the City with such covenants, interest on the Bonds will be excludable from the gross income of the owners thereof for federal income tax purposes.

5. Interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax. The Code contains other provisions that could result in tax consequences, upon which we render no opinion, as a result of ownership of such Bonds or the inclusion in certain computations of interest that is excluded from gross income.

We express no opinion with respect to any other federal, state or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Furthermore, we express no opinion as to the effect on the exclusion from gross income of interest on the Bonds of any action (including without limitation a change in the interest rate mode with respect to any of the Bonds) taken or not taken after the date of this opinion without our approval. Ownership of tax-exempt obligations such as the Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain foreign corporations doing business in the United States, "S" corporations with subchapter C earnings and profits, owners of an interest in a financial asset securitization investment trust, individual recipients of Social Security or Railroad Retirement Benefits, individuals otherwise qualifying for the earned income tax credit and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted, to the extent constitutionally applicable, and the enforcement of related contractual and statutory covenants of the City and the State may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases.

Our opinions are based on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may hereafter come to our attention or to reflect any changes in any law that may hereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

Very truly yours,

NORTON ROSE FULBRIGHT US LLP

NORTON ROSE FULBRIGHT

Norton Rose Fulbright US LLP
1301 Avenue of the Americas
New York, New York 10019-6022
United States

Tel +1 212 318 3000
Fax +1 212 318 3400
nortonrosefulbright.com

August 13, 2019

Honorable Scott M. Stringer
Comptroller
The City of New York
Municipal Building
New York, New York 10007

Dear Comptroller Stringer:

We have acted as Co-Bond Counsel to The City of New York (the "City"), a municipal corporation of the State of New York (the "State"), in connection with the adoption of the Supplemental Certificate of the Deputy Comptroller for Public Finance, dated August 13, 2019 (the "Supplemental Certificate"), with respect to the City's General Obligation Bonds, Fiscal 2014 Series I, Subseries I-3 (the "Bonds"). In the Supplemental Certificate, the City elects to cause the Bonds to be tendered and reoffered in the Weekly Rate Mode in accordance with the terms of the Supplemental Certificate, as provided pursuant to the provisions of the Certificate of the Deputy Comptroller for Public Finance relating to the original issuance of the Bonds (the "Certificate").

This letter is delivered pursuant to the Supplemental Certificate and the Certificate.

We have examined, and in expressing the opinions hereinafter described we rely upon, certificates of the City and such other agreements, documents and matters as we deem necessary to render our opinions. We have not undertaken an independent investigation of the matters described or contained in the foregoing certificates, agreements and documents. We have assumed, without undertaking to verify, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as certified copies, the genuineness of all signatures, and the accuracy of the statements contained in such documents.

In rendering the opinions below, we have assumed the correctness of the approving opinion delivered by Sidley Austin LLP in connection with the original issuance of the Bonds, which concluded that the Bonds were duly authorized and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City.

Based upon the foregoing and our examination of existing law, we are of the opinion that:

1. The Supplemental Certificate and the actions ordered thereby are authorized by law and the Certificate.

2. The adoption of the Supplemental Certificate will not in and of itself adversely affect any exclusion of interest on the Bonds from gross income for purposes of federal income taxation.

At the time of reissuance of the Bonds, the City covenanted to comply with applicable provisions of the Internal Revenue Code of 1986, as amended (the "Code") relating to the exclusion from gross income of the interest on the Bonds for purposes of federal income taxation. Noncompliance with such requirements could cause interest on the Bonds to be includable in the gross income of the owners thereof retroactive to the issue date. We have not been engaged to assess the adequacy of such covenants or to determine whether the City has complied with such requirements. Furthermore, in rendering this opinion, we have not obtained, verified or reviewed any information concerning any event that might have occurred subsequent to the reissuance of the Bonds, except the adoption of the Supplemental Certificate, that might affect the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

In addition, we have not been engaged, nor have we undertaken, to advise any party or to opine as to any matter not specifically covered herein, and, except as expressly stated herein, we express no opinion as to the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted, to the extent constitutionally applicable, and the enforcement of related contractual and statutory covenants of the City and the State may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases.

We express no opinion with respect to any other federal, state, or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Our opinions are based on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may hereafter come to our attention or to reflect any changes in any law that may hereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

Very truly yours,

BRYANT RABBINO LLP
650 Fifth Avenue, Suite 3300, New York, NY 10019
Tel: 212-967-1800 Fax: 212-967-1811
www.bryantrabbino.com

August 13, 2019

Honorable Scott M. Stringer
Comptroller
The City of New York
Municipal Building
New York, New York 10007

Dear Comptroller Stringer:

We have acted as Co-Bond Counsel to The City of New York (the "City"), a municipal corporation of the State of New York (the "State"), in connection with the adoption of the Supplemental Certificate of the Deputy Comptroller for Public Finance, dated August 13, 2019 (the "Supplemental Certificate"), with respect to the City's General Obligation Bonds, Fiscal 2014 Series I, Subseries I-3 (the "Bonds"). In the Supplemental Certificate, the City elects to cause the Bonds to be tendered and reoffered in the weekly rate mode in accordance with the terms of the Supplemental Certificate, as provided pursuant to the provisions of the Certificate of the Deputy Comptroller for Public Finance relating to the original issuance of the Bonds (the "Certificate").

This letter is delivered pursuant to the Supplemental Certificate and the Certificate.

We have examined, and in expressing the opinions hereinafter described we rely upon, certificates of the City and such other agreements, documents and matters as we deem necessary to render our opinions. We have not undertaken an independent investigation of the matters described or contained in the foregoing certificates, agreements and documents. We have assumed, without undertaking to verify, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as certified copies, the genuineness of all signatures, and the accuracy of the statements contained in such documents.

In rendering the opinions below, we have assumed the correctness of (i) the approving opinion delivered by Sidley Austin LLP in connection with the original issuance of the Bonds, which concluded that the Bonds were duly authorized and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City, and (ii) the opinion delivered by Norton Rose Fulbright US LLP on March 25, 2019 in connection with a modification of the terms of the Bonds, which concluded that under then-existing law interest on the Bonds would not be includable in the gross income of the owners thereof for purposes of federal income taxation.

Based upon the foregoing and our examination of existing law, we are of the opinion that:

1. The Supplemental Certificate and the actions ordered thereby are authorized by law and the Certificate.

2. The adoption of the Supplemental Certificate will not in and of itself adversely affect any exclusion of interest on the Bonds from gross income for purposes of federal income taxation.

At the time of reissuance of the Bonds, the City covenanted to comply with applicable provisions of the Internal Revenue Code of 1986, as amended (the "Code") relating to the exclusion from gross income of the interest on the Bonds for purposes of federal income taxation. Noncompliance with such requirements could cause interest on the Bonds to be includable in the gross income of the owners thereof retroactive to the issue date. We have not been engaged to assess the adequacy of such covenants or to determine whether the City has complied with such requirements. Furthermore, in rendering this opinion, we have not obtained, verified or reviewed any information concerning any event that might have occurred subsequent to the reissuance of the Bonds, except the adoption of the Supplemental Certificate, that might affect the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

In addition, we have not been engaged, nor have we undertaken, to advise any party or to opine as to any matter not specifically covered herein, and, except as expressly stated herein, we express no opinion as to the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted, to the extent constitutionally applicable, and the enforcement of related contractual and statutory covenants of the City and the State may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases.

We express no opinion with respect to any other federal, state, or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Our opinions are based on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may hereafter come to our attention or to reflect any changes in any law that may hereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

Very truly yours,

APPENDIX E

THE BANK

The information under this Appendix E has been provided solely by the Bank and is believed to be reliable. This information has not been verified independently by the City or the Remarketing Agent. The City and the Remarketing Agent make no representation whatsoever as to the accuracy, adequacy or completeness of such information.

Citibank was originally organized on June 16, 1812, and now is a national banking association organized under the National Bank Act of 1864. Citibank is an indirect wholly owned subsidiary of Citigroup Inc. ("Citigroup"), a Delaware holding company.

The long-term ratings of Citibank and its consolidated subsidiaries are as follows:

Rating Agency	Long-Term	Short-Term	Outlook
Moody's	Aa3	P-1	Stable
S&P	A+	A-1	Stable
Fitch	A+	F1	Stable

Citibank is a commercial bank that, along with its subsidiaries and affiliates, offers a wide range of banking and trust services to its customers throughout the United States and the world. As a national bank, Citibank is a regulated entity permitted to engage only in banking and activities incidental to banking. Citibank is primarily regulated by the Office of the Comptroller of the Currency (the "Comptroller"), which also examines its loan portfolios and reviews the sufficiency of its allowance for credit losses.

Citibank's deposits at its U.S. branches are insured by the Federal Deposit Insurance Corporation (the "FDIC") and are subject to FDIC insurance assessments. The Credit Facility is not insured by the FDIC or any other regulatory agency of the United States or any other jurisdiction. Citibank may, under certain circumstances, be obligated for the liabilities of its affiliates that are FDIC-insured depository institutions.

Under U.S. law, deposits in U.S. offices and certain claims for administrative expenses and employee compensation against a U.S. insured depository institution which has failed will be afforded a priority over other general unsecured claims, including deposits in non-U.S. offices and claims under non-depository contracts in all offices, against such an institution in the "liquidation or other resolution" of such an institution by any receiver. Such priority creditors (including the FDIC, as the subrogee of insured depositors) of such FDIC-insured depository institution will be entitled to priority over unsecured creditors in the event of a "liquidation or other resolution" of such institution.

For further information regarding Citibank, reference is made to the Annual Report on Form 10-K of Citigroup and its subsidiaries for the year ended December 31, 2018, filed by Citigroup with the Securities and Exchange Commission (the "SEC"). Copies of Citigroup's 10-K may be obtained, upon payment of a duplicating fee, by writing to the SEC at 100 F Street, N.E., Washington, D.C. 20549. In addition, Citigroup's 10-K is available at the SEC's web site (http://www.sec.gov).

In addition, Citibank submits quarterly to the Comptroller certain reports called "Consolidated Reports of Condition and Income for a Bank With Domestic and Foreign Offices" ("Call Reports"). The Call Reports are on file with, and publicly available at, the Comptroller's offices at 250 E Street, SW, Washington, D.C. 20219 and are also available on the web site of the FDIC (http://www.fdic.gov). Each Call Report consists of a Balance Sheet, Income Statement, Changes in Equity Capital and other supporting schedules at the end of and for the period to which the report relates.

Any of the reports referenced above are available upon request without charge from Citi Document Services by calling toll-free at (877) 936-2737 (outside the United States at (716) 730-8055), by e-mailing a request to docserve@citi.com or by writing to: Citi Document Services, 540 Crosspoint Parkway, Getzville, New York 14068.

The information contained under “THE BANK” in this Reoffering Circular relates to and has been obtained from Citibank. The information concerning Citibank contained herein is furnished solely to provide limited introductory information regarding Citibank and does not purport to be comprehensive. Such information is qualified in its entirety by the detailed information appearing in the documents and financial statements referenced above.

APPENDIX F

THE CREDIT FACILITY

CITIBANK, N.A.

IRREVOCABLE LETTER OF CREDIT NO. [______]

August 13, 2019

The Bank of New York Mellon, as Tender Agent
and Fiscal Agent

The City of New York
General Obligation Bonds,
Fiscal 2014 Series I,
Subseries I-3

Ladies and Gentlemen:

At the request and for the account of The City of New York, a New York municipal corporation (the *"Issuer"*), pursuant to the Letter of Credit Reimbursement Agreement between us and the Issuer dated as of August 1, 2019 (as amended, supplemented, restated or otherwise modified from time to time pursuant to its terms, the *"Reimbursement Agreement"*), we hereby establish this Irrevocable Letter of Credit (the *"Letter of Credit"*) in your favor as Fiscal Agent (the *"Fiscal Agent"*) and as Tender Agent (the *"Tender Agent"*) under the Certificate of the Deputy Comptroller for Public Finance of The City of New York With Respect to General Obligation Bonds, Fiscal 2014 Series I, dated March 25, 2014, [as supplemented] and Exhibit B thereto (collectively, as amended, restated or otherwise modified supplemented from time to time pursuant to its terms, the *"Certificate"*), for the benefit of the holders of the Issuer's above-referenced series of bonds issued under the Certificate (the *"Bonds"*) in accordance with the following terms and conditions.

1. **Expiration**. This Letter of Credit automatically shall expire on the Termination Date. As used herein, "Termination Date" shall mean 5:00 p.m., New York City time (except as otherwise specified in the following subparagraphs) on the earliest of:

(a) August 12, 2022 (the *"Letter of Credit Scheduled Expiration Date"*);

(b) the date on which we receive an appropriately completed certificate from the Fiscal Agent in the form of Exhibit C hereto that the principal amount of and interest on all of the Bonds has been paid in full or deemed paid in full in accordance with the provisions of Section 9.05 of the Certificate;

(c) the date on which all of the Bonds have been converted to a Non-Covered Interest Rate under Section 3.03 of the Certificate and (i) all Tendered Bonds (as defined in Paragraph 2) have been remarketed or (ii) we have honored a Drawing (as defined in Paragraph 6) made in accordance with the terms of this Letter of Credit in connection with the Conversion;

(d) the date on which an Alternate Credit Facility has become effective under Section 7.01 of the Certificate, in substitution for this Letter of Credit and (i) all Tendered Bonds have been remarketed, (ii) we have honored a Drawing made in accordance with the terms of this Letter of Credit in connection with the substitution or (iii) no Mandatory Tender was required under Section 4.01(d)(iii) of the Certificate; or

(e) the first to occur of (i) the date which is eight (8) calendar days after the Fiscal Agent has received a Termination Event of Default Notice in the form of Exhibit G hereto or (ii) the date, following receipt of such Termination Event of Default Notice, upon which the Fiscal Agent has drawn upon this Letter of Credit the amount required thereby and as permitted under this Letter of Credit and the proceeds of the Drawing have been distributed to the Fiscal Agent.

In the event the Letter of Credit Scheduled Expiration Date shall not be a Business Day, then this Letter of Credit shall expire on the next succeeding Business Day.

2. **Letter of Credit Amount**. The maximum aggregate amount available under this Letter of Credit shall be $201,726,028, which amount, as from time to time reduced and reinstated as provided in Paragraphs 3 and 4, is hereinafter referred to as the "Letter of Credit Amount." Of the Letter of Credit Amount, up to $200,000,000 is available for the payment of the portion of the Purchase Price (as defined below) corresponding to principal of the Bonds (the "Principal Portion") and up to $1,726,028 is available for the payment of the portion of the Purchase Price corresponding to interest accrued on the Bonds (the "Interest Portion") for the immediately preceding thirty-five (35) days, calculated at a rate of nine percent (9%) per annum, based on a year of 365 days. "Purchase Price" means, with respect to any Bond bearing interest at a Covered Rate tendered or deemed tendered for purchase pursuant to Section 4.01 of the Certificate (referred to herein as a "Tendered Bond") and not remarketed pursuant to the Certificate prior to the Drawing hereunder (hereinafter referred to as an "Eligible Bond"), an amount equal to the principal amount of such Bond plus, with respect to any Bond tendered or deemed tendered for purchase, accrued but unpaid interest.

3. **Reductions in the Letter of Credit Amount**. The Letter of Credit Amount shall be reduced automatically from time to time as follows:

(a) Upon our honoring of a Drawing hereunder, the Letter of Credit Amount shall be reduced by an amount equal to the amount of such Drawing.

(b) Upon our receipt of your certificate in the form of Exhibit B hereto appropriately completed, the Letter of Credit Amount shall be reduced by an amount equal to the amount specified in such certificate.

Upon such a reduction, we may require you to return the original of this Letter of Credit and to accept in substitution hereof a substitute Letter of Credit for a Letter of Credit Amount reflecting such reduction, but otherwise identical in form and substance to this Letter of Credit.

4. **Reinstatement**.

(a) Reductions under Paragraph 3(a) with respect to any Drawing in accordance with a draft and certificate in the form of Exhibit A hereto to pay the Purchase Price of Eligible Bonds tendered or deemed to have been tendered pursuant to Section 4.01(a) of the Certificate (an "Optional Tender") shall be reinstated to the extent such Bonds are released by us pursuant to Section 2.04 of the Reimbursement Agreement as confirmed by us in a notice to you in the form of Exhibit H hereto. Any such reinstatement shall be in an amount equal to the Purchase Price of such released Bonds previously paid with proceeds of this Letter of Credit.

(b) Reductions under Paragraph 3(b) shall not be subject to reinstatement. Reductions under Paragraph 3(a) with respect to any Drawing to pay the Purchase Price of Eligible Bonds tendered or deemed to have been tendered pursuant to Section 4.01(d) of the Certificate (each, a "Mandatory Tender"), shall not be subject to reinstatement.

5. **Documents To Be Presented**. Funds under this Letter of Credit are available to you in the case of a demand for payment of the Purchase Price of Eligible Bonds pursuant to a Mandatory Tender or an Optional Tender, against a draft and certificate signed by you in the form of Exhibit A hereto appropriately completed (referred to as a "Purchase Drawing").

6. **Method and Notice of Presentment**. The drafts and certificates referenced in Paragraph 5 (each a "Drawing"), and any other certificate or notice required or permitted to be provided to us hereunder, shall be in writing and dated the date of presentation and, in the case of a Drawing or a certificate in the form of Exhibit D or Exhibit E, shall be delivered to us by facsimile; and, in all other cases, shall be delivered to us at the address stated in this paragraph, in person, by first class registered or certified mail or by an express delivery service. A

Drawing or a certificate in the form of Exhibit D or Exhibit E shall be presented on or after the date of this Letter of Credit during our business hours on a Business Day on or prior to the Expiration Date at our office at Citibank, N.A., and addressed to , Attention: , or at such other address or facsimile number as we may notify you in writing from time to time. As used herein, "Business Day" means a day other than (a) a Saturday and Sunday or (b) a day on which the Issuer, the New York Stock Exchange, the Federal Reserve Bank of New York, the Fiscal Agent, the Tender Agent, the Auction Agent (as defined in the Certificate), the Broker-Dealers (as defined in the Certificate), the Remarketing Agents (as defined in the Certificate) or banks and trust companies in New York, New York, are authorized or required to remain closed.

7. **Time and Method for Payment**.

(a) If a Purchase Drawing is made by you in strict conformity with the terms and conditions of this Letter of Credit, we will honor the Drawing, if such Drawing is received by us prior to 11:30 a.m. on a Business Day, not later than 2:30 p.m. on such Business Day or such later date as you may specify in such Drawing. If a Drawing is received by us on a day which is not a Business Day or is received after 11:30 a.m. on a Business Day, such Drawing shall be deemed to have been received by us on the next Business Day, and we will honor such Purchase Drawing by 2:30 p.m. on the Business Day on which the Drawing is deemed to have been received by us; provided in any case that the Business Day on which a Drawing is requested to be honored by us in accordance with the terms of this Paragraph 7 is on or prior to the Expiration Date. All times referenced herein are as of New York City time.

(b) Unless otherwise agreed, payment under this Letter of Credit shall be made by Fedwire in immediately available funds to BNY Mellon, , General Ledger , For Further Credit to . For the purposes of determining compliance with the times for payment specified in (a) above, payment shall be deemed to have been made by us when we have delivered appropriate wire transfer instructions to an appropriate Federal Reserve Bank.

(c) All payments made by the Bank under this Letter of Credit shall be made with the Bank's own funds.

8. **Other Documents in the Case of a Conversion or Substitution**. You agree to provide to us a duly completed certificate immediately upon the occurrence thereof (a) in the form of Exhibit D hereto upon the Conversion of all of the Bonds to a Non-Covered Interest Rate as set forth in Paragraph 1(c) hereof and (b) in the form of Exhibit E hereto upon the substitution of an Alternate Credit Facility for this Letter of Credit as set forth in Paragraph 1(d) hereof; and you agree that each such certificate shall be provided (x) on the same day as any Drawing is made upon this Letter of Credit in connection with the Conversion or substitution, respectively, or (y) if no Drawing is made, on the effective date of such Conversion or substitution, respectively.

9. **Transferability**. This Letter of Credit is transferable in its entirety, but not in part, to any transferee who has succeeded you as Fiscal Agent and as Tender Agent under the Certificate and may be successively transferred. Transfer of the drawing rights under this Letter of Credit to such transferee shall be effected by (a) your presentation to us of the original of this Letter of Credit, including all amendments, if any, accompanied by a certificate in the form of Exhibit F hereto and (b) our transfer of this Letter of Credit (i) by endorsement on the original Letter of Credit or (ii) by issuance of a substitute Letter of Credit made out in favor of such transferee but otherwise identical in form and substance to this Letter of Credit.

10. **Governing Law and Practices**. This Letter of Credit is issued subject to the International Standby Practices (1998), International Chamber of Commerce, Publication No. 590 (the "ISP 98"). This Letter of Credit shall be deemed made under the laws of the State of New York, including Article 5 of the Uniform Commercial Code, and as to matters not addressed by the ISP 98 shall be governed by and construed in accordance with the laws of the State of New York and applicable U.S. Federal law.

11. **Irrevocability**. This Letter of Credit shall be irrevocable.

12. **No Negotiation**. A Drawing under this Letter of Credit shall be presented directly to us by you or by any transferee who has succeeded you as Fiscal Agent and as Tender Agent under the Certificate and shall not be negotiated to or by any third party.

13. **Excluded Bonds; Excluded Drawings**. Notwithstanding any other provision of this Letter of Credit, no Drawing under this Letter of Credit may be made (a) with respect to any Bank Bond or Refunding Bond, any Bond bearing interest at other than the Covered Rate or any Bond registered in the name of, or to the best of your knowledge held for the account or benefit of the Issuer, or a Person who is a guarantor of any of the obligations of the Issuer in connection with the Bonds (each an "Excluded Bond"), (b) with respect to the payment of any principal or interest (other than as a part of the Purchase Price) or any redemption, prepayment or purchase premium, (c) with respect to any payment which (i) comprises any part of the Sale Price or (ii) constitutes or comprises any interest amount accruing on the Bonds or under the Reimbursement Agreement other than interest accruing on the Bonds at a Covered Rate on and subject to the terms of Paragraph 2 hereof, and (d) from and after the date we receive notice from the Fiscal Agent in the form of Exhibit C hereto that payment or provision for payment of all the Bonds has been made, other than a draft to pay the Purchase Price of Eligible Bonds (any Drawing described in any of (a), (b), (c) or (d) being referred to as an "Excluded Drawing").

14. **Address for Communications**. Communications with respect to this Letter of Credit shall be in writing and shall be addressed to us at the address referenced in Paragraph 6, specifically referring thereon to our Irrevocable Letter of Credit No. [______]. At the time any such communications or Drawings are sent, copies of such communications or Drawings shall also be sent by facsimile to us at Citibank, N.A., , Attention: ; provided, however, that the failure to send such copies shall not affect our obligations hereunder. Communications with respect to the Fiscal Agent or Tender Agent shall either be sent by first class registered or certified mail or express courier service, properly addressed and prepaid, or physically delivered to the address set forth on the first page of this Letter of Credit.

15. **Definitions**. In addition to the definitions set forth in the other paragraphs of this Letter of Credit, as used herein, (a) "*Affiliate*" means, with respect to any Person, any other Person directly or indirectly controlling, controlled by or under common control with such Person (and "control" (including "controlled by" and "under common control with") means the power, directly or indirectly, to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities or by contract or otherwise), and (b) "*Alternate Credit Facility*" means a letter of credit or other agreement providing for the purchase of the Bonds and satisfying the requirements of the Certificate and which is accepted by the Fiscal Agent in substitution for this Letter of Credit, and (c) "*Bank Bond Rate*" means the per annum rate of interest borne by Bank Bonds from time to time as set forth in the Certificate, and (d) "*Bank Bonds*" means Bonds which have been purchased with the proceeds of a draw on this Letter of Credit, until such Bonds no longer constitute Bank Bonds pursuant to the terms of the Reimbursement Agreement, and (e) *"Business Day*" has the meaning assigned thereto in Paragraph 6 of this Letter of Credit, and (f) "*Conversion*" means a conversion of the Bonds from a Covered Rate to another interest rate mode as provided in the Certificate, and (g) "*Covered Rate*" means the Weekly Rate, and (h) "*Eligible Bond(s)*" has the meaning assigned thereto in Paragraph 2 of this Letter of Credit, and (i) "*Non-Covered Interest Rate*" means the Bank Bond Rate and any interest rate applicable to the Bonds other than the Covered Rate, and (j) "*Outstanding Bonds*" means, as of the time in question, all Bonds authenticated and delivered under the Certificate except Bonds canceled or required to be canceled, Bonds with respect to which all liability of the Issuer shall have been discharged in accordance with the requirements of the Certificate, and Bonds in substitution for which other Bonds have been authenticated and delivered under the Certificate, and (k) "*Person*" means an individual, a corporation, a partnership, an association, a joint venture, a trust, a business trust, a limited liability company or any other entity or organization, including a governmental or political subdivision or an agency or instrumentality thereof, and (l) "*Sale Price*" means a price equal to the principal amount of the Bank Bonds plus unpaid accrued interest thereon from and including the date of purchase of such Bank Bonds, as determined under the Reimbursement Agreement, to but excluding the date of sale of

such Bank Bonds, as determined under the Reimbursement Agreement, at the interest rate then applicable to the Bonds, and (m) "*Tendered Bond(s)*" has the meaning assigned thereto in Paragraph 2 of this Letter of Credit, and (n) "*Termination Event*" means any Event of Default under Section 7.01 of the Reimbursement Agreement, other than an Event of Default solely under Sections 7.01(a)(ii), (c) or (d), and (o) "*Termination Event of Default Notice*" means a notice substantially in the form of Exhibit G hereto given by the Bank to the Fiscal Agent under Section 7.02(a) of the Reimbursement Agreement, which notice (i) shall notify the Fiscal Agent that a Termination Event has occurred and is continuing and that the Letter of Credit shall terminate, and (ii) shall direct the Fiscal Agent to draw upon the Letter of Credit in accordance with its terms and purchase all Outstanding Bonds for the account of the Bank and may direct the Fiscal Agent to declare a mandatory tender of all Outstanding Bonds and the accrued interest thereon, and (p) "*Weekly Rate*" means the variable rate of interest for the Bonds determined weekly in accordance with the provisions of the Certificate.

16. **Complete Agreement**. This Letter of Credit, including Exhibits A through I hereto, sets forth in full the terms of our undertaking. Reference in this Letter of Credit to other documents or instruments is for identification purposes only and any such reference (including, without limitation, the use herein of terms defined in the Reimbursement Agreement) shall not modify, amend, amplify, limit or otherwise affect the terms of our undertaking or cause such documents or instruments to be deemed incorporated herein.

[remainder of page intentionally left blank]

We hereby agree with you to honor your Drawings presented in strict compliance with the terms and conditions of this Letter of Credit.

You and the Issuer are advised that the U.S. Government has in place certain sanctions against certain countries, individuals, entities, and vessels. Citigroup entities, including branches and, in certain circumstances, subsidiaries, are/will be prohibited from engaging in transactions or other activities within the scope of applicable sanctions.

Very truly yours,

CITIBANK, N.A.

By ____

Name ____

Title ____

[THIS PAGE INTENTIONALLY LEFT BLANK]

[THIS PAGE INTENTIONALLY LEFT BLANK]

NEW ISSUE

In the opinion of Norton Rose Fulbright US LLP and Bryant Rabbino LLP, Co-Bond Counsel, interest on the Bonds will be exempt from personal income taxes imposed by the State of New York or any political subdivision thereof, including the City, and assuming continuing compliance with the provisions of the Internal Revenue Code of 1986, as amended, with respect to the Tax-Exempt Bonds, as described herein, interest on the Tax-Exempt Bonds will be excludable from the gross income of the owners thereof for federal income tax purposes. Interest on the Taxable Bonds will be includable in gross income for federal income tax purposes. See "SECTION X: OTHER INFORMATION—Tax Matters" herein for further information.

$1,400,000,000

The City of New York

General Obligation Bonds, Fiscal 2020 Series A
$800,000,000 Tax-Exempt Bonds, Subseries A-1
$340,600,000 Taxable Bonds, Subseries A-2
$259,400,000 Taxable Bonds, Subseries A-3

Dated: Date of Delivery | Due: As shown on the inside cover page

The Bonds will be issued as registered bonds. The Bonds will be registered in the nominee name of The Depository Trust Company, New York, New York, which will act as securities depository for the Bonds.

Interest on the Bonds will be payable on each February 1 and August 1, commencing February 1, 2020. The Bonds can be purchased in principal amounts of $5,000 or any integral multiple thereof. Other terms of the Bonds including redemption provisions are described herein. *A detailed schedule of the Bonds is set forth on the inside cover page.*

The Tax-Exempt Bonds are offered subject to prior sale, when, as and if issued by the City and accepted by the Underwriters. The Taxable Bonds are being sold by public letting on the basis of electronic competitive bids in accordance with the Notices of Sale dated July 16, 2019 as supplemented. The issuance of the Bonds is subject to the approval of the legality of the Bonds by Norton Rose Fulbright US LLP, New York, New York, and Bryant Rabbino LLP, New York, New York, Co-Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the City by its Corporation Counsel. Certain legal matters in connection with the preparation of this Official Statement will be passed upon for the City by Orrick, Herrington & Sutcliffe LLP, New York, New York, and Law Offices of Joseph C. Reid, P.A., New York, New York, Co-Special Disclosure Counsel to the City. Certain legal matters will be passed upon for the Underwriters and the Original Purchasers by Bracewell LLP, New York, New York, and Hardwick Law Firm, LLC, New York, New York, Co-Counsel to the Underwriters and the Original Purchasers. It is expected that the Bonds will be available for delivery in New York, New York, on or about August 13, 2019.

Ramirez & Co., Inc. | **The Williams Capital Group, L.P.**

BofA Merrill Lynch | **Citigroup** | **Goldman Sachs & Co. LLC**
J.P. Morgan | **Jefferies** | **Loop Capital Markets**
RBC Capital Markets | **Siebert Cisneros Shank & Co., L.L.C.**

Barclays | **BNY Mellon Capital Markets, LLC** | **Drexel Hamilton, LLC**
Fidelity Capital Markets | **Janney Montgomery Scott** | **Morgan Stanley**
Oppenheimer & Co. | **Raymond James** | **Roosevelt & Cross Incorporated**
Stifel, Nicolaus & Company, Incorporated | **TD Securities** | **U.S. Bancorp Investments, Inc.**
Wells Fargo Securities

Academy Securities Inc. | **Blaylock Van, LLC** | **FTN Financial Capital Markets**
Hilltop Securities Inc. | **PNC Capital Markets LLC** | **Rice Financial Products Company**
Stern Brothers & Co.

July 24, 2019

$1,400,000,000 General Obligation Bonds, Fiscal 2020 Series A[1]

Base CUSIP[2]: 64966Q

$800,000,000
Subseries A-1 Tax-Exempt Bonds

August 1,	Principal Amount	Interest Rate	Price or Yield	CUSIP[2] Suffix
2021	$34,685,000	5%	1.12%	CM0
2022	6,885,000	5	1.13	CN8
2035	56,540,000	5	2.12[3]	CP3
2036	59,355,000	3	2.65[3]	CQ1
2037	61,140,000	4	2.47[3]	CR9
2038	63,590,000	4	2.51[3]	CS7
2039	66,130,000	5	2.30[3]	CT5
2040	69,440,000	4	2.59[3]	CU2
2041	72,215,000	5	2.39[3]	CV0
2042	75,825,000	4	2.67[3]	CW8
2043	78,860,000	5	2.46[3]	CX6
2044	82,805,000	4	2.71[3]	CY4
2045	54,285,000	3	100	CZ1
2045	18,245,000	5	2.48[3]	DA5

	$340,600,000 Subseries A-2 Taxable Bonds				$259,400,000 Subseries A-3 Taxable Bonds			
August 1,	Principal Amount	Interest Rate	Price	CUSIP[2] Suffix	Principal Amount	Interest Rate	Price	CUSIP[2] Suffix
2022	$29,535,000	2.03%	100	BY5				
2023	41,535,000	2.08	100	BZ2				
2024	42,400,000	2.13	100	CA6				
2025	43,305,000	2.28	100	CB4				
2026	44,290,000	2.39	100	CC2				
2027	45,350,000	2.49	100	CD0				
2028	46,480,000	2.63	100	CE8				
2029	47,705,000	2.73	100	CF5				
2030					$49,005,000	2.80%	100	CG3
2031					50,375,000	2.85	100	CH1
2032					51,815,000	2.90	100	CJ7
2033					53,315,000	2.95	100	CK4
2034					54,890,000	3.00	100	CL2

(1) In addition to the $1,400,000,000 aggregate principal amount of Subseries A-1, Subseries A-2 and Subseries A-3 Bonds, the City expects to convert from variable rates to fixed rates $137,940,000 aggregate principal amount of its Fiscal 2006 Series F, Subseries F-4B Bonds, Fiscal 2006 Series H, Subseries H-1 Bonds, Fiscal 2006 Series H, Subseries H-2 Bonds (which Subseries H-1 and Subseries H-2 Bonds will be redesignated as the Subseries H-A Bonds) and Fiscal 2008 Series J, Subseries J-8 Bonds, convert $225,000,000 aggregate principal amount of its Fiscal 2014 Series D, Subseries D-3 Bonds from a variable rate to step coupon bonds, and convert $200,000,000 aggregate principal amount of its Fiscal 2014 Series I, Subseries I-3 Bonds from an index rate to a variable rate. Such bonds will be reoffered by separate reoffering circulars and are not offered hereby.

(2) Copyright, American Bankers Association (the "ABA"). CUSIP data herein are provided by CUSIP Global Services ("CGS"), operated on behalf of the ABA by S&P Global Market Intelligence, a division of S&P Global Inc. These data are not intended to create a database and do not serve in any way as a substitute for the CGS database. CUSIP numbers listed above have been assigned by an independent company not affiliated with the City and are being provided solely for the convenience of Bondholders only at the time of issuance of the Bonds, and none of the City, the Underwriters or the Original Purchaser makes any representation with respect to such numbers or undertakes 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 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 Bonds.

(3) Priced to the first call date on August 1, 2029.

OFFICIAL STATEMENT OF THE CITY OF NEW YORK

TABLE OF CONTENTS

[THIS PAGE INTENTIONALLY LEFT BLANK]

No dealer, broker, salesperson or other person has been authorized by the City, the Underwriters or the Original Purchasers to give any information or to make any representations in connection with the Bonds or the matters described herein, other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon as having been authorized by the City, the Underwriters or the Original Purchasers. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information and expressions of opinion contained 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 matters described herein since the date hereof. This Official Statement is submitted in connection with the sale of the Bonds referred to herein and may not be reproduced or used, in whole or in part, for any other purpose. The Underwriters and the Original Purchasers may offer and sell Bonds to certain dealers and others at prices lower than the offering prices stated on the inside cover page hereof. The offering prices may be changed from time to time by the Underwriters or the Original Purchasers. No representations are made or implied by the City, the Underwriters or the Original Purchasers as to any offering of any derivative instruments.

The factors affecting the City's financial condition are complex. This Official Statement should be considered in its entirety and no one factor considered less important than any other by reason of its location herein. Where agreements, reports or other documents are referred to herein, reference should be made to such agreements, reports or other documents for more complete information regarding the rights and obligations of parties thereto, facts and opinions contained therein and the subject matter thereof. Any electronic reproduction of this Official Statement may contain computer-generated errors or other deviations from the printed Official Statement. In any such case, the printed version controls.

This Official Statement 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 Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the City, its independent auditors, the Underwriters or the Original Purchasers 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 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.

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, 2018 and 2017, which is a matter of public record, is included in the CAFR for the fiscal year ended June 30, 2018, which is included by specific reference 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, or included by specific reference, in this Official Statement, since the date of such report and has not been asked to consent to the inclusion of its report in this Official Statement.

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 Official Statement for purposes of Rule 15c2-12 adopted by the United States Securities and Exchange Commission under the Securities Exchange Act of 1934.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS AND THE ORIGINAL PURCHASERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN MARKET PRICES OF THE BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THESE SECURITIES HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. 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 MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THIS OFFICIAL STATEMENT AND THE TERMS OF THE OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED.

INFORMATION CONCERNING OFFERING RESTRICTIONS IN CERTAIN JURISDICTIONS OUTSIDE THE UNITED STATES

THE CITY OF NEW YORK (REFERRED TO IN THESE LEGENDS AS THE "ISSUER") MAKES NO REPRESENTATION AS TO THE ACCURACY OR ADEQUACY OF SUCH INFORMATION. REFERENCES UNDER THIS CAPTION TO "BONDS" OR "SECURITIES" MEAN THE BONDS OFFERED HEREBY, AND REFERENCES TO THE "UNDERWRITERS" MEAN THE UNDERWRITERS AND ORIGINAL PURCHASERS.

Minimum Unit Sales

THE BONDS WILL TRADE AND SETTLE ON A UNIT BASIS (ONE UNIT EQUALING ONE BOND OF $1,000 PRINCIPAL AMOUNT). FOR ANY SALES MADE OUTSIDE THE UNITED STATES, THE MINIMUM PURCHASE AND TRADING AMOUNT IS 150 UNITS (BEING 150 BONDS IN AN AGGREGATE PRINCIPAL AMOUNT OF $150,000).

Notice to Prospective Investors in the European Economic Area

THE BONDS ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE EUROPEAN ECONOMIC AREA ("EEA"). FOR THESE PURPOSES, A RETAIL INVESTOR MEANS A PERSON WHO IS ONE (OR MORE) OF: (I) A RETAIL CLIENT AS DEFINED IN POINT (11) OF ARTICLE 4(1) OF DIRECTIVE 2014/65/EU (AS AMENDED, "MIFID II"); OR (II) A CUSTOMER WITHIN THE MEANING OF DIRECTIVE 2002/92/EC (AS AMENDED, THE "INSURANCE MEDIATION DIRECTIVE"), WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT AS DEFINED IN POINT (10) OF ARTICLE 4(1) OF MIFID II; OR (III) NOT A QUALIFIED INVESTOR AS DEFINED IN DIRECTIVE 2003/71/EC (AS AMENDED, THE "PROSPECTUS DIRECTIVE"). CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO 1286/2014 (AS AMENDED, THE "PRIIPS REGULATION") FOR OFFERING OR SELLING THE BONDS OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE EEA HAS BEEN

PREPARED AND THEREFORE OFFERING OR SELLING THE BONDS OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE EEA MAY BE UNLAWFUL UNDER THE PRIIPS REGULATION.

THIS OFFICIAL STATEMENT HAS BEEN PREPARED ON THE BASIS THAT ALL OFFERS OF THE BONDS TO ANY PERSON THAT IS LOCATED WITHIN A MEMBER STATE OF THE EEA WILL BE MADE PURSUANT TO AN EXEMPTION UNDER ARTICLE 3 OF THE PROSPECTUS DIRECTIVE, AS IMPLEMENTED IN MEMBER STATES OF THE EEA, FROM THE REQUIREMENT TO PRODUCE A PROSPECTUS FOR OFFERS OF THE SECURITIES. ACCORDINGLY, ANY PERSON MAKING OR INTENDING TO MAKE ANY OFFER IN THE EEA OF THE BONDS SHOULD ONLY DO SO IN CIRCUMSTANCES IN WHICH NO OBLIGATION ARISES FOR THE ISSUER OR ANY OF THE UNDERWRITERS TO PRODUCE A PROSPECTUS FOR SUCH OFFER. NEITHER THE ISSUER NOR THE UNDERWRITERS HAS AUTHORIZED, NOR DO THEY AUTHORIZE, THE MAKING OF ANY OFFER OF BONDS THROUGH ANY FINANCIAL INTERMEDIARY, OTHER THAN OFFERS MADE BY THE UNDERWRITERS, WHICH CONSTITUTE THE FINAL PLACEMENT OF THE BONDS CONTEMPLATED IN THIS OFFICIAL STATEMENT.

IN RELATION TO EACH MEMBER STATE OF THE EEA THAT HAS IMPLEMENTED THE PROSPECTUS DIRECTIVE (EACH, A "RELEVANT MEMBER STATE"), WITH EFFECT FROM AND INCLUDING THE DATE ON WHICH THE PROSPECTUS DIRECTIVE IS IMPLEMENTED IN THAT RELEVANT MEMBER STATE, THE OFFER OF ANY BONDS WHICH IS THE SUBJECT OF THE OFFERING CONTEMPLATED BY THIS OFFICIAL STATEMENT IS NOT BEING MADE AND WILL NOT BE MADE TO THE PUBLIC IN THAT RELEVANT MEMBER STATE, OTHER THAN: (A) TO ANY LEGAL ENTITY WHICH IS A "QUALIFIED INVESTOR" AS SUCH TERM IS DEFINED IN THE PROSPECTUS DIRECTIVE; (B) TO FEWER THAN 150 NATURAL OR LEGAL PERSONS (OTHER THAN "QUALIFIED INVESTORS" AS SUCH TERM IS DEFINED IN THE PROSPECTUS DIRECTIVE), SUBJECT TO OBTAINING THE PRIOR CONSENT OF THE RELEVANT UNDERWRITER OR THE ISSUER FOR ANY SUCH OFFER OR (C) IN ANY OTHER CIRCUMSTANCES FALLING WITHIN ARTICLE 3(2) OF THE PROSPECTUS DIRECTIVE; PROVIDED THAT NO SUCH OFFER OF THE BONDS SHALL REQUIRE THE ISSUER OR ANY UNDERWRITER TO PUBLISH A PROSPECTUS PURSUANT TO ARTICLE 3 OF THE PROSPECTUS DIRECTIVE OR A SUPPLEMENT TO A PROSPECTUS PURSUANT TO ARTICLE 16 OF THE PROSPECTUS DIRECTIVE.

FOR THE PURPOSES OF THIS PROVISION, THE EXPRESSION AN "OFFER OF SECURITIES TO THE PUBLIC" IN RELATION TO THE BONDS IN ANY RELEVANT MEMBER STATE MEANS THE COMMUNICATION IN ANY FORM AND BY ANY MEANS OF SUFFICIENT INFORMATION ON THE TERMS OF THE OFFER AND THE BONDS TO BE OFFERED SO AS TO ENABLE AN INVESTOR TO DECIDE TO PURCHASE THE BONDS, AS THE SAME MAY BE VARIED IN THAT RELEVANT MEMBER STATE BY ANY MEASURE IMPLEMENTING THE PROSPECTUS DIRECTIVE IN THAT RELEVANT MEMBER STATE.

EACH SUBSCRIBER FOR OR PURCHASER OF THE SECURITIES IN THE OFFERING LOCATED WITHIN A RELEVANT MEMBER STATE WILL BE DEEMED TO HAVE REPRESENTED, ACKNOWLEDGED AND AGREED THAT IT IS A "QUALIFIED INVESTOR" WITHIN THE MEANING OF ARTICLE 2(1)(E) OF THE PROSPECTUS DIRECTIVE. THE ISSUER AND EACH UNDERWRITER AND OTHERS WILL RELY ON THE TRUTH AND ACCURACY OF THE FOREGOING REPRESENTATION, ACKNOWLEDGEMENT AND AGREEMENT.

Notice to Prospective Investors in The United Kingdom

THIS OFFICIAL STATEMENT IS FOR DISTRIBUTION ONLY TO, AND IS DIRECTED SOLELY AT, PERSONS WHO (I) ARE INVESTMENT PROFESSIONALS AS SUCH TERM IN DEFINED IN ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005, AS AMENDED (THE "FINANCIAL PROMOTION ORDER"), (II) ARE PERSONS FALLING WITHIN ARTICLE 49(2)(A) TO (D) OF THE FINANCIAL PROMOTION ORDER, (III) ARE OUTSIDE THE UNITED KINGDOM, OR (IV) ARE PERSONS TO WHOM AN INVITATION OR INDUCEMENT TO ENGAGE IN INVESTMENT ACTIVITY (WITHIN THE MEANING OF SECTION 21 OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (THE "FSMA")) IN CONNECTION WITH THE ISSUE OR SALE OF ANY BONDS MAY OTHERWISE BE LAWFULLY COMMUNICATED OR CAUSED TO BE COMMUNICATED (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "RELEVANT PERSONS"). THIS OFFICIAL STATEMENT IS DIRECTED ONLY AT RELEVANT PERSONS AND MUST NOT BE ACTED ON OR RELIED ON BY PERSONS WHO ARE NOT RELEVANT PERSONS. ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS OFFICIAL STATEMENT RELATES IS AVAILABLE ONLY TO RELEVANT PERSONS AND WILL BE ENGAGED IN ONLY WITH RELEVANT PERSONS. ANY PERSON WHO IS NOT A RELEVANT PERSON SHOULD NOT ACT OR RELY ON THIS OFFICIAL STATEMENT OR ANY OF ITS CONTENTS. THIS OFFICIAL STATEMENT HAS NOT BEEN APPROVED FOR THE PURPOSES OF SECTION 21 OF THE FSMA AND DOES NOT CONSTITUTE AN OFFER TO THE PUBLIC IN ACCORDANCE WITH THE PROVISIONS OF SECTION 85 OF THE FSMA.

Notice to Prospective Investors in Taiwan

THE OFFER OF THE BONDS HAS NOT BEEN AND WILL NOT BE REGISTERED WITH THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN (THE "FSC") PURSUANT TO APPLICABLE SECURITIES LAWS AND REGULATIONS OF TAIWAN AND THE BONDS, INCLUDING ANY COPY OF THIS OFFICIAL STATEMENT OR ANY OTHER DOCUMENTS RELATING TO THE BONDS, MAY NOT BE OFFERED, SOLD, DELIVERED OR DISTRIBUTED WITHIN TAIWAN (THE REPUBLIC OF CHINA) THROUGH A PUBLIC OFFERING OR IN CIRCUMSTANCES WHICH CONSTITUTE AN OFFER WITHIN THE MEANING OF THE SECURITIES AND EXCHANGE ACT OF TAIWAN THAT REQUIRES THE REGISTRATION WITH OR APPROVAL OF THE FSC. NO PERSON OR ENTITY IN TAIWAN (THE REPUBLIC OF CHINA) HAS BEEN AUTHORIZED TO OFFER, SELL, DISTRIBUTE, GIVE ADVICE REGARDING OR OTHERWISE INTERMEDIATE THE OFFERING, SALE OR DISTRIBUTION OF THE BONDS. TAIWAN INVESTORS WHO SUBSCRIBE AND PURCHASE THE BONDS MUST COMPLY WITH ALL RELEVANT SECURITIES, TAX AND FOREIGN EXCHANGE LAWS AND REGULATIONS IN EFFECT IN TAIWAN.

Notice to Prospective Investors in Switzerland

THIS OFFICIAL STATEMENT IS NOT INTENDED TO CONSTITUTE AN OFFER OR A SOLICITATION TO PURCHASE OR INVEST IN THE BONDS. THE BONDS MAY NOT BE PUBLICLY OFFERED, SOLD OR ADVERTISED, DIRECTLY OR INDIRECTLY, IN, INTO OR FROM SWITZERLAND AND WILL NOT BE LISTED ON THE SIX SWISS EXCHANGE LTD. OR ON ANY OTHER EXCHANGE OR REGULATED TRADING FACILITY IN SWITZERLAND. NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE BONDS CONSTITUTES A PROSPECTUS AS SUCH TERM IS UNDERSTOOD PURSUANT TO ART. 652A OR ART. 1156 OF THE SWISS CODE OF OBLIGATIONS OR A LISTING PROSPECTUS WITHIN THE MEANING OF THE LISTING RULES OF THE SIX SWISS EXCHANGE LTD. OR ANY OTHER REGULATED TRADING FACILITY IN SWITZERLAND, AND NEITHER

THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE BONDS MAY BE PUBLICLY DISTRIBUTED OR OTHERWISE MADE PUBLICLY AVAILABLE IN OR FROM SWITZERLAND. ACCORDINGLY, THIS OFFICIAL STATEMENT IS COMMUNICATED IN OR FROM SWITZERLAND TO A LIMITED NUMBER OF SELECTED INVESTORS ONLY. NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE OFFERING, NOR THE ISSUER, NOR THE BONDS HAVE BEEN OR WILL BE FILED WITH OR APPROVED BY ANY SWISS REGULATORY AUTHORITY. THE BONDS ARE NOT SUBJECT TO SUPERVISION BY ANY SWISS REGULATORY AUTHORITY, E.G., THE SWISS FINANCIAL MARKET SUPERVISORY AUTHORITY FINMA, AND INVESTORS IN THE BONDS WILL NOT BENEFIT FROM PROTECTION OR SUPERVISION BY SUCH AUTHORITY.

[THIS PAGE INTENTIONALLY LEFT BLANK]

OFFICIAL STATEMENT
OF
THE CITY OF NEW YORK

This Official Statement provides certain information concerning The City of New York (the "City") in connection with the sale of $1,400,000,000 aggregate principal amount of the City's General Obligation Bonds, Fiscal 2020 Series A (the "Bonds"), consisting of $800,000,000 tax-exempt bonds, Subseries A-1 (the "Subseries A-1 Bonds" or the "Tax-Exempt Bonds"), $340,600,000 taxable bonds, Subseries A-2 (the "Subseries A-2 Bonds") and $259,400,000 taxable bonds, Subseries A-3 (the "Subseries A-3 Bonds" and with the Subseries A-2 Bonds, the "Taxable Bonds"). Concurrently with the delivery of the Bonds, the City expects to convert from variable rates to fixed rates $137,940,000 aggregate principal amount of its Fiscal 2006 Series F, Subseries F-4B Bonds, Fiscal 2006 Series H, Subseries H-1 Bonds, Fiscal 2006 Series H, Subseries H-2 Bonds (which Subseries H-1 and Subseries H-2 Bonds will be redesignated as the Subseries H-A Bonds) and Fiscal 2008 Series J, Subseries J-8 Bonds, convert $225,000,000 aggregate principal amount of its Fiscal 2014 Series D, Subseries D-3 Bonds from a variable rate to step coupon bonds, and convert $200,000,000 aggregate principal amount of its Fiscal 2014 Series I, Subseries I-3 Bonds from an index rate to a variable rate. Such bonds will be reoffered by separate reoffering circulars and are not offered hereby.

The factors affecting the City's financial condition described throughout this Official Statement are complex and are not intended to be summarized in the Introductory Statement below. 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 below under "INTRODUCTORY STATEMENT" and "SECTION VII: FINANCIAL PLAN—Assumptions." This Official Statement should be read in its entirety.

INTRODUCTORY STATEMENT

The Bonds are general obligations of the City for the payment of which the City has pledged its faith and credit. All real property subject to taxation by the City is subject to the levy of *ad valorem* taxes, without limitation as to rate or amount, to pay the principal of, applicable redemption premium, if any, and interest on the Bonds.

The City, with an estimated population of approximately 8.4 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 2018 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 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 2019 and 2020 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 2021 through 2023 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 I: 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 I: RECENT FINANCIAL DEVELOPMENTS—2019-2023 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 I: 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."

SECTION I: RECENT FINANCIAL DEVELOPMENTS

For the 2018 fiscal year, the City's General Fund had a total surplus of $4.581 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 2018 fiscal year is the thirty-eighth consecutive year that the City has achieved balanced operating results when reported in accordance with GAAP, except for the application of GASB 49.

2019-2023 Financial Plan

On June 14, 2018, the City submitted to the Control Board the financial plan for the 2019 through 2022 fiscal years (the "June 2018 Financial Plan"), which was consistent with the City's capital and expense budgets as adopted for the 2019 fiscal year. Subsequently, the June 2018 Financial Plan was modified during the 2019 fiscal year. On June 19, 2019, the City submitted to the Control Board the financial plan for the 2020 through 2023 fiscal years, which is consistent with the City's capital and expense budgets as adopted for the 2020 fiscal year, and a further modification to the June 2018 Financial Plan with respect to the 2019 fiscal year (together, the "Financial Plan").

The Financial Plan projects revenues and expenses for the 2019 and 2020 fiscal years balanced in accordance with GAAP, except for the application of GASB 49, and projects gaps of approximately $3.52 billion, $2.88 billion and $3.14 billion in fiscal years 2021 through 2023, respectively. The June 2018 Financial Plan had projected revenues and expenses for the 2019 fiscal year balanced in accordance with GAAP, except for the application of GASB 49, and had projected gaps of approximately $3.26 billion, $2.89 billion and $2.29 billion in fiscal years 2020 through 2022, respectively.

The Financial Plan reflects, since the June 2018 Financial Plan, increases in projected net revenues of $2.03 billion, $1.14 billion, $348 million and $821 million in fiscal years 2019 through 2022, respectively. Changes in projected revenues include: (i) a decrease in real property tax revenues of $44 million in fiscal year 2019 and increases in real property tax revenues of $320 million, $198 million and $448 million in fiscal years 2020 through 2022, respectively; (ii) increases in personal income tax revenues of $854 million, $398 million, $39 million and $134 million in fiscal years 2019 through 2022, respectively; (iii) increases in business tax revenues of $99 million and $48 million in fiscal years 2019 and 2022, respectively, and decreases in business tax revenues of $115 million and $87 million in fiscal years 2020 and 2021, respectively; (iv) increases in sales tax revenues of $75 million, $100 million, $62 million and $73 million in fiscal years 2019 through 2022, respectively; (v) increases in real estate transaction tax revenues of $174 million, $85 million, $35 million and $24 million in fiscal years 2019 through 2022, respectively; (vi) decreases in State School Tax Relief Program ("STAR Program") revenues of $4 million and $12 million in fiscal years 2019 and 2020, respectively; (vii) increases in hotel tax revenues of $21 million, $22 million, $15 million and $13 million in fiscal years 2019 through 2022, respectively; and (viii) an increase in other tax revenues of $71 million in fiscal year 2019 and decreases in other tax revenues of $4 million, $4 million and $7 million in fiscal years 2020 through 2022, respectively. Changes in projected revenues also include (i) an increase in tax audit revenues of $275 million in fiscal year 2020; and (ii) net increases in other revenues of $783 million, $75 million, $90 million and $88 million in fiscal years 2019 through 2022, respectively.

The Financial Plan also reflects, since the June 2018 Financial Plan, a decrease in projected net expenditures of $2.19 billion in fiscal year 2019 and increases in projected net expenditures of $2.10 billion, $980 million and $1.42 billion in fiscal years 2020 through 2022, respectively. Changes in projected expenditures include: (i) increases in agency expenses of $836 million, $1.63 billion, $1.17 billion and $1.21 billion in fiscal years 2019 through 2022, respectively; (ii) an increase of $454 million in fiscal year 2020 as a result of City Council initiatives; (iii) increases in the labor reserve of $227 million, $704 million, $967 million and $1.44 billion in fiscal years 2019 through 2022, respectively, reflecting the costs of labor settlements; (iv) an increase in pension contributions of $95 million in fiscal year 2019, and decreases in pension contributions of $38 million, $380 million and $435 million in fiscal years 2020 through 2022, respectively, primarily as a result of strong investment earnings in fiscal year 2018; (v) increases of $63 million, $306 million, $259 million and $259 million in fiscal years 2019 through 2022, respectively, primarily reflecting the impact of the State Budget (defined below); (vi) a decrease in the general reserve of $1.11 billion in fiscal year 2019 and an increase in the general reserve of $150 million in fiscal year 2020; (vii) a decrease in the capital stabilization reserve of $250 million in fiscal year 2019; (viii) a decrease of $400 million in fiscal year 2019 reflecting a re-estimate of prior years' expenses and receivables; and (ix) an increase of $100 million in contributions to the Retiree Health Benefits Trust in fiscal year 2019.

Changes in projected net expenditures also include decreases in net expenditures of $1.76 billion, $1.10 billion, $1.04 billion and $1.06 billion in fiscal years 2019 through 2022, respectively, to be achieved as a result of the Citywide Savings Program (which includes increases in tax revenue of $2 million, $4 million, $1 million and $1 million in fiscal years 2019 through 2022, respectively, and increases in miscellaneous revenue of $453 million, $102 million, $41 million and $39 million in fiscal years 2019 through 2022, respectively, that are not reflected within the revenue changes described above). The Citywide Savings Program also reflects $372 million from New York City Health and Hospitals ("NYCHH") to satisfy an outstanding payment due to the City from prior fiscal years.

The Financial Plan reflects, since the June 2018 Financial Plan, provision for $4.22 billion for the prepayment in fiscal year 2019 of fiscal year 2020 expenses and an expenditure reduction of $4.22 billion in fiscal year 2020.

The Financial Plan also reflects funding to cover the cost of the collective bargaining patterns established in the agreements between the City and District Council 37 of AFSME ("DC37"), the United Federation of Teachers ("UFT"), and others. For further information, see "SECTION VII: FINANCIAL PLAN—Assumptions—*Expenditure Assumptions*—1. PERSONAL SERVICE COSTS."

The Financial Plan reflects the cost of the Fair Fares Program, which provides reduced fares to low income subway and bus riders, in fiscal years 2019 and 2020, but does not currently reflect funding beyond fiscal year 2020. It is expected that funding sources for the continuation of the program will be identified in coordination with the City Council.

The Mayor and the City Council Speaker announced their intent to address salary parity issues involving teachers in the City's contracted early childhood education program as well as salary parity issues involving district attorneys' staff and the staff of indigent legal providers. A tentative settlement between Day Care Council of New York ("DCCNY") and Local 205, District Council 1707 of AFCME, AFL-CIO ("Local 205") was announced on July 9, 2019. The tentative agreement provides certified teachers represented by Local 205 the same starting salary as Department of Education teachers, as well as pay increases for non-certified teachers and other support staff. If ratified, the net costs of such settlement are $9.6 million, $0.4 million, $5.2 million, $4.9 million in fiscal years 2020 through 2023, respectively. The framework of this agreement will serve as the model for remaining early childhood contracts and if implemented for the entire sector, including Local 205, will cost $29.3 million, $26.4 million, $54.6 million and $56.6 million in fiscal years 2020 through 2023, respectively. Funding for these salary increases is not reflected in the Financial Plan, but is expected to be reflected in the quarterly modification to the Financial Plan to be released in November, 2019.

The Mayor and the City Council Speaker also announced their intent to lift the cap on City funding of indirect costs incurred by nonprofits providing contracted services to the City. Costs associated with these changes are not reflected in the Financial Plan.

On January 31, 2019, New York City Housing Authority ("NYCHA"), the City and the U.S. Department of Housing and Urban Development ("HUD") entered into an agreement relating to lead-based paint and other health and safety concerns in NYCHA's properties. Pursuant to this agreement, a Federal monitor has been appointed to oversee NYCHA's compliance with the terms of the agreement and federal regulations and the City will provide additional funding. Pursuant to the agreement, the 2019-2023 Capital Commitment Plan (defined herein) reflects $1.2 billion in additional City capital funds, with an additional $1 billion in City capital funds reflected in the remaining years of the Ten Year Capital Strategy for fiscal years 2020 through 2029. NYCHA has announced that it may be out of compliance with federal requirements beyond the regulations concerning lead-based paint and other health and safety concerns that were the subject of such agreement. NYCHA has estimated that its total projected capital costs are approximately $32 billion over the next five years.

On April 1, 2019, the State legislature passed the State fiscal year 2020 budget (the "State 2020 Budget"). The Financial Plan reflects the impact of the State 2020 Budget, with the exception of (i) a reduction in school aid which is $37 million and $130 million lower than assumed in the Financial Plan in fiscal years 2021 and 2022, respectively; and (ii) funding for paid time off to vote that could result in costs to the City of up to $85 million per election event. Additionally, the Financial Plan does not reflect potential Medicaid cuts, up to $190 million Statewide in each of State fiscal years 2020 and 2021, authorized, but not required, by the State 2020 Budget. The City's share of the Medicaid budget is estimated to be one sixth of the State-wide share. It is not known whether such cuts will be made and, if so, in what amounts.

The State 2020 Budget also included legislation authorizing cuts of up to 1% to local assistance payments if the State Budget Director reasonably anticipates a year end shortfall of $500 million or more in the State general fund. Upon such determination, the State Budget Director's proposed cuts would be subject to approval of the State legislature, which would have 30 days to propose its own cuts.

The State 2020 Budget also included enactment of congestion tolling for vehicles entering a designated congestion zone in Manhattan below 60th Street, with a start date no earlier than December 31, 2020, the revenues from which will be directed to the Metropolitan Transportation Authority ("MTA") for transit improvements. Details of the plan, including pricing and the start date, have yet to be determined. In addition, the State 2020 Budget includes legislation authorizing the imposition of sales tax on certain additional internet sales and providing that sales tax revenues in the amount of $127.5 million in State fiscal year 2020 (reflecting the portion of the year in which it is effective) and $170 million in State fiscal year 2021 and thereafter increasing by one percent per year, will be directed to the MTA for transit improvements. Revenues from such additional sales tax are currently estimated to be approximately $170 million per year and are in addition to existing sales taxes attributable to certain other internet transactions. The State 2020 Budget also included legislation increasing real estate transfer taxes on properties valued at more than $2 million, which will also be directed to the MTA for transit improvements.

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 cost the City $150 million in fiscal year 2021, $334 million in fiscal year 2022, and $562 million in fiscal year 2023. 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 City's Capital Budget (as defined below) reflects approximately $2 billion for the reconstruction of the Brooklyn Queens Expressway Triple Cantilever reconstruction project. The ultimate cost of such project is uncertain at this time but is expected to be significantly higher than the amount currently provided in the City's Capital Budget.

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

In January 2017, GASB issued Statement No. 84, Fiduciary Activities, effective for fiscal years beginning after December 15, 2018 (City fiscal year 2020). The State legislature has passed legislation permitting the City to carry over fiscal year end certain fiduciary fund balances intended to be spent over multiple fiscal years. Such legislation is currently pending the Governor's signature. 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 February 2019 Financial Plan (the "February Financial Plan") and the April 2019 Financial Plan (the "April Financial Plan") and to be 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 2019 fiscal year with a balance of $7.2 billion in its general fund (the "General Fund"), a decrease of $2.2 billion from fiscal year 2018. The State Legislature completed action on the $175.5 billion State 2020 Budget for its 2020 fiscal year on April 1, 2019. The State 2020 Budget provides for balanced operations on a cash basis in the General Fund, as required by law. The State Annual Information Statement, dated June 12, 2019 (the "Annual Information Statement"), reflects the State 2020 Budget and the State's Financial Plan for fiscal years 2020-2023 (the "State Financial Plan"). In the Annual Information Statement, the State projects a balanced budget, on a cash basis, in fiscal year 2020, a gap in fiscal year 2021 of $172 million, and surpluses in fiscal years 2022 and 2023 of $910 million and $2.1 billion, respectively. The State's projections for fiscal year 2020 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 Annual Information Statement identifies a number of risks inherent in the implementation of the State 2020 Budget and the State Financial Plan. Such risks include, but are not limited to, the performance of the national and State economies, and the collection of economically sensitive tax receipts in the amounts projected; 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 to federal programs; 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; credit rating agency actions; the impact of financial and real estate market developments on bonus income and capital gains realizations; tech industry developments and employment; 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 II: THE BONDS

General

The Bonds will be general obligations of the City issued pursuant to the Constitution and laws of the State, including the Local Finance Law (the "LFL"), and the City Charter and in accordance with bond resolutions of the Mayor and a certificate of the Deputy Comptroller for Public Finance (with related proceedings, the "Certificate"). The Bonds will mature and bear interest as described on the cover and inside cover page of this Official Statement. Interest on the Bonds, calculated on the basis of a 360-day year of 30-day months, will be payable to the registered owners thereof as shown on the registration books of the City on the Record Date, the fifteenth day of the calendar month immediately preceding the applicable interest payment date.

The State Constitution requires that the City pledge its faith and credit to the payment of its bonds and notes. All real property subject to taxation by the City will be subject to the levy of *ad valorem* taxes, without limitation as to rate or amount, to pay the principal of and interest on the Bonds. The City is not permitted by the State Constitution to issue revenue bonds.

Payment Mechanism

Pursuant to the Financial Emergency Act, a general debt service fund (the "General Debt Service Fund" or the "Fund") has been established for City bonds and certain City notes. Pursuant to the Act, payments of the City real estate tax must be deposited upon receipt in the Fund, and retained under a statutory formula, for the payment of debt service (with exceptions for debt service, such as principal of seasonal borrowings, that is set aside under other procedures). The statutory formula has in recent years resulted in retention of sufficient real estate taxes to comply with the City Covenants (as defined in "—Certain Covenants and Agreements"). If the statutory formula does not result in retention of sufficient real estate taxes to comply with the City Covenants, the City will comply with the City Covenants either by providing for early retention of real estate taxes or by making cash payments into the Fund. The principal of and interest on the Bonds will be paid from the Fund until the Act terminates, and thereafter from a separate fund maintained in accordance with the City Covenants. Since its inception in 1978, the Fund has been fully funded at the beginning of each payment period.

If the Control Board determines that retentions in the Fund are likely to be insufficient to provide for the debt service payable therefrom, it must require that additional real estate tax revenues be retained or other cash resources of the City be paid into the Fund. In addition, the Control Board is required to take such action as it determines to be necessary so that the money in the Fund is adequate to meet debt service requirements. For information regarding the termination date of the Act, see "SECTION III: GOVERNMENT AND FINANCIAL CONTROLS—City Financial Management, Budgeting and Controls—*Financial Emergency Act and City Charter*."

Enforceability of City Obligations

As required by the State Constitution and applicable law, the City pledges its faith and credit for the payment of the principal of and interest on all City indebtedness. Holders of City debt obligations have a contractual right to full payment of principal and interest when due. If the City fails to pay principal or interest, the holder has the right to sue and is entitled to the full amount due, including interest to maturity at the stated rate and at the rate authorized by law thereafter until payment. Under the New York General Municipal Law, if the City fails to pay any money judgment, it is the duty of the City to assess, levy and cause to be collected amounts sufficient to pay the judgment. Decisions indicate that judicial enforcement of statutes such as this provision in the New York General Municipal Law is within the discretion of a court. Other judicial decisions also indicate that a money judgment against a municipality may not be enforceable against municipal property devoted to public use.

The rights of the owners of Bonds to receive interest, principal and applicable redemption premium, if any, from the City could be adversely affected by a restructuring of the City's debt under Chapter 9 of the Federal

Bankruptcy Code. No assurance can be given that any priority of holders of City securities (including the Bonds) to payment from money retained in the Fund or from other sources would be recognized if a petition were filed by or on behalf of the City under the Federal Bankruptcy Code or pursuant to other subsequently enacted laws relating to creditors' rights; such money might then be available for the payment of all City creditors generally. Judicial enforcement of the City's obligation to make payments into the Fund, of the obligation to retain money in the Fund, of the rights of holders of bonds and notes of the City to money in the Fund, of the obligations of the City under the City Covenants and of the State under the State Pledge and Agreement (in each case, as defined in "—Certain Covenants and Agreements") may be within the discretion of a court. For further information concerning rights of owners of Bonds against the City, see "SECTION VIII: INDEBTEDNESS—Indebtedness of the City and Certain Other Entities."

Certain Covenants and Agreements

The City will covenant that: (i) a separate fund or funds for the purpose of paying principal of and interest on bonds and interest on notes of the City (including required payments into, but not from, City sinking funds) shall be maintained by an officer or agency of the State or by a bank or trust company; and (ii) not later than the last day of each month, there shall be on deposit in a separate fund or funds an amount sufficient to pay principal of and interest on bonds and interest on notes of the City due and payable in the next succeeding month. The City currently uses the debt service payment mechanism described above to perform these covenants. The City will further covenant in the Bonds to provide a general reserve for each fiscal year to cover potential reductions in its projected revenues or increases in its projected expenditures during each such fiscal year, to comply with the financial reporting requirements of the Act, as in effect from time to time and to limit its issuance of bond anticipation notes and tax anticipation notes as required by the Act, as in effect from time to time, and to include as terms of the Bonds the applicable multi-modal provisions and to comply with such provisions and with the statutory restrictions on multi-modal rate bonds in effect from time to time.

The State pledges and agrees in the Financial Emergency Act that the State will not take any action that will impair the power of the City to comply with the covenants described in the preceding paragraph (the "City Covenants") or any right or remedy of any owner of the Bonds to enforce the City Covenants (the "State Pledge and Agreement"). The City will covenant to make continuing disclosure with respect to the Bonds (the "Undertaking") to the extent summarized in "SECTION X: OTHER INFORMATION—Continuing Disclosure Undertaking." In the opinion of Co-Bond Counsel, the enforceability of the City Covenants, the Undertaking and the State Pledge and Agreement may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted and may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases. The City Covenants, the Undertaking and the State Pledge and Agreement shall be of no force and effect with respect to any Bond if there is a deposit in trust with a bank or trust company of sufficient cash or equivalents to pay when due all principal of, applicable redemption premium, if any, and interest on such Bond.

Use of Proceeds

The proceeds of the Bonds will be used for capital purposes and for the payment of certain costs of issuance.

Optional Par Redemption and Mandatory Tender of Tax-Exempt Bonds

The Tax-Exempt Bonds maturing on or before August 1, 2029 are not subject to optional redemption or mandatory tender prior to their stated maturity dates.

The Tax-Exempt Bonds maturing after August 1, 2029 are subject to redemption or mandatory tender, at the option of the City, in whole or in part, on any date on or after August 1, 2029 (the "Call Date") upon 30 days' notice, at a price of 100% of their principal amount plus accrued interest to the Call Date.

Any Tax-Exempt Bonds that are subject to optional redemption or mandatory tender and are escrowed to maturity will remain subject to optional redemption or mandatory tender by the City.

Make-Whole Optional Redemption and Mandatory Tender of Subseries A-2 Bonds

Make-Whole Optional Redemption and Mandatory Tender. The Subseries A-2 Bonds are subject to redemption or mandatory tender at the option of the City, in whole or in part, on any date, at a redemption price equal to the greater of:

(a) the issue price set forth on the inside cover page hereof (but not less than 100%) of the principal amount of such Subseries A-2 Bonds to be redeemed or tendered; or

(b) the sum of the present value of the remaining scheduled payments of principal and interest to the maturity date of such Subseries A-2 Bonds to be redeemed or tendered, not including any portion of those payments of interest accrued and unpaid as of the date on which such Subseries A-2 Bonds are to be redeemed or tendered, discounted to the date on which such Subseries A-2 Bonds are to be redeemed or tendered on a semi-annual basis, assuming a 360-day year consisting of twelve 30-day months, at the Treasury Rate plus 10 basis points;

plus in each case accrued interest to the redemption or tender date.

"Treasury Rate" means, with respect to any redemption or tender date for a particular Subseries A-2 Bond, the yield to maturity as of such redemption or tender date of United States Treasury securities with a constant maturity (as compiled and published in the Federal Reserve Statistical Release H.15 (519) that has become publicly available at least two Business Days, but not more than 45 calendar days, prior to the redemption or tender date (excluding inflation indexed securities) (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption or tender date to the maturity date of the Subseries A-2 Bond to be redeemed.

Any Subseries A-2 Bonds that are subject to optional redemption or mandatory tender and are escrowed to maturity will remain subject to optional redemption or mandatory tender by the City.

Par and Make-Whole Optional Redemption and Mandatory Tender of Subseries A-3 Bonds

Par Optional Redemption and Mandatory Tender. The Subseries A-3 Bonds are subject to redemption or mandatory tender at the option of the City, in whole or in part, on any date on or after August 1, 2029 at par, plus accrued interest to the date of redemption or tender.

Make-Whole Optional Redemption and Mandatory Tender. The Subseries A-3 Bonds are also subject to redemption or mandatory tender at the option of the City, in whole or in part, on any date, at a redemption price equal to the greater of:

(a) the issue price set forth on the inside cover page hereof (but not less than 100%) of the principal amount of such Subseries A-3 Bonds to be redeemed or tendered; or

(b) the sum of the present value of the remaining scheduled payments of principal and interest to the maturity date of such Subseries A-3 Bonds to be redeemed or tendered, not including any portion of those payments of interest accrued and unpaid as of the date on which such Subseries A-3 Bonds are to be redeemed or tendered, discounted to the date on which such Subseries A-3 Bonds are to be redeemed or tendered on a semi-annual basis, assuming a 360-day year consisting of twelve 30-day months, at the Treasury Rate plus 25 basis points;

plus in each case accrued interest to the redemption or tender date.

"Treasury Rate" means, with respect to any redemption or tender date for a particular Subseries A-3 Bond, the yield to maturity as of such redemption or tender date of United States Treasury securities with a constant maturity (as compiled and published in the Federal Reserve Statistical Release H.15 (519) that has become publicly available at least two Business Days, but not more than 45 calendar days, prior to the redemption or tender date (excluding inflation indexed securities) (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption or tender date to the maturity date of the Subseries A-3 Bond to be redeemed or tendered.

Any Subseries A-3 Bonds that are subject to optional redemption or mandatory tender and are escrowed to maturity will remain subject to optional redemption or mandatory tender by the City.

Tender of Multi-Modal Bonds in the Fixed Rate Mode

The Bonds are being offered as multi-modal bonds in the Fixed Rate Mode. The City may cause a mandatory tender of the Bonds at the applicable optional redemption price on any date such Bonds are subject to optional redemption by giving 30 days' written notice to the Holders, subject to the City's providing a source of payment therefor in accordance with law. If notice of mandatory tender has been given and funds prove insufficient, the Bonds not purchased shall continue in the Fixed Rate Mode, without change in interest rate, maturity date or other terms. Other modes to which the Bonds may be converted following a mandatory tender are not described in this Official Statement.

Notice of Redemption or Tender; Selection of Bonds to be Redeemed or Tendered

On or after any redemption date or successful tender date, interest will cease to accrue on the Bonds called for redemption or successfully tendered.

The particular series, maturities, amounts and interest rates of the Bonds to be redeemed or called for mandatory tender at the option of the City will be determined by the City in its sole discretion.

Notice of redemption or tender will be given by mail to the Holders of the Bonds to be redeemed or tendered not less than 30 days prior to the date set for redemption or tender. Failure by a particular Holder to receive notice, or any defect in the notice to such Holder, will not affect the redemption or purchase of any other Bond.

If less than all of the Bonds of a series and maturity, amount and interest rate are called for prior redemption or tender, such Bonds will be selected for redemption or tender, in accordance with DTC procedures, by lot.

Book-Entry Only System

The Depository Trust Company ("DTC"), New York, New York, acts as securities depository for the Bonds. Reference to the Bonds under this caption "Book-Entry Only System" shall mean all Bonds held through DTC. The Bonds will be issued as fully-registered bonds 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 Bonds of a series or subseries, each in the aggregate principal amount of such maturity, and will be deposited with DTC. Purchasers may own beneficial interests in the Bonds through DTC, Clearstream Banking, S.A. ("Clearstream") or Euroclear Bank S.A./N.V. as operator of the Euroclear System ("Euroclear").

DTC 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, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("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, thereby eliminating 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 ("Indirect Participants"). The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond (under this caption, "Book-Entry Only System," a "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, but Beneficial Owners are 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 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 the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct 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.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Bonds unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an omnibus proxy (the "Omnibus Proxy") to the City 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 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

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

Payment of redemption proceeds and principal and interest on the 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 the City or its Fiscal Agent, The Bank of New York Mellon, on the payment 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 Fiscal Agent, or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds and principal and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Fiscal Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

The services of DTC as securities depository with respect to the Bonds of a series or subseries may be discontinued at any time by giving reasonable notice to the City or the Fiscal Agent. Under such circumstances, in the event that a successor securities depository is not obtained, Bond certificates of such series or subseries will be printed and delivered.

No assurance can be given by the City that DTC will make prompt transfer of payments to the Participants or that Participants will make prompt transfer of payments to Beneficial Owners. The City is not responsible or liable for payment by DTC or Participants or for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or Participants.

For every transfer and exchange of the Bonds, the Beneficial Owners may be charged a sum sufficient to cover any tax, fee or other charge that may be imposed in relation thereto.

Unless otherwise noted, certain of the information contained under this caption “Book-Entry Only System” has been extracted from information furnished by DTC. None of the City, the Underwriters or the Original Purchasers 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 hereof.

Global Clearance Procedures

Euroclear and Clearstream. Euroclear and Clearstream have advised the City as follows:

Euroclear and Clearstream each hold securities for their customers and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream also deal with domestic securities markets in several countries through established depositary and custodial relationships. Euroclear and Clearstream have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream customers are worldwide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system, either directly or indirectly.

Clearing and Settlement Procedures. The Bonds sold in offshore transactions will be initially issued to investors through the book-entry facilities of DTC, or Clearstream and Euroclear in Europe if the investors are participants in those systems, or indirectly through organizations that are participants in the systems. For any of such Bonds, the record holder will be DTC’s nominee. Clearstream and Euroclear will hold omnibus positions on behalf of their participants through customers’ securities accounts in Clearstream’s and Euroclear’s names on the books of their respective depositories.

The depositories, in turn, will hold positions in customers’ securities accounts in the depositories’ names on the books of DTC. Because of time zone differences, the securities account of a Clearstream or Euroclear participant as a result of a transaction with a participant, other than a depository holding on behalf of Clearstream or Euroclear, will be credited during the securities settlement processing day, which must be a business day for Clearstream or Euroclear, as the case may be, immediately following the DTC settlement date. These credits or any transactions in the securities settled during the processing will be reported to the relevant Euroclear participant or Clearstream participant on that business day. Cash received in Clearstream or Euroclear as a result of sales of securities by or through a Clearstream participant or Euroclear participant to a DTC Participant, other than the depository for Clearstream or Euroclear, will be received with value on the DTC settlement date but will be available in the relevant Clearstream or Euroclear cash account only as of the business day following settlement in DTC.

Transfers between participants will occur in accordance with DTC rules. Transfers between Clearstream participants or Euroclear participants will occur in accordance with their respective rules and operating procedures. Cross-market transfers between persons holding directly or indirectly through DTC, on the one hand, and directly or indirectly through Clearstream participants or Euroclear participants, on the other, will be effected in DTC in accordance with DTC rules on behalf of the relevant European international clearing system by the relevant depositories; however, cross-market transactions will require delivery of instructions to the relevant European international clearing system by the counterparty in the system in accordance with its rules and procedures and within its established deadlines in European time. The relevant European international clearing system will, if the transaction meets its settlement requirements, deliver instructions to its depository to take action to effect final settlement on its behalf by delivering or receiving securities in DTC, and making or receiving payment in accordance with normal procedures for same day funds settlement applicable to DTC. Clearstream participants or Euroclear participants may not deliver instructions directly to the depositories.

The City will not impose any fees in respect of holding the Bonds; however, holders of book-entry interests in the Bonds may incur fees normally payable in respect of the maintenance and operation of accounts in the DTC, Euroclear and Clearstream.

Initial Settlement. Interests in the Bonds will be in uncertified book-entry form. Purchasers electing to hold book-entry interests in the Bonds through Euroclear and Clearstream accounts will follow the settlement procedures applicable to conventional Eurobonds. Book-entry interests in the Bonds will be credited to Euroclear and Clearstream participants' securities clearance accounts on the business day following the date of delivery of the Bonds against payment (value as on the date of delivery of the Bonds). DTC participants acting on behalf of purchasers electing to hold book-entry interests in the Bonds through DTC will follow the delivery practices applicable to securities eligible for DTC's Same Day Funds Settlement system. DTC participants' securities accounts will be credited with book-entry interests in the Bonds following confirmation of receipt of payment to the City on the date of delivery of the Bonds.

Secondary Market Trading. Secondary market trades in the Bonds will be settled by transfer of title to book-entry interests in Euroclear, Clearstream or DTC, as the case may be. Title to such book-entry interests will pass by registration of the transfer within the records of Euroclear, Clearstream or DTC, as the case may be, in accordance with their respective procedures. Book-entry interests in the Bonds may be transferred within Euroclear and within Clearstream and between Euroclear and Clearstream in accordance with procedures established for these purposes by Euroclear and Clearstream. Book-entry interests in the Bonds may be transferred within DTC in accordance with procedures established for this purpose by DTC. Transfer of book-entry interests in the Bonds between Euroclear or Clearstream and DTC may be effected in accordance with procedures established for this purpose by Euroclear, Clearstream and DTC.

Special Timing Considerations. Investors should be aware that investors will only be able to make and receive deliveries, payments and other communications involving the Bonds through Euroclear or Clearstream on days when those systems are open for business. In addition, because of time-zone differences, there may be complications with completing transactions involving Clearstream and/or Euroclear on the same business day as in the United States. U.S. investors who wish to transfer their interests in the Bonds, or to receive or make a payment or delivery of Bonds, on a particular day, may find that the transactions will not be performed until the next business day in Luxembourg if Clearstream is used, or Brussels if Euroclear is used.

General. Neither Euroclear or Clearstream is under any obligation to perform or continue to perform the procedures referred to above, and such procedures may be discontinued at any time.

Neither the City nor any of its agents will have any responsibility for the performance by Euroclear or Clearstream or their respective direct or indirect participants or account holders of their respective obligations under the rules and procedures governing their operations or the arrangements referred to above.

The information in this subsection concerning DTC, Euroclear and Clearstream has been obtained from sources that the City, the Underwriters and the Original Purchasers believe to be reliable, but none of the City or the Original Purchaser take any responsibility for the accuracy thereof or 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 hereof.

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.* Jumaane Williams was elected as Public Advocate in a special election and took office in March 2019 to hold office until December 31, 2019. A special election for the next Public Advocate for the remainder of the four-year term will be held in November 2019. 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 2018 fiscal year, which includes, among other things, the City's financial statements for the 2018 and 2017 fiscal years, was issued on October 30, 2018. The CAFR for the 2018 fiscal year received the Government Finance Officers Association award of the Certificate of Achievement for Excellence in Financial Reporting, the thirty-ninth 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-eight 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 intends to seek legislation to eliminate the budgetary impact of GASB 84 and is preparing to implement GASB 84 with respect to 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 May 31, 2019, aggregate pension assets were allocated approximately as follows: 29% U.S. equity; 27% fixed income; 19% international equity; 10% alternative credit; 6% private equity; 5% 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 the 2003 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 latest termination date of the Act was July 1, 2008.

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 July 1, 2008. The State Legislature did not amend this provision. Therefore, under current law, although the Act continues in effect, no Control Period may be imposed.

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 2018, while federal aid has been sharply reduced. The City projects that local revenues will provide approximately 74.0% of total revenues in the 2019 fiscal year, while federal aid, including categorical grants, will provide 9.4%, 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 45.2% of its total tax revenues and 29.7% of its total revenues for the 2019 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—2014-2018 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 valuation is based on the special equalization ratios (discussed below) and the billable assessed valuation. Special equalization ratios and full valuations are revised periodically as a result of surveys by the State Office of Real Property Tax Services.

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 2020 fiscal year operating limit and general debt limit, have been established by the State Office and include the results of the fiscal year 2018 market value survey.

BILLABLE ASSESSED AND FULL VALUE OF TAXABLE REAL ESTATE(1)

Fiscal Year	Billable Assessed Valuation of Taxable Real Estate(2)	÷	Special Equalization Ratio	=	Full Valuation(2)
2016	$196,710,908,548		0.2005		$ 981,101,788,269
2017	210,130,499,481		0.1981		1,060,729,426,961
2018	225,863,036,909		0.1937		1,166,045,621,626
2019	240,777,862,121		0.1959		1,229,085,564,681
2020	257,509,634,870		0.1871		1,376,320,870,497
				Average:	$1,162,656,654,407

(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 most recent fiscal year for which such categorical data are available), the billable assessed value of all real estate (taxable and exempt) was $382.4 billion, comprised of $134.2 billion of fully exempt real estate, $73.9 billion of partially taxable real estate (including both taxable and exempt real estate) and $174.3 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 2020 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.

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 2019, 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 2020 tax rates were set on June 19, 2019 and reflect a 5% limitation on the market value adjustment for 2019. The average tax rate for fiscal year 2020 was maintained at $12.28 per $100 of assessed value. For fiscal year 2020, at the request of the City, the State limited the maximum rate of increase to 0%. The tax rates will be amended and revised property tax bills with the new tax rates for fiscal year 2020 will be sent to taxpayers in November 2019.

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—COMPREHENSIVE ANNUAL FINANCIAL REPORT—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, rose to $182.5 billion, $195.2 billion, $208.6 billion, $224.5 billion and $239.7 billion for fiscal years 2015 through 2019, respectively. The Department of Finance released the final roll for fiscal year 2020 on May 28, 2019 reflecting a billable assessed value of $256.6 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 5.2%, 4.0% and 3.0% in fiscal years 2021 through 2023, 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 7% 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 three-year 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 2015 through 2018, the City's tax lien program resulted in net proceeds of approximately $96.0 million, $80 million, $95.5 million and $101.1 million, respectively. The Financial Plan reflects receipt of $50 million and $110.9 million in fiscal years 2019 and 2020, respectively, from the tax lien program.

REAL ESTATE TAX COLLECTIONS AND DELINQUENCIES

Fiscal Year	Tax Levy(1)	Tax Collections on Current Year Levy	Tax Collections as a Percentage of Tax Levy	Prior Year (Delinquent Tax) 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)					
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	27,726.2	26,166.0	94.4	324.0	(372.2)	(1,219.2)	(341.0)	1.23	101.1
2019(2)	29,574.7	27,784.9	93.9	310.0	(400.0)	(1,397.9)	(391.9)	1.33	50.0
2020(2)	31,629.8	29,585.0	93.5	320.0	(400.0)	(1,492.1)	(552.7)	1.75	110.9

(1) As approved by the City Council.

(2) Forecast.

Other Taxes

The City expects to derive 54.8% of its total tax revenues for the 2019 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 2018 fiscal year increased by $2.91 billion from the 2017 fiscal year. The following table sets forth, by category, revenues from taxes, other than the real estate tax, for each of the City's 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018
			(In Millions)		
Personal Income(1)	$10,152	$11,264	$11,340	$11,230	$13,372
General Corporation	2,766	2,873	3,354	3,527	3,454
Banking Corporation(2)	1,227	1,214	268	(82)	(17)
Unincorporated Business Income	1,882	1,962	2,040	2,005	2,182
Sales(3)	6,494	6,742	6,911	7,017	7,443
Commercial Rent	710	735	779	816	853
Real Property Transfer	1,527	1,765	1,775	1,415	1,388
Mortgage Recording	961	1,155	1,234	1,118	1,050
Utility	405	384	354	371	371
Cigarette	54	50	45	37	36
Hotel	536	556	565	579	597
All Other(4)	548	591	614	654	630
Audits	911	1,132	1,161	1,296	1,337
Total	$28,173	$30,423	$30,440	$29,983	$32,696

Note: Totals may not add due to rounding.

(1) Personal Income includes the personal income tax revenues of $1.641 billion, $556 million, $180 million, $297 million and $181 million in fiscal years 2014 through 2018, 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 2014 through 2017, Personal Income includes $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 years 2017 and 2018, the amount refunded exceeded the gross receipts resulting in net negative revenues for such fiscal years.

(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 $838 million, $835 million, $814 million, $370 million and $189 million in fiscal years 2014 through 2018, respectively.

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 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018
			(In Millions)		
Licenses, Permits and Franchises	$ 648	$ 703	$ 728	$ 770	$ 776
Interest Income	16	30	79	73	125
Charges for Services	951	974	1,001	1,033	1,027
Water and Sewer Payments	1,491	1,439	1,297	1,385	1,390
Rental Income	311	284	279	253	261
Fines and Forfeitures	892	959	995	985	1,027
Other	1,313	1,828	725	565	413
Total	$5,622	$6,217	$5,104	$5,064	$5,019

Note: Totals may not add due to rounding.

Rental income in fiscal years 2014 through 2018 includes approximately $128.5 million, $128.5 million, $128.5 million, $144.5 million and $153.6 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 2014 through 2018 include $132.5 million, $113.4 million, $229 million, $100.3 million and $108.7 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 2014 through 2018 do not include TSRs retained by TSASC for debt service and operating expenses totaling $79 million, $68 million, $137 million, $60 million and $65 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: INDEBTEDNESS—Indebtedness 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. Other miscellaneous revenues for fiscal year 2018 include $39 million from affordable housing development fees.

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 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018
			(In Millions)		
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 I: 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 August 1, 2018, the United States Court of Appeals for the Ninth Circuit held this provision of the executive order unconstitutional. The Ninth Circuit vacated a nationwide permanent injunction enjoining enforcement of this provision entered by the District Court for the Northern District of California because the record before the court entitled the plaintiffs to an injunction as to the executive order's effect in California only.

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 additional conditions related to immigration enforcement. 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. In October 2018, the Justice Department approved the City's fiscal year 2017 application for the grant. The City accepted the award, which was made available to the City in February 2019. In November 2018, the United States District Court for the Southern District of New York ruled that the Justice Department did not have lawful authority to impose these conditions and enjoined it from enforcing the conditions on the City's fiscal year 2017 grant. This decision is now on appeal at the Second Circuit. The City has not yet received a determination from the Justice Department on its fiscal year 2018 application, and is also awaiting a decision from the United States District Court for the Southern District of New York on the Justice Department's authority to impose the conditions on the fiscal year 2018 grant.

The following table sets forth amounts of federal and State categorical grants received by the City for each of the City's 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018
			(In Millions)		
Federal(1)					
Community Development(2)	$ 337	$ 537	$ 780	$ 1,108	$ 1,081
Social Services	3,206	3,076	3,225	3,454	3,362
Education	1,672	1,677	1,698	1,709	1,786
Other(3)	1,747	1,692	1,691	1,656	1,737
Total	$ 6,962	$ 6,982	$ 7,394	$ 7,927	$ 7,966
State					
Social Services	$ 1,415	$ 1,410	$ 1,490	$ 1,709	$ 1,611
Education	7,907	9,131	9,612	10,250	10,710
Higher Education	221	227	239	248	255
Health and Mental Health	454	364	535	573	535
Other	919	965	1,126	1,210	1,342
Total	$10,916	$12,097	$13,002	$13,990	$14,453

(1) Federal funding includes amounts received under the American Recovery and Reinvestment Act of $296 million, $230 million, $203 million, $199.8 million and $198 million in fiscal years 2014 through 2018, 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 $145.5 million, $338.7 million, $669.4 million, $874.8 million and $884.4 million in fiscal years 2014 through 2018, respectively, in disaster recovery funding for storm damage remediation as a result of Superstorm Sandy.

(3) Other includes $154.4 million, $48.0 million, $74.5 million, $51.7 million and $20.1 million in fiscal years 2014 through 2018, 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—2014-2018 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 2019 through 2023 fiscal years. Actual enrollment in fiscal years 2014 through 2018 has been 1,062,275, 1,073,445, 1,081,324, 1,086,672 and 1,082,555, 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 43.2% of the costs of the Community Colleges in the 2019 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—*Expenditure Assumptions*—2. OTHER THAN PERSONAL SERVICES COSTS— *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, 2018, 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 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018
Education	134,426	137,078	141,311	144,740	146,134
Police	50,565	50,851	51,929	52,976	53,755
Social Services, Homeless and Children's Services	21,341	21,639	21,805	22,047	22,003
City University Community Colleges and Hunter Campus Schools	8,633	8,749	8,979	9,184	9,414
Environmental Protection and Sanitation	14,890	15,258	15,710	16,000	16,152
Fire	15,565	16,301	16,845	17,463	17,228
All Other	51,929	53,527	56,513	59,997	60,983
Total	297,349	303,403	313,092	322,407	325,669

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 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018
Transit Authority	46,271	46,862	47,354	48,495	49,415
Housing Authority	11,311	11,251	10,796	10,737	10,491
NYCHH	35,554	36,691	37,650	36,213	35,484
Total(1)	93,136	94,804	95,800	95,445	95,390

(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 fact-finding 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 25, 2019, the City published the Ten-Year Capital Strategy for fiscal years 2020 through 2029. The Ten-Year Capital Strategy totals $116.9 billion, of which approximately 95% 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) $24.8 billion to construct new schools and improve existing educational facilities, including CUNY; (ii) $20.1 billion for improvements to the water and sewer system; (iii) $12.8 billion for expanding and upgrading the City's housing stock; (iv) $6.6 billion for reconstruction or resurfacing of City streets; (v) $509.8 million for continued City-funded investment in mass transit; (vi) $8.3 billion for the continued reconstruction and rehabilitation of all four East River bridges and 108 other bridge structures; (vii) $10.0 billion to expand current jail capacity; and (viii) $2.0 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 $42.3 billion during the 2014 through 2018 fiscal years. City-funded expenditures, which totaled $36.4 billion during the 2014 through 2018 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 2014 through 2018 fiscal years.

	2014	2015	2016	2017	2018	Total
			(In Millions)			
Education	$2,107	$2,631	$2,475	$2,706	$2,353	$12,272
Environmental Protection	1,578	1,373	1,378	1,454	1,688	7,471
Transportation	902	758	1,032	1,139	1,461	5,292
Transit Authority(1)	36	115	231	91	55	528
Housing	428	561	753	950	1,412	4,104
Hospitals	197	136	104	130	217	784
Sanitation	264	246	324	324	290	1,448
All Other(2)	2,391	2,016	1,784	2,032	2,164	10,386
Total Expenditures(3)	$7,903	$7,836	$8,080	$8,826	$9,640	$42,285
City-funded Expenditures(4)	$7,468	$5,949	$6,676	$7,444	$8,887	$36,424

(1) Excludes the Transit Authority's non-City portion of the MTA capital program.

(2) All Other includes, among other things, parks, correction facilities, public structures and equipment.

(3) Total Expenditures for the 2014 through 2018 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 CAFR for the fiscal year ended June 30, 2018 is included by specific reference in this Official Statement as "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT." The CAFR for the fiscal year ended June 30, 2018 is available for inspection at the Office of the City Comptroller and at https://comptroller.nyc.gov/reports/comprehensive-annual-financial-reports/ and is available on EMMA (as defined herein) (https://emma.msrb.org). For a summary of the City's significant accounting policies, see "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT—Notes to Financial Statements—Note A." For a summary of the City's operating results for the previous five fiscal years, see "2014-2018 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.

2014-2018 Summary of Operations

The following table sets forth the City's results of operations for its 2014 through 2018 fiscal years in accordance with GAAP.

The information regarding the 2014 through 2018 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 2017 and 2018 financial statements included in "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT." The 2014 through 2016 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				
	2014	2015	2016	2017	2018
	(In Millions)				
Revenues and Transfers					
Real Estate Tax(2)	$20,202	$21,518	$23,181	$24,679	$26,408
Other Taxes(3)(4)	28,173	30,423	30,440	29,983	32,696
Miscellaneous Revenues(3)	5,622	6,216	5,104	5,064	5,019
Other Categorical Grants	1,023	908	861	1,208	1,255
Unrestricted Federal and State Aid	1	1	6	59	—
Federal Categorical Grants	6,962	6,982	7,394	7,927	7,966
State Categorical Grants	10,916	12,097	13,002	13,990	14,453
Disallowances Against Categorical Grants	(18)	(110)	(1)	558	139
Total Revenues and Transfers(5)	$72,881	$78,035	$79,987	$83,468	$87,936
Expenditures and Transfers					
Social Services	$13,473	$13,844	$13,801	$14,485	$15,208
Board of Education	18,672	20,458	21,974	23,318	25,026
City University	853	904	956	1,067	1,087
Public Safety and Judicial	8,472	8,827	9,326	9,694	10,024
Health Services	1,622	1,708	2,667	2,233	2,401
Pensions(6)	8,141	8,490	9,171	9,281	9,513
Debt Service(3)(7)	4,798	7,421	5,874	5,890	6,673
All Other(8)	16,845	16,378	16,213	17,495	17,999
Total Expenditures and Transfers(5)	$72,876	$78,030	$79,982	$83,463	$87,931
Surplus(9)	$ 5	$ 5	$ 5	$ 5	$ 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—COMPREHENSIVE ANNUAL FINANCIAL REPORT—Notes to Financial Statements—Note A."

(2) In fiscal years 2014 through 2018, Real Estate Tax includes $224.6 million, $201 million, $207 million, $204 million and $188.7 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 $1.641 billion, $556 million, $180 million, $297 million and $181 million in fiscal years 2014 through 2018, respectively. Debt Service includes as a debt service expense the funding requirements associated with TFA Future Tax Secured Bonds of $1.641 billion, $556 million, $180 million, $297 million and $181 million in fiscal years 2014 through 2018, 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 $621 million, $1.976 billion, $1.760 billion, $1.560 billion and $1.902 billion into the General Debt Service Fund in fiscal years 2014 through 2018, respectively, and grants from the City to the TFA of $1.362 billion, $1.578 billion, $1.734 billion, $1.909 billion and $2.174 billion in fiscal years 2014 through 2018, 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, $100 million and $100 million in fiscal years 2015, 2016, 2017 and 2018, respectively.

(9) Surplus is the surplus after discretionary and other transfers and expenditures. The City had general fund operating revenues exceeding expenditures of $2.011 billion, $3.606 billion, $4.043 billion, $4.185 billion and $4.581 billion before discretionary and other transfers and expenditures for the 2014 through 2018 fiscal years, respectively. Discretionary and other transfers are included in Debt Service and All Other.

Forecast of 2019 Results

The following table compares the forecast for the 2019 fiscal year contained in the financial plan, submitted to the Control Board in June 2018 (the "June 2018 Forecast"), with the forecast contained in the Financial Plan, which was submitted to the Control Board on June 19, 2019 (the "June 2019 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 I: RECENT FINANCIAL DEVELOPMENTS."

	June 2018 Forecast	June 2019 Forecast	Increase/(Decrease) from June 2018 Forecast
		(In Millions)	
REVENUES			
Taxes			
General Property Tax	$27,789	$27,745	$ (44)
Other Taxes	31,231	32,521	1,290[(1)]
Tax Audit Revenues	1,056	1,058	2
Subtotal – Taxes	$60,076	$61,324	$ 1,248
Miscellaneous Revenues	6,792	8,157	1,365[(2)]
Unrestricted Intergovernmental Aid	—	201	201
Less: Intra-City Revenue	(1,825)	(2,261)	(436)
Disallowances Against Categorical Grants	(15)	91	106
Subtotal – City Funds	$65,028	$67,512	$ 2,484
Other Categorical Grants	880	1,212	332[(3)]
Inter-Fund Revenues	682	651	(31)
Federal Categorical Grants	7,592	8,563	971[(4)]
State Categorical Grants	14,976	15,496	520[(5)]
Total Revenues	$89,158	$93,434	$ 4,276
EXPENDITURES			
Personal Services			
Salaries and Wages	$28,746	$29,051	$ 305[(6)]
Pensions	9,852	9,945	93
Fringe Benefits	10,737	10,582	(155)
Retiree Health Benefits Trust	—	100	100[(7)]
Subtotal – Personal Services	$49,335	$49,678	$ 343
Other Than Personal Services			
Medical Assistance	5,915	5,915	—
Public Assistance	1,605	1,595	(10)
All Other	30,342	32,407	2,065[(8)]
Subtotal – Other Than Personal Services	$37,862	$39,917	$ 2,055
Debt Service	6,987	6,435	(552)[(9)]
FY 2018 Budget Stabilization	(4,576)	(4,576)	—
FY 2019 Budget Stabilization	—	4,221	4,221[(10)]
Capital Stabilization Reserve	250	—	(250)[(11)]
General Reserve	1,125	20	(1,105)
Less: Intra-City Revenue	(1,825)	(2,261)	(436)
Net Total Expenditures	$89,158	$93,434	$ 4,276

(Footnotes on next page)

(Footnotes from previous page)

---

(1) The increase in Other Taxes is due to increases of $854 million in personal income taxes, $433 million in general corporation tax, $127 million in mortgage recording tax, $75 million in sales tax, $47 million in real property transfer tax, $21 million in hotel tax and $20 million in commercial rent tax, $64 million in all other taxes, offset by decreases of $274 million in unincorporated business tax, $60 million in banking corporation tax, $9 million in utility tax, $4 million in cigarette tax and $4 million in STAR Program aid.

(2) The increase in Miscellaneous Revenues is due to increases of $615 million in miscellaneous and other revenues, $137 million in fines and forfeitures, $70 million in permit revenues, $25 million in franchises, $23 million in interest income, $22 million in license fees, $18 million in rental charges, $14 million for charges for services, $5 million in water and sewer charges and $436 million in intra-city revenues.

(3) The increase in Other Categorical Grants is due to increases of $219 million in miscellaneous agency funding, $33 million in education funding, $31 million in health and mental hygiene funding, $21 million in parks department funding, $17 million in police funding, $14 million is housing preservation and development funding, $11 million in environmental protection funding, $10 million in information technology and telecommunications department funding and $36 million in other agencies funding offset by decreases of $27 million in fire department funding and $33 million in debt service funding.

(4) The increase in Federal Categorical Grants is due to increases of $420 million in community development funding, primarily disaster recovery funding, $185 million in children services funding, $171 million in police funding, $76 million in fire department funding, $61 million in social services funding, $49 million is housing preservation and development funding, $47 million in health and mental hygiene funding, $32 million in youth and community development funding, $24 million in transportation funding, $23 million in small business services funding, $15 million in emergency management services funding, $12 million in mayoral agency funding, $11 million in department of investigations funding and $30 million in other agencies funding offset by decreases of $97 million in education funding and $88 million in homeless services funding.

(5) The increase in State Categorical Grants is due to increases of $94 million in education funding, $83 million in children services funding, $80 million in miscellaneous agency funding, $77 million in health and mental hygiene funding, $76 million in social services funding, $64 million in police funding, $16 million in district attorney funding, and $30 million in other agencies funding.

(6) The increase in Salaries and Wages is primarily due to increased costs associated with collective bargaining settlements with City employees.

(7) The increase in fiscal year 2019 Retiree Health Benefits Trust reflects a contribution of an additional $100 million into the Retiree Health Benefits Trust in fiscal year 2019.

(8) The increase in Other Than Personal Services—All Other is primarily due to an increase of $1.594 billion in budget modifications reflecting increases in federal and categorical expenditures which are offset by federal and categorical grants, and by an increase of $471 million in net agency spending.

(9) The decrease in General Obligation, Lease and TFA Debt Service is primarily due to debt refinancing transactions and lower actual interest rates on floating rate obligations.

(10) FY 2019 Budget Stabilization reflects the discretionary transfer of $1.702 billion into the General Debt Service Fund, payment of $200 million of subsidies to NYCHH in fiscal year 2019 otherwise due in fiscal year 2020 and a grant of $2.319 billion to the TFA in fiscal year 2019 for debt service due in fiscal year 2020.

(11) The decrease in the Capital Stabilization Reserve reflects the reallocation of such funds from fiscal year 2019 to fiscal year 2020.

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 2019 through 2023 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 I: RECENT FINANCIAL DEVELOPMENTS."

	Fiscal Years(1)(2)				
	2019	2020	2021	2022	2023
			(In Millions)		
REVENUES					
Taxes					
General Property Tax(3)	$27,745	$29,615	$30,909	$32,150	$ 33,110
Other Taxes(4)	32,521	32,807	33,391	34,358	35,289
Tax Audit Revenue	1,058	999	721	721	721
Subtotal – Taxes	$61,324	$63,421	$65,021	$67,229	$ 69,120
Miscellaneous Revenues(5)	8,157	6,957	6,909	6,882	6,876
Unrestricted Intergovernmental Aid	201	—	—	—	—
Less: Intra-City Revenue	(2,261)	(1,820)	(1,817)	(1,815)	(1,814)
Disallowances Against Categorical Grants	91	(15)	(15)	(15)	(15)
Subtotal – City Funds	$67,512	$68,543	$70,098	$72,281	$ 74,167
Other Categorical Grants	1,212	928	870	863	863
Inter-Fund Revenues(6)	651	735	672	672	672
Federal Categorical Grants	8,563	7,228	7,071	6,998	6,967
State Categorical Grants	15,496	15,338	15,710	16,178	16,683
Total Revenues	$93,434	$92,772	$94,421	$96,992	$ 99,352
EXPENDITURES					
Personal Service					
Salaries and Wages	$29,051	$30,041	$30,935	$30,787	$ 31,674
Pensions	9,945	9,963	10,130	10,576	10,632
Fringe Benefits	10,582	11,342	11,854	12,527	13,228
Retiree Health Benefits Trust	100	—	—	—	—
Subtotal – Personal Service	$49,678	$51,346	$52,919	$53,890	$ 55,534
Other Than Personal Service					
Medical Assistance	5,915	5,915	5,915	5,915	5,915
Public Assistance	1,595	1,651	1,651	1,651	1,650
All Other(7)	32,407	31,272	30,476	30,787	31,020
Subtotal – Other Than Personal Service	$39,917	$38,838	$38,042	$38,353	$ 38,585
Debt Service(8)	6,435	7,229	7,548	8,193	8,938
FY 2018 Budget Stabilization & Discretionary Transfers(9)	(4,576)	—	—	—	—
FY 2019 Budget Stabilization(10)	4,221	(4,221)	—	—	—
Capital Stabilization Reserve(11)	—	250	250	250	250
General Reserve	20	1,150	1,000	1,000	1,000
Less: Intra-City Expenses	(2,261)	(1,820)	(1,817)	(1,815)	(1,814)
Total Expenditures	$93,434	$92,772	$97,942	$99,871	$102,493
Gap to be Closed	$ —	$ —	$ (3,521)	$ (2,879)	$ (3,141)

(1) The four year financial plan for the 2020 through 2023 fiscal years, as submitted to the Control Board on June 19, 2019, contained the following projections for the 2020-2023 fiscal years: (i) for 2020, total revenues of $92.772 billion and total expenditures of $92.772 billion; (ii) for 2021, total revenues of $94.421 billion and total expenditures of $97.942 billion, with a gap to be closed of $3.521 billion; (iii) for 2022, total revenues of $96.992 billion and total expenditures of $99.871 billion, with a gap to be closed of $2.879 billion; and (iv) for 2023, total revenues of $99.352 billion and total expenditures of $102.493 billion, with a gap to be closed of $3.141 billion.

(Footnotes on next page)

(Footnotes from previous page)

The four year financial plan for the 2019 through 2022 fiscal years, as submitted to the Control Board on June 14, 2018, contained the following projections for the 2019-2022 fiscal years: (i) for 2019, total revenues of $89.158 billion and total expenditures of $89.158 billion; (ii) for 2020, total revenues of $91.238 billion and total expenditures of $94.498 billion; (iii) for 2021, total revenues of $94.048 billion and total expenditures of $96.973 billion; and (iv) for 2022, total revenues of $96.257 billion and total expenditures of $98.542 billion.

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.

(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—Assumptions—*Revenue 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 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.

(10) FY 2019 Budget Stabilization reflects the discretionary transfer of $1.702 billion into the General Debt Service Fund, payment of $200 million of subsidies to NYCHH in fiscal year 2019 otherwise due in fiscal year 2020 and a grant of $2.319 billion to the TFA in fiscal year 2019 for debt service due in fiscal year 2020.

(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 38 fiscal years, except for the application of GASB 49 with respect to fiscal years 2010 through 2018, and is projected to achieve balanced operating results for the 2019 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 I: 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 I: RECENT FINANCIAL DEVELOPMENTS."

Revenue Assumptions

1. GENERAL ECONOMIC CONDITIONS

The Financial Plan assumes softer growth in economic activity in calendar year 2019 compared to calendar year 2018. The following table presents a forecast of the key economic indicators for the calendar years 2018 through 2023. This forecast is based upon information available in April 2019.

Forecast of Key Economic Indicators

	Calendar Years					
	2018	2019	2020	2021	2022	2023
U.S. Economy						
Economic Activity and Income						
Real GDP (billions of 2012 dollars)	18,571	19,011	19,414	19,759	20,091	20,410
Percent Change	2.9	2.4	2.1	1.8	1.7	1.6
Non-Agricultural Employment (millions)	149.1	151.6	153.1	153.8	154.5	155.1
Percent Change	1.7	1.7	1.0	0.5	0.5	0.4
CPI-All Urban (1982-84=100)	251	256	262	268	274	281
Percent Change	2.4	2.0	2.1	2.3	2.4	2.4
Wage Rate ($ per year)	59,268	60,868	62,916	65,275	67,864	70,602
Percent Change	2.8	2.7	3.4	3.7	4.0	4.0
Personal Income ($ billions)	17,581	18,334	19,147	19,987	20,852	21,719
Percent Change	4.5	4.3	4.4	4.4	4.3	4.2
Pre-Tax Corp Profits ($ billions)	2,173	2,213	2,305	2,407	2,481	2,604
Percent Change	-0.4	1.9	4.1	4.4	3.1	5.0
Unemployment Rate (Percent)	3.9	3.6	3.6	3.8	4.0	4.2
10-year Treasury Bond Rate	2.9	2.8	3.1	3.2	3.3	3.3
Federal Funds Rate	1.8	2.5	2.8	2.9	2.9	2.8
New York City Economy						
Real Gross City Product (billions of 2012 dollars)	864	890	905	915	924	927
Percent Change	4.8	3.0	1.7	1.1	0.9	0.4
Non-Agricultural Employment (thousands)	4,555	4,624	4,690	4,744	4,795	4,842
Percent Change	2.0	1.5	1.4	1.1	1.1	1.0
CPI-All Urban NY-NJ Area (1982-84=100)	274	279	285	291	298	306
Percent Change	1.9	1.8	2.2	2.3	2.4	2.4
Wage Rate ($ per year)	92,893	95,654	98,155	100,598	103,263	105,569
Percent Change	3.4	3.0	2.6	2.5	2.6	2.2
Personal Income	639	662	685	707	730	752
Percent Change	4.6	3.6	3.4	3.3	3.2	3.0
New York City Real Estate Market						
Manhattan Primary Office Market						
Asking Rental Rate ($ per square feet)	78.84	83.70	86.30	89.38	93.32	95.58
Percent Change	-0.26	6.16	3.11	3.57	4.40	2.43
Vacancy Rate – Percent	9.4	10.4	10.5	9.7	11.6	13.0

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 $50 million in fiscal year 2019, $110 million in fiscal year 2020 and $80 million in each of fiscal years 2021 through 2023. Projections of real estate tax revenues include the effects of the STAR Program which will reduce the real estate tax revenues by an estimated $181 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 $581 million, $577 million, $606 million, $631 million and $657 million in fiscal years 2019 through 2023, respectively.

The delinquency rate was 1.4% in fiscal year 2014, 1.6% in fiscal year 2015, 1.4% in fiscal year 2016, 1.3% in fiscal year 2017 and 1.2% in fiscal year 2018. The Financial Plan projects delinquency rates of 1.3% in fiscal year 2019 and 1.8% in each of fiscal years 2020 through 2023. 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.

	2019	2020	2021	2022	2023
			(In Millions)		
Personal Income(1)	$13,232	$13,367	$13,429	$13,856	$14,296
General Corporation	4,026	3,722	3,727	3,790	3,815
Banking Corporation	(60)	—	—	—	—
Unincorporated Business Income	1,997	2,141	2,294	2,352	2,415
Sales(2)	7,837	8,267	8,553	8,852	9,134
Commercial Rent	887	870	894	930	965
Real Property Transfer	1,498	1,486	1,504	1,544	1,586
Mortgage Recording	1,073	958	968	991	1,014
Utility	378	397	410	421	430
Cigarette	31	34	33	32	31
Hotel Tax(3)	627	627	630	643	658
All Other(4)	995	939	949	947	945
Total	$32,521	$32,808	$33,391	$34,358	$35,289

Note: Totals may not add due to rounding.

(1) Personal Income includes $445 million, $691 million, $3.264 billion, $3.604 billion and $3.975 billion of personal income tax revenues projected to be retained by the TFA for debt service and other expenses in the 2019 through 2023 fiscal years, respectively.

(2) Sales tax is net of the payment to the State pursuant to the State 2020 Budget of $150 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 $90 million, $90 million, $92 million, $94 million and $94 million in fiscal years 2019 through 2023, respectively.

(4) All Other includes, among others, beer and liquor taxes and the automobile use tax. All Other also includes $185 million, $182 million, $180 million, $178 million and $176 million in fiscal years 2019 through 2023, respectively, to be provided to the City by the State as reimbursement for the reduced property tax resulting from the STAR Program.

The Financial Plan reflects the following assumptions regarding projected baseline revenues from Other Taxes: (i) with respect to the personal income tax, revenue declines slightly in fiscal year 2019 reflecting a leveling off after high growth in fiscal year 2018 and continued employment and wage gains and slow but steady economic growth in fiscal years 2020 through 2022; (ii) with respect to the business corporation tax, strong growth in fiscal year 2019 supported by healthy levels of corporate profits in part due to additional corporate investments propagated from the Federal business tax cuts, a decline in growth in fiscal year 2020 reflecting a decline in Wall Street profitability and a slowing economy and weak growth for fiscal years 2021 through 2023 reflecting a slowdown in corporate profits; (iii) with respect to the unincorporated business income tax, growth declines in fiscal year 2019 following the strong growth seen the prior year (the result of the repatriation of non-qualified deferred compensation and taxpayer behavior in response to the TCJA), growth rebounds for fiscal year 2020 following the prior year's growth decline and mild growth in fiscal years 2021 through fiscal year 2023 reflecting steady economic growth; (iv) with respect to the sales tax, moderate growth in fiscal year 2019 reflecting employment gains, wage growth and tourist consumption 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., moderate growth continues in fiscal year 2020 reflecting employment gains and wage growth, continued healthy levels of tourist consumption, as well the conclusion of payments of sales tax to the State relating to STAR Corp. (payments to the State concluded in fiscal year 2019) and modest growth in fiscal years 2021 through 2023 reflecting steady economic growth; (v) with respect to real property transfer tax, growth in fiscal year 2019 reflecting strength in large commercial transactions, decline in fiscal year 2020 as the volume of large commercial transactions drops from the high levels seen in the prior fiscal years and growth in fiscal years 2021 through 2023 reflecting steady economic growth; (vi) with respect to mortgage recording tax, growth in fiscal year 2019 mirroring strength in large commercial transaction activity, decline in fiscal year 2020 as the volume of large commercial transactions drops and growth in fiscal years 2021 through 2023 reflecting steady economic growth; and (vii) with respect to the commercial rent tax, growth in fiscal year 2019 reflecting employment gains, decline in fiscal year 2020 reflecting the recently enacted tax program that increased the base rent subject to tax providing relief for tax payers and growth in fiscal years 2021 through 2023, 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.

	2019	2020	2021	2022	2023
			(In Millions)		
Licenses, Permits and Franchises	$ 806	$ 758	$ 742	$ 748	$ 752
Interest Income	213	235	252	254	256
Charges for Services	1,019	1,018	1,015	1,015	1,014
Water and Sewer Payments (1)	1,457	1,516	1,518	1,500	1,495
Rental Income	272	254	250	250	250
Fines and Forfeitures	1,080	1,016	978	965	961
Other	1,049	340	337	335	334
Intra-City Revenues	2,261	1,820	1,817	1,815	1,814
	$8,157	$6,957	$6,909	$6,882	$6,876

(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."

Rental Income reflects approximately $153.6 million in each of fiscal years 2019 through 2023 for lease payments for the City's airports.

Other reflects $103.0 million, $121.8 million, $120.8 million, $119.6 million and $118.6 million of projected resources in fiscal years 2019 through 2023, 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.

	2019	2020	2021	2022	2023
			(In Millions)		
Federal					
Community Development	$ 1,011	$ 400	$ 296	$ 279	$ 254
Social Services	3,763	3,348	3,347	3,347	3,347
Education	1,848	2,106	2,108	2,070	2,070
Other	1,941	1,374	1,320	1,302	1,296
Total	$ 8,563	$ 7,228	$ 7,071	$ 6,998	$ 6,967
State					
Social Services	$ 1,939	$ 1,832	$ 1,831	$ 1,823	$ 1,823
Education	11,202	11,395	11,817	12,256	12,708
Higher Education	296	288	288	288	288
Health and Mental Hygiene	626	504	486	486	486
Other	1,433	1,319	1,288	1,325	1,378
Total	$15,496	$15,338	$15,710	$16,178	$16,683

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 I: Recent Financial Developments."

As of May 31, 2019, approximately 15.5% 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, 2017 and 2018 downward adjustments of $59 million, $18 million, $110 million, $1 million, $558 million and

$139 million, respectively, were made. As of June 30, 2018, the City had an accumulated reserve of $413 million 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.

	2019	2020	2021	2022	2023
			(In Millions)		
Wages and Salaries	$28,633	$28,240	$28,718	$29,189	$29,616
Pensions	9,945	9,963	10,130	10,576	10,632
Other Fringe Benefits	10,582	11,342	11,854	12,527	13,228
Retiree Health Benefits Trust	100	—	—	—	—
Reserve for Collective Bargaining	418	1,801	2,217	1,598	2,058
Total	$49,678	$51,346	$52,919	$53,890	$55,534

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 279,416 as of June 30, 2019 to an estimated level of 280,978 by June 30, 2023.

Other Fringe Benefits includes $2.521 billion, $2.601 billion, $2.718 billion, $2.856 billion and $3.010 billion in fiscal years 2019 through 2023, 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—2014-2018 Summary of Operations."

The Financial Plan reflects contract settlements with DC 37 and the UFT and others (which, together, represent approximately 64% of the City's workforce) and the application of the pattern increases established in those settlements to the entire workforce over a 43-month contract period. The pattern framework provides for a 2% wage increase on the first month of the contract, a 2.25% wage increase on the 13th month, and a 3% wage increase on the 26th month. The pattern also provides funding equivalent to 0.25% of wages to be used to fund benefit items. The DC 37 Settlement covers the period from September 26, 2017 through May 25, 2021. The UFT Settlement covers the period from February 14, 2019 through September 13, 2022. Such settlements also include health insurance savings as part of a new Municipal Labor Committee ("MLC") agreement (the "MLC Agreement"), in addition to those previously agreed upon. Negotiations with unsettled unions are ongoing. The PBA has filed for arbitration with the City over new contract terms.

The amounts in the Financial Plan reflect the offsets from health insurance savings of $200 million in fiscal year 2019, $300 million in fiscal year 2020, and $600 million in fiscal year 2021 and thereafter. These savings are pursuant to the MLC Agreement. The City has the right to enforce the agreement through a binding arbitration process. If total health insurance savings in fiscal year 2021 are greater than $600 million, the first $68 million of such additional savings will be used by the City to make a $100 per member per year increase to welfare funds effective July 1, 2021. If a savings amount over $600 million but less than $668 million is achieved, the $100 per member per year increase will be prorated. Any savings thereafter are to be divided equally between the City and the unions. These savings are in addition to the $3.4 billion of health insurance savings the City achieved in fiscal years 2015 through 2018, $1.3 billion of which are recurring, which were negotiated pursuant to a previous MLC agreement.

For a discussion of the City's pension systems, see "SECTION IX: PENSION SYSTEMS AND OPEB" and "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT—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.

	2019	2020	2021	2022	2023
			(In Millions)		
Administrative OTPS and Energy	$26,199	$25,418	$24,714	$24,910	$25,077
Public Assistance	1,595	1,651	1,651	1,651	1,650
Medical Assistance	5,915	5,915	5,915	5,915	5,915
NYCHH Support	1,030	1,008	1,051	1,099	1,101
Other	5,178	4,846	4,711	4,778	4,842
Total	$39,917	$38,838	$38,042	$38,353	$38,585

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 2019 fiscal year. Thereafter, to account for inflation, administrative OTPS expenditures are projected to rise by 2.5% annually in fiscal years 2020 through 2023. Energy costs for each of the 2019 through 2023 fiscal years are assumed to vary annually, with total energy expenditures projected at $914 million in fiscal year 2019 and increasing to $996 million by fiscal year 2023.

Public Assistance

Of total cash assistance expenditures in the City, the City-funded portion is projected to be $678 million in fiscal year 2019 and $856 million in each of fiscal years 2020 through 2023.

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 2019 fiscal year.

The City-funded portion of medical assistance payments is expected to be $5.8 billion in each of fiscal years 2020 through 2023. 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 February 2019, NYCHH released a cash-based financial plan, which projected City-funded expenditures of $784 million, $998 million, $1.0 billion, $1.1 billion, and $1.1 billion in fiscal years 2019 through 2023, 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 total receipts of $8.5 billion, $7.9 billion, $7.8 billion, $7.8 billion, and $7.8 billion, and total disbursements of $8.4 billion, $7.8 billion, $7.9 billion, $8.1 billion, and $8.2 billion in fiscal years 2019 through 2023, 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. A financial plan for NYCT covering its 2018 through 2022 fiscal years was prepared in February 2019. On July 24, a financial plan for NYCT covering its 2019 through 2023 fiscal years is expected to be released. The NYCT fiscal year coincides with the calendar year. The NYCT financial plan reflects City assistance to the NYCT operating budget of $627.6 million in 2018, decreasing to $411.5 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 is expected to be funded through a separate revenue stream starting in 2019. In addition, the NYCT financial plan projects real estate transfer tax revenue dedicated for NYCT use of $681.3 million in 2018, decreasing to $656.9 million in 2022.

The NYCT financial plan includes technical adjustments to savings initiatives and other post-employment benefit liability expenses. Based on OMB review and analysis, the NYCT accrual-based financial plan reflects $11.0 billion in revenues and $14.1 billion in expenses for 2018, leaving a budget gap of $3.1 billion. After accounting for accrual adjustments and cash carried over from 2017, accrual-based operating budget gaps of $29.8 million in 2018, $415.3 million in 2019, $1.2 billion in 2020, $2.4 billion in 2021, and $3.7 billion in 2022 are projected.

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 $935.6 million in 2018, decreasing to $896.7 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 2015-2019 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 budget for State fiscal year 2019, 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 budget for State fiscal year 2019 also imposes an additional surcharge, which was slated to start January 1, 2019, on for-hire vehicles and taxis traveling below 96th Street in Manhattan, to be used to fund the Subway Action Plan and other MTA projects. In December 2018, a lawsuit was filed in New York State Supreme Court seeking to block implementation of the surcharge and a temporary restraining order was issued blocking the surcharge. In January 2019, the court lifted the temporary restraining order and allowed collection of the surcharge to begin on February 4, 2019, pending the outcome of the litigation.

The State 2020 Budget includes enactment of congestion tolling for vehicles entering a designated congestion zone in Manhattan below 60th Street, with a start date no earlier than December 31, 2020, the revenues from which will be directed to the MTA for transit improvements. Details of the plan, including pricing and the start date, have yet to be determined. In addition, the State 2020 Budget includes legislation authorizing the imposition of sales tax on certain additional internet sales and providing that sales tax revenues in the amount of $127.5 million in State fiscal year 2020 (reflecting the portion of the year in which it is effective) and $170 million in State fiscal year 2021 and thereafter increasing by one percent per year, will be directed to the MTA for transit improvements. Revenues from such additional sales tax are currently estimated to be approximately $170 million per year and are in addition to existing sales taxes attributable to certain other internet transactions. The State 2020 Budget also includes legislation increasing real estate transfer taxes on properties valued at more than $2 million, which will also be directed to the MTA for transit improvements.

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, 2018, the City expended $730.4 million for judgments and claims. The Financial Plan includes provisions for judgments and claims of $697.0 million, $711.9 million, $727.1 million, $742.3

million and $758.2 million for the 2019 through 2023 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, 2018 amounted to approximately $6.7 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, 2018 include an estimate that the City's liability in the *certiorari* proceedings, as of June 30, 2018, could amount to approximately $1,208 million. Provision has been made in the Financial Plan for estimated refunds of $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—Litigation—*Taxes*" and "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT—Notes to Financial Statements—Note D.5."

3. GENERAL OBLIGATION, LEASE AND TFA DEBT SERVICE

Debt service estimates for fiscal years 2019 through 2023 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 $3.72 billion, $4.09 billion, $4.16 billion, $4.46 billion and $4.82 billion in fiscal years 2019 through 2023, respectively, conduit debt service of $99 million, $126 million, $126 million, $126 million and $147 million in fiscal years 2019 through 2023, respectively, and TFA debt service of $2.62 billion, $3.01 billion, $3.26 billion, $3.60 billion and $3.97 billion in fiscal years 2019 through 2023, respectively, in each case prior to giving effect to prepayments. 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 May 23, 2019, the City Comptroller released a report entitled "Comments on New York City's Fiscal Year 2020 Executive Budget." In the report, the City Comptroller projects net additional resources of $629 million, $723 million, $979 million, $1.05 billion, and $1.02 billion in fiscal years 2019 through 2023, respectively, which, when added to the results projected in the April Financial Plan, would result in surpluses of approximately $629 million and $723 million in fiscal years 2019 and 2020, respectively, and gaps of approximately $2.50 billion, $1.83 billion and $2.14 billion in fiscal years 2021 through 2023, respectively.

The differences from the April Financial Plan projections result in part from the City Comptroller's net expenditure projections, which are higher than the April Financial Plan projections by $50 million, $286 million, $519 million, $652 million and $801 million in fiscal years 2019 through 2023, respectively, as a result of: (i) additional overtime expenditures of $195 million and $140 million in fiscal years 2019 and 2020, respectively, and $150 million in each of fiscal years 2021 through 2023; (ii) increased expenditures associated with increases in charter school tuition rates of $117 million, $250 million and $399 million in fiscal years 2021 through 2023, respectively; (iii) increased expenditures to fund the Fair Fares program of $106 million in fiscal year 2020 and $212 million in each of fiscal years 2021 through 2023; (iv) increased homeless shelter operation expenditures of $20 million in each of fiscal years 2020 through 2023; and (v) uncertainty of federal Medicaid reimbursement for special education services of $20 million in each of fiscal years 2020 through 2023. The report also projects (i) decreased expenditures of $65 million in fiscal year 2019 to fund the Fair Fares program; (ii) anticipated debt service savings from low interest rates on variable rate bonds of $30 million in fiscal year 2019; and (iii) decreased expenditures of $50 million in fiscal year 2019 due to the assumption that the $50 million fiscal year 2019 general reserve in the April Financial Plan will not be needed for budget balance.

The differences from the April Financial Plan projections also result from the City Comptroller's net revenue projections, which are higher than the April Financial Plan projections by $679 million, $1.01 billion, $1.50 billion, $1.70 billion and $1.82 billion in fiscal years 2019 through 2023, respectively. The report identifies certain risks and offsets to projected revenues: (i) property tax revenues are projected to be higher by $200 million, $387 million, $735 million and $1.09 billion in fiscal years 2020 through 2023, respectively; (ii) personal income tax revenues are projected to be higher by $496 million, $385 million, $387 million, $335 million and $237 million in fiscal years 2019 through 2023, respectively; (iii) business tax revenues are projected to be higher by $87 million, $95 million, $128 million, $119 million and $114 million in fiscal years 2019 through 2023, respectively; (iv) sales tax revenues are projected to be higher by $65 million, $114 million, $103 million and $34 million in fiscal years 2019 through 2022, respectively, and lower by $35 million in fiscal year 2023; (v) real estate transaction tax revenues are projected to be higher by $31 million, $202 million, $321 million, $299 million and $241 million in fiscal years 2019 through 2023, respectively; (vi) revenues from audit collections are projected to be higher by $154 million in each of fiscal years 2021 through 2023; (vii) Environmental Control Board fine revenues are projected to be higher by $10 million, $10 million, $15 million and $15 million in fiscal years 2020 through 2023, respectively; (vii) Department of Buildings penalty revenues are projected to be higher by $5 million in each of fiscal years 2021 through 2023; and (viii) Department of Finance penalty revenues are projected to be higher by $3 million in each of fiscal years 2020 through 2023.

The City Comptroller expects to release a report on the Financial Plan on or before August 7, 2019.

On May 31, 2019, the OSDC released a report on the April Financial Plan. The report states that the April Financial Plan projects a surplus of $3.5 billion in fiscal year 2019, which results mostly from resources from the Citywide Savings Program, a reduction in unneeded reserves, and higher-than-expected revenues. The report notes that projected budget gaps for fiscal years 2021 and 2022 are larger than those projected in 2018 for the same years, but are still relatively small as a share of City fund revenues and manageable under current conditions. The report states that the City's budget faces few immediate risks, and the City's economy is strong, although trade tensions, an international incident, or other unforeseen developments could trigger a setback. In addition, federal budget cuts remain a possibility, and NYCHH and the MTA face significant operational and financial challenges that could require additional financial support from the City.

The OSDC report quantifies certain risks and offsets to the April Financial Plan. The report identifies net offsets of $525 million and $500 million in fiscal years 2019 and 2020, respectively, and $213 million in each of fiscal years 2021 through 2023. When combined with the results projected in the April Financial Plan, the report estimates budget surpluses of $525 million and $500 million in fiscal years 2019 and 2020, respectively, and budget gaps of $3.27 billion, $2.67 billion and $2.95 billion in fiscal years 2021 through 2023, respectively. The risks to the April Financial Plan identified in the report include: (i) increased uniformed services overtime costs of $100 million in each of fiscal years 2020 through 2023; and (ii) increased expenditures to fund the Fair Fares program of $212 million in each of fiscal years 2021 through 2023. The report also identifies: (i) increased tax revenues of $450 million in fiscal year 2019 and $400 million in each of fiscal years 2020 through 2023; (ii) additional miscellaneous revenues (including recurring revenues such as licenses, fines, forfeitures and charges for services) of $75 million in fiscal year 2019 and $125 million in each of fiscal years 2020 through 2023; and (iii) anticipated debt service savings from low interest rates on variable rate bonds of $75 million in fiscal year 2020.

The staff of the OSDC expects to release a report on the Financial Plan on or before August 7, 2019.

On March 26, 2019, the staff of the Control Board issued a report reviewing the February Financial Plan. The report states that the projected budget gaps for fiscal years 2021 through 2023 are manageable, but notes that some uncertainties exist: concerns over the economy exist, and actions that may be taken by the State and federal governments could impact the City's budget. The report also notes that if actions with recurring savings are developed, the City will be able to continue to manage its finances with the least service disruption even if unforeseen events occur.

The report identifies net offsets to the February Financial Plan of $161 million and $196 million in fiscal years 2019 and 2020, respectively, and net risks of $184 million in each of fiscal years 2021 through 2023, resulting in estimated surpluses of $161 million and $196 million in fiscal years 2019 and 2020, respectively, and estimated gaps of $3.70 billion, $3.12 billion and $3.48 billion in fiscal years 2021 through 2023, respectively. Such net risks and offsets result from: (i) increased nonproperty tax revenues of $150 million in each of fiscal years 2019 and 2020; (ii) increased miscellaneous revenues of $40 million in fiscal year 2019 and $100 million in each of fiscal years 2020 through 2023; (iii) increased expenditures to fund the Fair Fares program of $212 million in each of fiscal years 2021 through 2023; and (iv) increased uniformed services overtime costs of $29 million and $54 million in fiscal years 2019 and 2020, respectively, and $72 million in each of fiscal years 2021 through 2023.

The Control Board expects to release a report on the Financial Plan on or about August 1, 2019.

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 April 25, 2019, the City released the five-year capital commitment plan for fiscal years 2019 through 2023 which covers the current fiscal year and the four-year capital plan for fiscal years 2020 through 2023 (the "2019-2023 Capital Commitment Plan").

City-funded commitments, which were $344 million in fiscal year 1979, are projected to reach $14.8 billion in fiscal year 2019. City-funded expenditures are forecast at $8.3 billion in fiscal year 2019; total expenditures are forecast at $9.7 billion in fiscal year 2019. For additional information concerning the City's capital expenditures and the Ten-Year Capital Strategy covering fiscal years 2020 through 2029, see "SECTION V: CITY SERVICES AND EXPENDITURES—Capital Expenditures."

The following table sets forth the major areas of capital commitment projected in the 2019-2023 Capital Commitment Plan.

2019-2023 CAPITAL COMMITMENT PLAN

	2019		2020		2021		2022		2023		TOTALS	
	(In Millions)											
	City Funds	All Funds	City Funds	All Funds	City Funds	All Funds	City Funds	All Funds	City Funds	All Funds	City Funds	All Funds
Mass Transit(1)	$ 466	$ 485	$ 136	$ 136	$ 54	$ 54	$ 40	$ 40	$ 40	$ 40	$ 735	$ 755
Roadway, Bridges	1,232	1,554	1,534	1,696	1,459	1,673	2,323	2,439	2,639	2,852	9,188	10,213
Environmental Protection(2)	2,182	2,241	2,634	2,811	2,464	2,466	2,690	2,699	2,710	2,710	12,681	12,927
Education	3,703	4,043	3,806	4,138	2,830	3,574	3,631	3,631	3,514	3,514	17,484	18,901
Housing	1,493	1,528	1,246	1,278	1,122	1,154	1,174	1,206	902	934	5,938	6,101
Sanitation	383	385	446	456	382	382	390	390	453	453	2,054	2,065
City Operations/Facilities	4,501	5,252	6,440	7,325	5,367	6,102	6,193	6,689	5,471	5,667	27,972	31,035
Economic Development	799	873	426	606	767	808	1,190	1,193	652	688	3,834	4,168
Subtotal Commitments	14,760	16,358	16,667	18,445	14,445	16,214	17,632	18,287	16,382	16,858	79,886	86,162
Reserve for Unattained Commitments	(4,402)	(4,401)	(2,050)	(2,050)	(862)	(862)	(1,417)	(1,417)	(58)	(58)	(8,789)	(8,788)
Total Commitments(3)	$10,358	$11,957	$14,617	$16,395	$13,583	$15,352	$16,215	$16,870	$16,324	$16,800	$71,097	$77,374
Total Expenditures(4)	$ 8,267	$ 9,655	$ 9,418	$10,556	$10,554	$12,191	$12,264	$13,689	$14,033	$15,054	$54,536	$61,145

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 2019-2023 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 2019.

In December 2018, 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 $9.5 billion in capital investment would be needed for fiscal years 2020 through 2023 to bring the assets to a state of good repair. The report also estimated that $512 million, $235 million, $301 million and $254 million should be spent on maintenance in fiscal years 2020 through 2023, respectively.

The recommended capital investment for each inventoried asset is not readily comparable to the capital spending allocated by the City in the 2019-2023 Capital Commitment Plan and the Ten-Year Capital Strategy. Only a portion of the funding set forth in the 2019-2023 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 2019-2023 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 2017. 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 2023 fiscal years (as set forth in the Financial Plan) to implement the 2019-2023 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.

2019-2023 FINANCING PROGRAM

	2019	2020	2021	2022	2023	Total
			(In Millions)			
City General Obligation Bonds	$1,200	$3,540	$ 4,290	$ 5,080	$ 5,890	$20,000
TFA Future Tax Secured Bonds	4,475	3,540	4,290	5,080	5,890	23,275
Water Authority Bonds	1,373	1,796	1,533	1,700	1,880	8,282
Total	$7,048	$8,876	$10,113	$11,860	$13,660	$51,557

Note: Totals may not add due to rounding.

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 2020 through 2029, projects City-funded water and sewer investment (which is expected to be financed with proceeds of Water Authority debt) at approximately $19.7 billion. The 2019-2023 Capital Commitment Plan reflects total anticipated City-funded water and sewer commitments of $12.7 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 Financial Plan reflects the issuance of $500 million, $103 million, $31 million, $78 million and $25 million of Building Aid Revenue Bonds by TFA in fiscal years 2019 through 2023.

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 2020 through 2029 totals $116.9 billion, of which approximately 95% 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 Entities—*Limitations 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 B—FINANCIAL STATEMENTS—Notes to Financial Statements—Note A.12." As of June 30, 2019, the aggregate notional amount of the City's interest rate exchange agreements was $599,350,000 and the total marked-to-market value of such agreements was ($66,754,747).

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, 2019, the total marked-to-market value of the DASNY agreements was ($30,943,874).

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 short-term 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, 2019. "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)	$37,518,447	
Less: Assets Held for Debt Service(2)	(1,701,823)	
Net City Long-Term Indebtedness		35,816,624
PBC Indebtedness		
Bonds Payable	256,135	
Capital Lease Obligations	806,855	
Gross PBC Indebtedness	1,062,990	
Less: Assets Held for Debt Service	(66,268)	
Net PBC Indebtedness		996,723
Combined Net City and PBC Indebtedness		$36,813,347

(1) Reflects capital appreciation bonds at accreted values as of June 30, 2019.

(2) Assets Held for Debt Service consists of General Debt Service Fund assets.

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 2009 through 2019.

	City Indebtedness			
	Long-Term	Short-Term	PBC Indebtedness(1)	Total
	(In Millions)			
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
2018	36,725	—	1,155	37,880
2019	35,817	—	997	36,813

(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, 2019, 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 Debt Scheduled for Retirement
5 years	30.49%
10 years	57.52
15 years	76.36
20 years	90.08
25 years	97.77
30 years	100.00

City and PBC Debt Service Requirements

The following table summarizes future debt service requirements, as of June 30, 2019, on City and PBC indebtedness.

	City Long-Term Debt		PBC		
Fiscal Years	Principal	Interest	Indebtedness	Interest	Total
		(In Thousands)			
2020	$ 2,217,407	$ 1,634,604	$ 57,312	$ 51,516	$ 3,960,839
2021	2,182,441	1,537,135	60,175	48,706	3,828,457
2022	2,277,730	1,435,792	67,203	45,748	3,826,473
2023 through 2147	30,840,869	11,515,819	878,301	316,552	43,551,542
Total	$37,518,447	$16,123,350	$1,062,990	$462,523	$55,167,310

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 2009 through 2018.

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 Obligation Bonded Debt as a Percentage of Assessed Taxable Value of Property(3)	Per Capita
	(in millions)	(in millions)	(in millions)		
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
2018	38,628	1,922	36,706	14.60	4,257

Source: CAFR for the fiscal year ended June 30, 2018; 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 2009 through 2018. 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	General Obligation Bonds	ECF	TFA	TSASC	STAR	HYIC	PBC Indebtedness and Other(1)	IDA Stock Exchange
				(In Millions)				
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
2018	38,628	231	43,355	1,071	1,805	2,724	1,659	77

Source: CAFR for the fiscal year ended June 30, 2018; 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, 2019, approximately $37.52 billion of City general obligation bonds were outstanding. For information regarding the City's variable rate bonds, see Appendix E hereto.

Currently, HYIC has outstanding $2.72 billion aggregate principal amount of bonds. In addition, HYIC has entered into a term loan facility with Bank of America, N.A. pursuant to which HYIC may draw up to an aggregate amount of $350 million, none of which has been drawn. The bonds financed the extension of the Number 7 subway line and other public improvements in the Hudson Yards area, and the term loan will be used to finance any remaining costs of completion of the original project and the expansion of the park in the Hudson Yards area. HYIC's bonds and, on a subordinate basis, draws under the term loan facility are secured by and payable from payments in lieu of taxes and other revenues generated by development in the Hudson Yards area. However, HYIC expects to repay amounts drawn under the term loan facility with the proceeds of its long-term bonds prior to maturity on June 30, 2022. To the extent payments in lieu of taxes and other HYIC revenues are insufficient to pay interest on the HYIC bonds or the term loan, the City has agreed to pay the amount of any shortfall in interest, subject to appropriation. The Financial Plan provides $0 in fiscal years 2019 through 2023 for such interest support payments. The City has no obligation to pay the principal of such bonds or of such term loan.

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 Tax—*Assessment*." 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. As of June 30, 2019, 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) and the TFA may have outstanding Future Tax Secured Bonds in excess of $13.5 billion, provided that the amount of such additional 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, 2019, has outstanding approximately $37.95 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 July 1, 2019.

	(In Thousands)	
Total City Debt-Incurring Power under General Debt Limit		$116,265,665
Gross Debt-Funded(1)	$37,317,602	
Less: Excluded Debt	(41,611)	
	37,275,990	
Less: Appropriations for Payment of Principal	(2,214,839)	
	35,061,151	
Contracts and Other Liabilities, Net of Prior Financings Thereof	15,279,491	
Less: Total City Indebtedness		(50,340,642)
Less: TFA Debt Outstanding above $13.5 billion		(24,370,000)
Debt-Incurring Power		$ 41,555,022

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 June 30, 2019, $218.4 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 June 30, 2019, $364.5 million principal amount and $442.4 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 June 30, 2019, approximately $58.1 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, TRS 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, 2017 consisted of 383,668 active employees, 344,833 retirees and beneficiaries receiving benefits and other vested members terminated but not receiving benefits, and 31,632 other inactives. Of the total membership of 760,133, City membership was 582,638. 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 2017 and 2018, the City's pension contributions for the five actuarial pension systems, plus other pension expenditures, were approximately $9.4 billion and $9.6 billion, respectively, and were in addition to employee contributions. For fiscal years 2017 and 2018, 57% and 59% of the City pension contributions for such years, respectively, were attributable to the amortizations of Unfunded Accrued Liability ("UAL") described herein, see "—*Actuarial Assumptions and Methods*" below.

For the 2018 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 43% 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 UAL established as of June 30, 2010; (iii) amortization of positive or negative adjustments to UAL 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 UAL, 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 as of January 1, 2019 is approximately $132 million. The City is currently paying half of OTB's future cost and unfunded liabilities, which unfunded liabilities are amortized over 15 years beginning in fiscal year 2019. However, the City is seeking full reimbursement from the State.

The following tables summarize the components of City pension contributions by system for fiscal years 2017, 2018 and 2019 (preliminary).

New York City Retirement Systems
Components of Employer Contribution—City Share

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

Fiscal Year 2019—Preliminary
(In Millions)

	NYCERS[1]	TRS[2]	BERS[3]	POLICE	FIRE
Entry age Normal Cost	$ 870.2	$1,232.9	$144.0	$1,365.4	$ 433.5
Initial UAAL Contribution	$1,023.8	$1,849.7	$121.2	$1,220.8	$ 655.7
Subsequent UAAL Contribution	$ (28.1)	$ 550.6	$ 8.8	$ (50.8)	$ 157.1
Administrative Expenses	$ 35.5	$ 56.4	$ 17.7	$ 21.7	$ —
Interest on Late Employer Contributions	$ —	$ —	$ —	$ —	$ —
Total	$1,901.4	$3,689.5	$291.7	$2,557.1	$1,246.3

(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, $9.954 billion, $9.963 billion, $10.130 billion, $10.576 billion, and $10.632 billion for fiscal years 2019 through 2023, respectively. These projections are based on the valuation from the Actuary as of June 30, 2018. The pension contributions projected in the Financial Plan reflect changes to funding assumptions and methods first implemented in 2019 as discussed below. The Financial Plan also reflects costs associated with an adjustment to the number of NYCERS members resulting from a previous calculation error and the phase-in of QPP investment earnings in fiscal years 2013 – 2018, as calculated by the Actuary. Investment earnings vary by system and are calculated differently from the investment performance reported by the City Comptroller's office, as described below.

The City 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 2018 were 23.23%, 1.37%, 12.12%, 17.48%, 3.15%, 1.46%, 12.95%, and 8.67%, 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 2018 were net of all investment manager 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 City 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. Bolton, Inc., an independent actuarial firm, completed their final reports in June 2019. Partially, as a result of this study, the Actuary recommended changes to several of the assumptions for each of the NYCRS. These recommendations, which were primarily changes to the demographic assumptions (i.e., rates of mortality, turnover, disability, etc.), were presented in reports that were adopted by each of the NYCRS Boards of Trustees. This new set of actuarial assumptions and methods are referred to as the "2019 A&M" and were used by the Actuary for determining employer contributions to the NYCRS, and where applicable, Net Pension Liabilities of the NYCRS, beginning in fiscal year 2019.

The 2019 A&M reports for each of the NYCRS is 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. Other actuarial methods and assumptions currently in effect include an Actuarial Interest (discount) Rate assumption of 7% per annum which is based on investment earnings net of investment expenses, and the use of the Entry Age Actuarial Cost Method. The initial UAL recognized as of June 30, 2010 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.

Also under the current funding method, emerging unfunded liabilities are recognized and amortized over closed, fixed periods using level dollar payments. Future UAL attributable to actuarial gains and losses is amortized over 15 years; future UAL attributable to changes in actuarial assumptions and methods is amortized over 20 years; and future changes in UAL attributed to benefit improvements is generally 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 2019 A&M includes the 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 2019 pension contribution calculation, employee data and the AVA as of June 30, 2017 were used.

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.

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. As a result, pension fund accounting under GASB 68 has increased 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 2018, 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 2014-2018 (1)
(Dollars in billions)

	2014	2015	2016	2017	2018
City Membership (active, inactive, retired)(2)	546,519	545,646	551,080	559,210	572,755
Total Pension Liability (TPL)	$169.7	$177.3	$188.2	$195.2	$198.2
Less Plan Fiduciary Net Position (PFNP)	123.1	124.2	123.4	138.9	150.4
Net Pension Liability (NPL)	$ 46.6	$ 53.1	$ 64.8	$ 56.3	$ 47.8
PFNP as percent of TPL	72.5%	70.1%	65.6%	71.2%	75.9%

Source: NYC CAFRs

(1) Data are aggregated across the five pension systems. Funding amounts and percentages vary between systems. Data for NYCERS, PPF and FPF include the QPP and VSFs, and data for TRS and BRS are QPP only.

(2) Membership data for fiscal year 2014 are as of June 30, 2012; for fiscal year 2015, as of June 30, 2013; for fiscal year 2016, as of June 30, 2014; for fiscal year 2017, as of June 30, 2015; and for fiscal year 2018, as of June 30, 2016.

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—COMPREHENSIVE ANNUAL FINANCIAL REPORT."

Fiduciary Fund Reporting

The fiscal year 2018 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 2018 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—COMPREHENSIVE ANNUAL FINANCIAL REPORT—Pension and Other Employee Benefit Trust Funds Combining Statement of Fiduciary Net Position."

New York City Retirement Systems
Aggregate Net Position,

Fiscal Years 2014-2018
(In Millions)

	2014	2015	2016	2017	2018
Net Position:					
Restricted for QPPs	$144,537.9	$145,769.3	$146,917.9	$163,025.5	$175,638.0
Restricted for VSFs	3,540.8	3,775.1	2,642.2	4,911.9	5,926.4
Restricted for TDAs	27,311.0	28,844.9	30,074.4	32,851.8	35,349.8
Total Net Position	$175,389.7	$178,389.3	$179,634.5	$200,789.2	$216,914.2

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, 2017 and 2018, the total fiduciary net position restricted for TDA benefits was $32.9 billion and $35.3 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 Actuary recognizes the difference between the guaranteed rate of 8.25% and the Actuarial Interest Rate of 7.0% in the calculation of the employer contributions to the QPPs each year.

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, 2017 and 2018 were $22.0 billion and $23.7 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 $1.6 billion, respectively. The balances of TDA Program fixed return funds held by the BERS QPP as of June 30, 2017 and 2018 were $1.4 billion and $1.6 billion, respectively, and interest paid on TDA Program fixed return funds by the BERS QPP for the years then ended were $106.6 million and $128.0 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. 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—COMPREHENSIVE ANNUAL FINANCIAL REPORT—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 (referred to as OPEB), which include health insurance, Medicare Part B premium reimbursements and welfare fund contributions, are provided to eligible retirees of the City and their eligible beneficiaries and dependents.

City OPEB Contributions

OPEB costs are currently paid by the City in each fiscal year on a pay-as-you-go basis. 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. The Financial Plan reflects OPEB costs of $2.521 billion, $2.601 billion, $2.718 billion, $2.856 billion and $3.010 billion in fiscal years 2019 through 2023, respectively.

In 2006, the City created the Retiree Health Benefits Trust (the "RHBT") which is used to receive, hold, and disburse assets accumulated to address the OPEB liabilities. Amounts contributed to the RHBT by the City are held in an irrevocable trust and may not be used for any purpose other than to fund the costs of health and welfare benefits of its eligible participants. In fiscal years 2014 through 2018, the City contributed $864 million, $955 million, $500 million, $100 million and $100 million, respectively, to the RHBT in excess of the City's contributions for OPEB costs due in those fiscal years, which resulted in increases in the net assets in the RHBT. The following table shows the net position of the RHBT as of the end of each of fiscal years 2014 through 2018.

Retiree Health Benefits Trust
Net Position
(In Millions)

2014	$2,378
2015	3,397
2016	4,036
2017	4,654
2018	4,766

Source: NYC CAFRs

Actuarial Assumptions and Methods

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 2018 CAFR reported the City's net OPEB liabilities as $88.4 billion and $98.5 billion as of June 30, 2017 and 2018, respectively.

The actuarial assumptions and methods used in the OPEB valuations are a combination of those used in the NYCRS pension valuations, such as the Entry Age Actuarial Cost Method, and certain demographic and economic assumptions proposed by the Actuary that were adopted by each respective Board of Trustees of NYCRS in fiscal years 2012 and 2016 as discussed above in "City Pension Contributions—*Actuarial Assumptions and Methods*," in addition to those specific to the OPEB valuations, such as the discount rate described below. As required under GASB 75, the net OPEB liability attributable to benefit changes is now recognized in the current reporting period, investment earnings above or below expectations are recognized over a five year period, and other actuarial liability gains and losses are amortized over the average remaining working lifetimes of all plan members, including inactive plan members. In addition, as required under GASB 75, OPEB valuations assume a discount rate based on a long-term expected rate of return on assets and the index rate for certain highly rated municipal bonds. The fiscal year 2018 OPEB valuation assumed a discount rate of 3.01% per annum.

Summary OPEB Information

As reported in the City's financial statements, the following table summarizes City OPEB information for fiscal years 2016 through 2018.

Summary of City OPEB Information, Fiscal Years 2016 – 2018
(Dollars in billions)

	2016	2017	2018
Participants (active/inactive plan members receiving or eligible to receive benefits)	544,120	554,028	563,901
Total OPEB Liability (TOL)	$ 98.54	$ 93.08	$ 103.26
Less Fiduciary Net Position (FNP)	(4.04)	(4.65)	(4.77)
Net OPEB Liability (NOL)	94.50	88.42	98.50
FNP as percent of TOL	4.1%	5.0%	4.6%
Covered Employee Payroll	$ 24.27	$ 25.18	$ 26.23
NOL as a percent of Covered Employee Payroll	389.4%	351.2%	375.5%

Source: NYC CAFRs
Totals may not add due to rounding.

For further information regarding OPEB, see "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT—Notes to Financial Statements—Note E.4," "—Pension and Other Employee Benefit Trust Funds—Combining Statement of Fiduciary Net Position" and "—Required Supplementary Information."

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, 2018 amounted to approximately $6.7 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 $1,208 million at June 30, 2018. For a discussion of the City's accounting treatment of its inequality and overvaluation exposure, see "APPENDIX B—COMPREHENSIVE ANNUAL FINANCIAL REPORT—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 1994/95 through 2016/17 and the special franchise assessments on its electric, gas and steam equipment located in the public right of way for tax years 2009/10 through 2016/17 and 2018/19. 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. The City and State timely filed their reply papers, and oral argument is scheduled for September 2019. 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 59th Street power plant. Con Edison and the City are presently negotiating a settlement for the East 60th 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 in New York State Supreme Court 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. 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 City and State filed respective Notices of Appeal of the lower court decision on October 5, 2018 and on November 1, 2018 the City made a motion before the trial court for a declaration that a statutory stay of the lower court proceeding was in effect by virtue of its filing the Notice of Appeal, or in the alternative, for a discretionary stay of all proceedings pending the appeal. The State joined in seeking a discretionary stay of the lower court proceedings pending appeal. In a decision dated November 30, 2018, and released on December 4, 2018, the lower court granted the respective motions of the City and State to stay all proceedings pending appeal of the court's decision denying the motions to dismiss the complaint in its entirety. Tax Equity Now New York LLC shortly thereafter appealed the lower

court's stay decision to the Appellate Division, First Department and the matter has been fully briefed by the parties. On May 16, 2019, the City perfected its appeal from the order denying its motion to dismiss, which appeal will be heard in the October 2019 term. In a decision dated June 6, 2019, the Appellate Division, First Department held that the City was not entitled to an automatic stay; however, the Court nonetheless granted a stay pursuant to its inherent judicial powers.

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, approximately 4,000 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. Hearings to determine each claimant's damages are ongoing. While some final judgments have been entered, it is too early to permit an accurate estimation of the ultimate potential cost to the City.

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. 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 14th Street. In March 2019, plaintiffs and the City agreed to a settlement that will require the City to undertake a comprehensive survey of all City street corners and to install Americans with Disabilities Act-compliant curb ramps on all City street corners on an agreed upon schedule. The court issued an order granting preliminary approval of the settlement subject to completion of a fairness hearing for final approval of the class settlement.

5. 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 make 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 but not damages.

6. 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. Motion practice remains ongoing in the second filed action. The Court recently denied plaintiffs' motion for class certification as premature. In November 2017, the Court dismissed the third filed action, which plaintiffs appealed. In March 2019, the Court granted the plaintiffs' motion to reargue and the discovery is underway. 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.

7. 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 $10.7 billion (comprised of approximately $1.8 billion of expense costs and approximately $8.9 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 approximately $10.5 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 $734 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 December 31, 2018, the City, NYCHH and NYCHA have received $3.2 billion in reimbursements from FEMA for the direct costs described above. In addition, HUD has made available over $4.2 billion, of which over $3.2 billion has been received through March 31, 2019 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 "OneNYC Report"). The City issues progress reports to the OneNYC Report annually, and issues an updated report every four years. The most recent updated report, entitled OneNYC 2050, was issued in April 2019. As stated in both the OneNYC Report and volume 7 of OneNYC 2050, 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 is required to make recommendations to the City regarding climate change projections at least every three years, and has published four reports, most recently in March 2019.

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. An allocation process has recently been completed between the City and approximately 20 other parties to allocate costs of the design of the in-canal portion of the remediation, which includes dredging and capping the canal. Prior to completion of the allocation process, the City paid a portion of the design costs based on an estimate of the City's potential share of the costs. As a result of the agreed upon allocation process, the City will be required to provide additional funding over the next three years. Such additional funding for design costs is not expected to be a material cost.

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 sought to have the City perform some of the work. In February 2018, the City notified EPA that, subject to certain conditions, it was willing to undertake such work and 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

The City relies on a large and complex technology environment to conduct its operations. As a recipient and provider of personal, private or sensitive information, the City and its agencies and offices face multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computers and other sensitive digital networks and systems. In 2017, pursuant to a Mayoral Executive Order, the Mayor established the New York City Cyber Command (the "Cyber Command"), led by the City's Chief Information Security Officer, to protect the people and technological assets of the City. In collaboration with the New York City Department of Information Technology and Telecommunications, the Cyber Command is charged with setting information security policies and standards, directing citywide cyber defense and incident response, deploying defensive technical and administrative controls and providing guidance to the Mayor and City agencies on cyber defense. In carrying out these functions, it works with a range of City, State, and federal law enforcement agencies, including the New York City Police Department and the Federal Bureau of Investigation's Joint Terrorism Task Force.

While the City conducts periodic tests and reviews of its networks, no assurances can be given that such security and operational control measures will be successful in guarding against all cyber threats and attacks. The results of any successful attack on the City's computer and information technology systems could impact its operations and damage the City's digital networks and systems, and the costs of remedying any such damage could be substantial.

Tax Matters

The Bonds—New York Personal Income Tax Exemption

In the opinion of Norton Rose Fulbright US LLP, New York, New York, and Bryant Rabbino LLP, New York, New York, as Co-Bond Counsel to the City ("Co-Bond Counsel"), interest on the Bonds will be exempt from personal income taxes imposed by the State or any political subdivision thereof, including the City.

Tax-Exempt Bonds

The City will covenant in a tax certificate to comply with applicable provisions of the Internal Revenue Code of 1986, as amended (the "Code"), relating to the exclusion from gross income of the interest on the Tax-Exempt Bonds for purposes of federal income taxation. In the opinion of Co-Bond Counsel, assuming compliance by the City with such covenants, interest on the Tax-Exempt Bonds will be excludable from the gross income of the owners thereof for purposes of federal income taxation. Failure by the City to comply with such covenants may cause interest on the Tax-Exempt Bonds to be includable in the gross income of the owners thereof retroactive to the date of the issue of the Tax-Exempt Bonds. Further, Co-Bond Counsel will render no opinion as to the effect on the exclusion from gross income of interest on the Tax-Exempt Bonds of any action (including without limitation a change in the interest rate mode with respect to any of the Tax-Exempt Bonds) taken or not taken after the date of such opinion without the approval of Co-Bond Counsel.

In the opinion of Co-Bond Counsel, interest on the Tax-Exempt Bonds is not an item of tax preference for purposes of the federal alternative minimum tax. The Code contains other provisions that could result in tax consequences, upon which no opinion will be rendered by Co-Bond Counsel, as a result of ownership of the Tax-Exempt Bonds or the inclusion in certain computations of interest that is excluded from gross income.

Co-Bond Counsel's opinions are not a guarantee of a result, but represent their legal judgment based upon their review of existing statutes, regulations, published rulings and court decisions and the covenants of the City described above. No ruling has been sought from the Internal Revenue Service (the "IRS" or the "Service") with respect to the matters addressed in the opinions of Co-Bond Counsel, and Co-Bond Counsel's opinions are not binding on the IRS. The IRS has an ongoing program of auditing the tax-exempt status of the interest on tax-exempt obligations. If an audit of the Tax-Exempt Bonds is commenced, under current procedures the IRS is likely to treat the City as the "taxpayer," and the owners of the Tax-Exempt Bonds would have no right to participate in the audit process. In responding to or defending an audit of the tax-exempt status of the interest on the Tax-Exempt Bonds, the City may have different or conflicting interests from the owners of the Tax-Exempt Bonds. Public awareness of any future audit of the Tax-Exempt Bonds could adversely affect the value and liquidity of the Tax-Exempt Bonds during the pendency of the audit, regardless of its ultimate outcome.

Except as described above, Co-Bond Counsel will express no opinion with respect to any federal, state or local tax consequences under present law, or proposed legislation, resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Tax-Exempt Bonds. Prospective purchasers of the Tax-Exempt Bonds should be aware that the ownership of tax-exempt obligations such as the Tax-Exempt Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain foreign corporations doing business in the United States, S corporations with subchapter C earnings and profits, individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise qualifying for the earned income tax credit, owners of an interest in a financial asset securitization investment trust (FASIT), and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations. Prospective purchasers should consult their own tax advisors as to the applicability of these consequences to their particular circumstances.

The purchase price of certain Tax-Exempt Bonds (the "Premium Bonds") paid by an owner may be greater than the amount payable on such Tax-Exempt Bonds at maturity. An amount equal to the excess of a purchaser's tax basis in a Premium Bond over the amount payable at maturity constitutes premium to such purchaser. The basis for federal income tax purposes of a Premium Bond in the hands of such purchaser must be reduced each year by the amortizable bond premium, although no federal income tax deduction is allowed as a result of such reduction in basis for amortizable bond premium. Such reduction in basis will increase the amount of any gain (or decrease the amount of any loss) to be recognized for federal income tax purposes upon a sale or other taxable disposition of a Premium Bond. The amount of premium which is amortizable each year by a purchaser is determined by using such purchaser's yield to maturity. Purchasers of the Premium Bonds should consult with their own tax advisors with respect to the determination of amortizable bond premium on Premium Bonds for federal income tax purposes and with respect to the state and local tax consequences of owning and disposing of Premium Bonds.

Existing law may change so as to reduce or eliminate the benefit to holders of the Tax-Exempt Bonds of the exclusion of interest thereon from gross income for federal income tax purposes. Proposed legislative or administrative action, whether or not taken, could also affect the value and marketability of the Tax-Exempt Bonds. Prospective purchasers of the Tax-Exempt Bonds should consult with their own tax advisors with respect to any proposed changes in tax law.

Taxable Bonds

General. The following is a general summary of certain federal income tax consequences of the purchase and ownership of the Taxable Bonds. The discussion is based upon the Code, U.S. Treasury Regulations, rulings, and decisions now in effect, all of which are subject to change (possibly, with retroactive effect) or possibly differing interpretation. No assurances can be given that future changes in the law will not alter the conclusions reached herein. The discussion below does not purport to deal with federal income tax consequences applicable to all categories of investors and generally does not address consequences relating to the disposition of a Taxable Bond by a Beneficial Owner thereof. Further, this summary does not discuss all aspects of federal income taxation that may be relevant to a particular investor in the Taxable Bonds in light of the investor's particular circumstances (for example, persons subject to the alternative minimum tax provisions of the Code), or to certain types of investors subject to special treatment under the federal income tax laws (including insurance companies, tax-exempt organizations and entities, financial institutions, broker-dealers, persons who have hedged the risk of owning the Taxable Bonds, traders in securities that elect to use a mark-to-market method of accounting, thrifts, regulated investment companies, pension and other employee benefit plans, partnerships and other pass-through entities, certain hybrid entities and owners of interests therein, persons who acquire Taxable Bonds in connection with the performance of services, or persons deemed to sell Taxable Bonds under the constructive sale provisions of the Code). The discussion below also does not discuss any aspect of state, local, or foreign law or U.S. federal tax laws other than U.S. federal income tax law. The summary is limited to certain issues relating to initial investors who will hold the Taxable Bonds as "capital assets" within the meaning of Section 1221 of the Code, and acquire such Taxable Bonds for investment and not as a dealer or for resale. This summary addresses certain federal income tax consequences applicable to Beneficial Owners of the Taxable Bonds who are United States persons within the meaning of Section 7701(a)(30) of the Code ("United States persons") and, except as discussed below, does not address any consequences to persons other than United States persons. Prospective investors should note that no rulings have been or will be sought from the Internal Revenue Service with respect to any of the federal income tax consequences discussed below, and no assurance can be given that the Service will not take contrary positions.

ALL PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS IN DETERMINING THE FEDERAL, STATE, LOCAL, FOREIGN, AND ANY OTHER TAX CONSEQUENCES TO THEM FROM THE PURCHASE, OWNERSHIP, AND DISPOSITION OF THE TAXABLE BONDS.

Stated Interest and Reporting of Interest Payments. The stated interest on the Taxable Bonds will be included in the gross income, as defined in Section 61 of the Code, of the Beneficial Owners thereof as ordinary income for federal income tax purposes at the time it is paid or accrued, depending on the tax accounting method applicable to the Beneficial Owners thereof. Subject to certain exceptions, the stated interest on the Taxable Bonds will be reported to the Service. Such information will be filed each year with the Service on Form 1099 which will reflect the name, address, and taxpayer identification number ("TIN") of the Beneficial Owner. A copy of Form 1099 will be sent to each Beneficial Owner of a Taxable Bond for federal income tax purposes.

Medicare Contribution Tax. Pursuant to Section 1411 of the Code, as enacted by the Health Care and Education Reconciliation Act of 2010, an additional tax is imposed on individuals beginning January 1, 2013. The additional tax is 3.8% of the lesser of (i) net investment income (defined as gross income from interest, dividends, net gain from disposition of property not used in a trade or business, and certain other listed items of gross income), or (ii) the excess of "modified adjusted gross income" of the individual over $200,000 for unmarried individuals ($250,000 for married couples filing a joint return and a surviving spouse). Beneficial Owners of the Taxable Bonds should consult with their own tax advisors concerning this additional tax, as it may apply to interest earned on the Taxable Bonds as well as gain on the sale of a Taxable Bond.

Backup Withholding. Under Section 3406 of the Code, a Beneficial Owner of the Taxable Bonds who is a United States person may, under certain circumstances, be subject to "backup withholding" (currently at a rate of 24 percent) on current or accrued interest on the Taxable Bonds or with respect to proceeds received from a disposition of the Taxable Bonds. This withholding applies if such Beneficial Owner of Taxable Bonds: (i) fails to furnish to the payor such Beneficial Owner's social security number or other TIN; (ii) furnishes the payor an incorrect TIN; (iii) fails to report interest properly; or (iv) under certain circumstances, fails to provide the payor or such Beneficial Owner's broker with a certified statement, signed under penalty of perjury, that the TIN provided to the payor or broker is correct and that such Beneficial Owner is not subject to backup withholding. To establish status as an exempt person, a Beneficial Owner will generally be required to provide certification on IRS Form W-9 (or substitute form).

Backup withholding will not apply, however, if the Beneficial Owner is a corporation or falls within certain tax-exempt categories and, when required, demonstrates such fact. BENEFICIAL OWNERS OF THE TAXABLE BONDS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THEIR QUALIFICATION FOR EXEMPTION FROM BACKUP WITHHOLDING AND THE PROCEDURE FOR OBTAINING SUCH EXEMPTION, IF APPLICABLE. The backup withholding tax is not an additional tax and taxpayers may use amounts withheld as a credit against their federal income tax liability or may claim a refund as long as they timely provide certain information to the Service.

Withholding on Payments to Nonresident Alien Individuals and Foreign Corporations. Under Sections 1441 and 1442 of the Code, nonresident alien individuals and foreign corporations are generally subject to withholding of U.S. federal income tax by the payor at the rate of 30 percent on periodic income items arising from sources within the United States, provided such income is not effectively connected with the conduct of a United States trade or business. Assuming the interest income of such a Beneficial Owner of the Taxable Bonds is not treated as effectively connected income within the meaning of Section 864 of the Code, such interest will be subject to 30 percent withholding, or any lower rate specified in an income tax treaty, unless such income is treated as "portfolio interest." Interest will be treated as portfolio interest if (i) the Beneficial Owner provides a statement to the payor certifying, under penalties of perjury, that such Beneficial Owner is not a United States person and providing the name and address of such Beneficial Owner, (ii) such interest is treated as not effectively connected with the Beneficial Owner's United States trade or business, (iii) interest payments are not made to a person within a foreign country which the Service has included on a list of countries having provisions inadequate to prevent United States tax evasion, (iv) interest payable with respect to the Taxable Bonds is not deemed contingent interest within the meaning of the portfolio debt provision, (v) such Beneficial Owner is not a controlled foreign corporation within the meaning of Section 957 of the Code, and (vi) such Beneficial Owner is not a bank receiving interest on the Taxable Bonds pursuant to a loan agreement entered into in the ordinary course of the bank's trade or business.

Assuming payments on the Taxable Bonds are treated as portfolio interest within the meaning of Sections 871 and 881 of the Code, then no withholding under Section 1441 and 1442 of the Code, and no backup withholding under Section 3406 of the Code is required with respect to Beneficial Owners or intermediaries who have furnished Form W-8 BEN, Form W-8 BEN-E, Form W-8 EXP, or Form W-8 IMY, as applicable, provided the payor has no actual knowledge or reason to know that such person is a United States person.

Foreign Account Tax Compliance Act. Sections 1471 through 1474 of the Code impose a 30% withholding tax on certain types of payments made to a foreign financial institution, unless the foreign financial institution enters into an agreement with the U.S. Treasury to, among other things, undertake to identify accounts held by certain U.S. persons or U.S.-owned entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these and other reporting requirements, or unless the foreign financial institution is otherwise exempt from those requirements. In addition, the Foreign Account Tax Compliance Act ("FATCA") imposes a 30% withholding tax on the same types of payments to a non-financial foreign entity unless the entity certifies that it does not have any substantial U.S. owners or the entity furnishes identifying information regarding each substantial U.S. owner. Failure to comply with the additional certification, information reporting and other specified requirements imposed under FATCA could result in the 30% withholding tax being imposed on payments of interest and principal under the Taxable Bonds and sales proceeds of Taxable Bonds held by or through a foreign entity. In general, withholding under FATCA currently applies to payments of U.S. source interest (including original issue discount) and will apply "foreign passthru payments" but no earlier than two years after the date of publication of final regulations defining the term "foreign passthru payment." Prospective investors should consult their own tax advisors regarding FATCA and its effect on them.

The preceding discussion of certain U.S. federal income tax consequences is for general information only and is not tax advice. Accordingly, each investor should consult its own tax advisor as to particular tax consequences to it of purchasing, owning, and disposing of the Taxable Bonds, including the applicability and effect of any state, local, or foreign tax laws, and of any proposed changes in applicable laws.

ERISA Considerations

The Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and the Code generally prohibit certain transactions between employee benefit plans under ERISA or tax qualified retirement plans and individual retirement accounts under the Code (collectively, the "Plans") and persons who, with respect to a Plan, are fiduciaries or other "parties in interest" within the meaning of ERISA or "disqualified persons" within the meaning of the Code. In addition, each fiduciary of a Plan ("Plan Fiduciary") must give appropriate consideration to the facts and circumstances that are relevant to an investment in the Bonds, including the role that such an investment in the Bonds would play in the Plan's overall investment portfolio. Each Plan Fiduciary, before deciding to invest in the Bonds, must be satisfied that such investment in the Bonds is a prudent investment for the Plan, that the investments of the Plan, including the investment in the Bonds, are diversified so as to minimize the risk of large losses and that an investment in the Bonds complies with the documents of the Plan and related trust, to the extent such documents are consistent with ERISA. All Plan Fiduciaries, in consultation with their advisors, should carefully consider the impact of ERISA and the Code on an investment in any Bond.

Ratings

The Bonds have been rated "Aa1" by Moody's Investors Service, Inc. ("Moody's"), "AA" by S&P Global Ratings ("S&P") and "AA" by Fitch, Inc. ("Fitch"). Such ratings reflect only the views of Moody's, S&P and Fitch from which an explanation of the significance of such ratings may be obtained. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely. Any such downward revision or withdrawal could have an adverse effect on the market prices of such bonds. A securities rating is not a recommendation to buy, sell or hold securities.

Legal Opinions

The legality of the authorization and issuance of the Bonds will be affirmed by the approving legal opinion of Norton Rose Fulbright US LLP and Bryant Rabbino LLP, Co-Bond Counsel to the City. Reference should be made to the forms of such opinions as set forth in Appendix C hereto for the matters covered by such opinions and the scope of Co-Bond Counsel's engagement in relation to the issuance of the Bonds.

Certain legal matters are being passed upon for the City by its Corporation Counsel.

Orrick, Herrington & Sutcliffe LLP, New York, New York, and Law Offices of Joseph C. Reid, P.A., New York, New York, Co-Special Disclosure Counsel to the City, will pass upon certain legal matters in connection with the preparation of this Official Statement.

Certain legal matters will be passed upon for the Underwriters and the Original Purchasers by Bracewell LLP, New York, New York, and Hardwick Law Firm, LLC, New York, New York, Co-Counsel for the Underwriters and the Original Purchasers.

Underwriting

The Tax-Exempt Bonds are being purchased for reoffering by the Underwriters for whom Samuel A. Ramirez & Co., Inc., The Williams Capital Group, L.P., BofA Securities, Inc., Citigroup Global Markets Inc., Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC, Jefferies LLC, Loop Capital Markets, LLC, RBC Capital Markets, LLC and Siebert Cisneros Shank & Co., L.L.C. are acting as lead managers. The compensation for services rendered in connection with the underwriting of the Tax-Exempt Bonds will be $3,744,387.20, inclusive of expenses.

The Subseries A-2 Bonds will be purchased for reoffering by BofA Securities, Inc., the Original Purchaser of such Bonds. The compensation for services rendered in connection with such Bonds will be $1,139,694.60, inclusive of expenses.

The Subseries A-3 Bonds will be purchased for reoffering by Morgan Stanley & Co. LLC, the Original Purchaser of such Bonds. The compensation for services rendered in connection with such Bonds will be $890,977.01, inclusive of expenses.

The issuance of the Tax-Exempt Bonds and the Taxable Bonds are contingent on the other being issued.

In addition, certain of the Underwriters have entered, and the Original Purchasers may have entered, into distribution agreements with other broker-dealers (that have not been designated by the City as Underwriters or are not the Original Purchasers) for the distribution of the Bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter, or the Original Purchasers, will share a portion of its underwriting compensation or selling concession with such broker-dealers.

The Underwriters, the Original Purchasers and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters, the Original Purchasers and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the City for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters, the Original Purchasers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the City.

Continuing Disclosure Undertaking

As authorized by the Act, and to the extent that (i) Rule 15c2-12 (the "Rule") of the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934, as amended (the "1934 Act") requires the underwriters (as defined in the Rule) of securities offered hereby (under this caption, if subject to the Rule, the "securities") to determine, as a condition to purchasing the securities, that the City will covenant to the effect of the Undertaking, and (ii) the Rule as so applied is authorized by a federal law that as so construed is within the powers of Congress, the City agrees with the record and beneficial owners from time to time of the outstanding securities (under this caption, if subject to the Rule, "Bondholders") to provide:

(a) within 185 days after the end of each fiscal year, to the Electronic Municipal Market Access system ("EMMA") (www.emma.msrb.org) established by the Municipal Securities Rulemaking Board (the "MSRB"), 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 herein in Sections IV, V, VIII and IX, and under the caption "2014-2018 Summary of Operations" in Section VI, provided that if the inclusion or format of such information is changed or new information is added in such sections in any future official statement, thereafter the information provided to EMMA will contain or include by reference information of the type included in that official statement as so changed or added; and

(b) in a timely manner, not in excess of 10 Business Days after the occurrence of any event described below, notice to EMMA, of any of the following events with respect to the securities:

(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 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 Bonds, if material;

(11) rating changes;

(12) 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 or 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;

(13) 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;

(14) appointment of a successor or additional Fiscal Agent or the change of name of a Fiscal Agent, if material;

(15) incurrence of a Financial Obligation (as defined below) of the City, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the City, any of which affect Holders of the Bonds, if material;

(16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the City, any of which reflect financial difficulties; and

(17) failure of the City to comply with clause (a) above.

Event (3) is included pursuant to a letter from the SEC staff to the National Association of Bond Lawyers dated September 19, 1995. However, event (3) may not be applicable, since the terms of the securities do not provide for “debt service reserves.”

Events (4) and (5). The City does not undertake to provide any notice with respect to credit enhancement added after the primary offering of the securities, unless the City applies for or participates in obtaining the enhancement.

Event (6) is relevant only to the extent interest on the securities is tax-exempt.

Event (8). The City does not undertake to provide the above-described event notice of a mandatory scheduled redemption, not otherwise contingent upon the occurrence of an event, if (i) the terms, dates and amounts of redemption are set forth in detail in the final official statement (as defined in the Rule), (ii) the only open issue is which securities will be redeemed in the case of a partial redemption, (iii) notice of redemption is given to the Bondholders as required under the terms of the securities and (iv) public notice of redemption is given pursuant to Exchange Act Release No. 23856 of the SEC, even if the originally scheduled amounts are reduced prior to optional redemptions or security purchases.

Events (15) and (16). "Financial Obligation" (i) means a (A) debt obligation; (B) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (C) guarantee of (A) or (B) but (ii) shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

No Bondholder may institute any suit, action or proceeding at law or in equity ("Proceeding") for the enforcement of the Undertaking or for any remedy for breach thereof, unless such Bondholder shall have filed with the Corporation Counsel of the City evidence of ownership and a written notice of and request to cure such breach, and the City shall have refused to comply within a reasonable time. All Proceedings shall be instituted only as specified herein, in the federal or State courts located in the Borough of Manhattan, State and City of New York, and for the equal benefit of all holders of the outstanding securities benefitted by the same or a substantially similar covenant, and no remedy shall be sought or granted other than specific performance of the covenant at issue.

Any amendment to the Undertaking may only take effect if:

(a) the amendment is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of the City, or type of business conducted; the Undertaking, as amended, would have complied with the requirements of the Rule at the time of award of the securities after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and the amendment does not materially impair the interests of Bondholders, as determined by parties unaffiliated with the City (such as, but without limitation, the City's financial advisor or bond counsel); and the annual financial information containing (if applicable) the amended operating data or financial information will explain, in narrative form, the reasons for the amendment and the "impact" (as that word is used in the letter from the staff of the SEC to the National Association of Bond Lawyers dated June 23, 1995) of the change in the type of operating data or financial information being provided; or

(b) all or any part of the Rule, as interpreted by the staff of the SEC at the date of the Undertaking, ceases to be in effect for any reason, and the City elects that the Undertaking shall be deemed terminated or amended (as the case may be) accordingly.

For purposes of the Undertaking, a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise has or shares investment power which includes the power to dispose, or to direct the disposition of, such security, subject to certain exceptions, as set forth in the Undertaking. An assertion of beneficial ownership must be filed, with full documentary support, as part of the written request to the Corporation Counsel described above.

Financial Advisors

The City has retained Public Resources Advisory Group and Public Financial Management, Inc. to act as financial advisors with respect to the City's general obligation bond financing program and the issuance of the Bonds.

Financial Statements

The City's CAFR for the fiscal year ended June 30, 2018 is included by specific reference in this Official Statement as Appendix B. 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, 2018 and 2017, which is a matter of public record, is included in the CAFR for the fiscal year ended June 30, 2018, which is included by specific reference 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, or included by specific reference, in this Official Statement, since the date of such report and has not been asked to consent to the inclusion of its report in this Official Statement.

Further Information

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 and are available on EMMA (https://emma.msrb.org). 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.

Neither this Official Statement nor any statement which may have been made orally or in writing shall be construed as a contract or as a part of a contract with any purchaser or any holders of the Bonds.

THE CITY OF NEW YORK

[THIS PAGE INTENTIONALLY LEFT BLANK]

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 foreign-owned 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 (millions of current dollars)					GDP PER CAPITA (2009 Dollars)
	2013	2014	2015	2016	2017*	2017*
United States (metropolitan areas)	$14,966,839	$15,628,087	$16,358,498	$16,857,169	$17,547,902	$54,410
New York-Newark-Jersey City, NY-NJ-PA	1,477,043	1,542,763	1,618,366	1,662,671	1,717,712	71,084
Los Angeles-Long Beach-Anaheim, CA.	852,034	901,980	967,100	996,432	1,043,735	67,763
Chicago-Naperville-Elgin, IL-IN-WI.	585,948	608,805	639,033	657,589	679,699	61,170
Dallas-Fort Worth-Arlington, TX.	448,178	475,929	491,879	503,667	535,499	64,824
Washington-Arlington-Alexandria, DC-VA-MD-WV	459,268	471,254	491,779	509,599	529,990	74,000
Houston-The Woodlands-Sugar Land, TX	488,430	507,183	494,837	472,331	490,074	63,311
San Francisco-Oakland-Hayward, CA.	385,451	413,026	445,124	475,417	500,710	89,978
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	389,787	400,621	418,605	431,384	444,975	63,519
Boston-Cambridge-Newton, MA-NH.	364,804	380,769	407,675	419,783	438,684	78,465
Atlanta-Sandy Springs-Roswell, GA	307,750	326,502	347,604	369,806	385,542	56,840

Source: U.S. Bureau of Economic Analysis

* Advance statistics.

Personal Income

From 2007 through 2017 (the most recent year for which City personal income data are available), total personal income for City residents, unadjusted for the effects of inflation, grew at a compounded annual average rate of 4.0% and 3.4% for the City and the nation, respectively. The City's total personal income per capita grew at a compounded annual average rate of 3.2% per year for the same period. In 2017, total personal income per capita in the City exceeded that of the U.S. by 37%.

The following table sets forth information regarding personal income in the City from 2007 to 2017.

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.
2007	$413.8	51,642	39,844	130%
2008	413.6	51,263	40,904	125%
2009	406.9	50,044	39,284	127%
2010	428.3	52,273	40,545	129%
2011	460.0	55,468	42,727	130%
2012	484.0	57,735	44,582	130%
2013	498.8	58,966	44,826	132%
2014	524.0	61,498	47,025	131%
2015	547.1	63,815	48,940	130%
2016	571.1	66,283	49,831	133%
2017	611.2	70,879	51,640	137%

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.

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 456,500 private sector jobs (growth of 17%). From 2000 to 2003, the City lost 173,200 private sector jobs (decline of 5%). From 2003 to 2008, the City added 257,600 private sector jobs (growth of 9%). From 2008 to 2009, the City lost 103,100 private sector jobs (decline of 3%). From 2009 to 2018, the City added 818,400 private sector jobs (growth of 26%). All such changes are based on average annual employment levels through and including the years referenced.

As of May 2019, total employment in the City was 4,651,600 compared to 4,548,100 in May 2018, an increase of approximately 2.3% 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 2009 to 2018.

EMPLOYMENT DISTRIBUTION

	Average Annual Employment (in thousands)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Goods Producing Sectors										
Construction	120.8	112.5	112.4	116.2	122.3	129.3	139.4	147.2	152.5	157.8
Manufacturing	81.6	76.3	75.7	76.4	76.4	76.6	77.9	76.2	73.2	70.6
Service Producing Sectors										
Trade, Transportation & Utilities	551.9	559.0	574.9	589.7	603.9	619.2	628.6	628.3	631.5	631.2
Information	165.9	166.6	171.5	176.5	180.2	186.3	190.4	194.2	200.5	204.4
Financial Activities	432.9	427.3	438.1	437.8	436.4	448.0	457.9	464.6	467.5	474.7
Professional & Business Services	569.1	575.3	597.4	619.2	643.0	669.1	700.0	722.7	742.8	762.1
Education & Health Services	752.6	771.6	789.2	805.6	831.1	866.4	896.9	928.7	961.9	1,006.2
Leisure & Hospitality	309.5	323.1	343.2	366.7	386.6	409.7	429.1	441.6	458.4	463.0
Other Services	160.3	160.6	165.2	170.4	174.9	180.2	185.7	190.1	191.6	193.1
Total Private	3,144.7	3,172.4	3,267.5	3,358.5	3,454.5	3,584.6	3,705.9	3,793.5	3,880.0	3,963.0
Total Government	586.3	579.0	573.3	570.6	570.6	573.3	579.5	583.7	584.7	588.3
Total	3,730.9	3,751.4	3,840.8	3,929.0	4,025.0	4,157.9	4,285.4	4,377.2	4,464.7	4,551.3

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 2017, the City's service producing sectors provided approximately 3.7 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 2017, 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 47%. In the nation, those same service producing sectors accounted for only approximately 20% of employment and 27% of earnings in 2017. 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.

The City's and the nation's employment and earnings by sector for 2017 are set forth in the following table.

SECTORAL DISTRIBUTION OF EMPLOYMENT AND EARNINGS IN 2017(1)

	Employment		Earnings(2)	
	NYC	U.S.	NYC	U.S.
Goods Producing Sectors				
Mining and Logging	0.0%	0.5%	0.4%	1.2%
Construction	3.4%	4.8%	3.4%	6.2%
Manufacturing	1.6%	8.5%	1.0%	9.2%
Total Goods Producing	5.1%	13.7%	4.9%	16.6%
Service Producing Sectors				
Trade, Transportation and Utilities	14.1%	18.7%	8.8%	15.3%
Information	4.5%	1.9%	7.6%	3.6%
Financial Activities	10.5%	5.8%	26.6%	9.7%
Professional and Business Services	16.6%	14.0%	20.8%	17.3%
Education and Health Services	21.5%	15.8%	11.6%	12.9%
Leisure & Hospitality	10.3%	10.9%	5.6%	4.8%
Other Services	4.3%	3.9%	2.9%	3.6%
Total Service Producing	81.8%	71.1%	83.9%	67.2%
Total Private Sector	86.9%	84.8%	89.6%	83.8%
Government(3)	13.1%	15.2%	10.4%	16.2%

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 2017 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	22.4	6.5	14.0	13.2	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").

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 May 2019, the total unemployment rate in the City was 4.2%, compared to 3.6% in May 2018, 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)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
New York City	9.3%	9.5%	9.1%	9.3%	8.8%	7.3%	5.7%	5.2%	4.6%	4.1%
United States	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%

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 April 2019, the number of persons receiving cash assistance in the City was 335,117 compared to 359,368 in April 2018. 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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	356.1

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 7.0%. 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 2018, total taxable sales volume growth rate averaged 5.3% 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 2018.

TAXABLE SALES AND PURCHASES SUBJECT TO SALES TAX (In Billions)

Year(1)	Retail(2)	Utility & Communication Sales(3)	Services(4)	Manufacturing	Other(5)	All Total
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	47.9	21.9	51.1	5.7	23.1	149.7
2017	48.4	22.6	53.0	6.0	23.4	153.4
2018	49.7	24.2	55.2	6.6	24.6	160.3

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."

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

Note: Figures do not include an undetermined number of undocumented aliens.
Source: U.S. Department of Commerce, Bureau of the Census.

The United States Census Bureau estimates the City's population to be 8,398,748 as of July 2018.

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 for Sale or 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

COMPREHENSIVE ANNUAL FINANCIAL REPORT

The CAFR for the fiscal year ended June 30, 2018 is included by specific reference in this Official Statement as Appendix B. The report of Grant Thornton LLP relating to the City's financial statements for the fiscal years ended June 30, 2018 and 2017, which is a matter of public record, is included in the CAFR for the fiscal year ended June 30, 2018, which is included by specific reference 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 this Official Statement.

The CAFR for the fiscal year ended June 30, 2018 is available for inspection at the Office of the City Comptroller and at https://comptroller.nyc.gov/reports/comprehensive-annual-financial-reports/ and is available on EMMA (https://emma.msrb.org).

[THIS PAGE INTENTIONALLY LEFT BLANK]

NORTON ROSE FULBRIGHT

Norton Rose Fulbright US LLP
1301 Avenue of the Americas
New York, New York 10019-6022
United States

Tel +1 212 318 3000
Fax +1 212 318 3400
nortonrosefulbright.com

August 13, 2019

Honorable Scott M. Stringer
Comptroller
The City of New York
Municipal Building
New York, New York 10007

Dear Comptroller Stringer:

We have acted as Co-Bond Counsel to The City of New York (the "City"), a municipal corporation of the State of New York (the "State"), in connection with the issuance by the City on the date hereof of its General Obligation Bonds, Fiscal 2020 Subseries A-1 (the "Tax-Exempt Bonds"), General Obligation Bonds, Fiscal 2020 Subseries A-2, and General Obligation Bonds, Fiscal 2020 Subseries A-3 (said Subseries A-2 Bonds and Subseries A-3 Bonds, together with the Tax-Exempt Bonds, the "Bonds").

The Bonds are issued pursuant to the Constitution of the State, the Local Finance Law of the State, and the Charter of the City, and in accordance with a certificate of the Deputy Comptroller for Public Finance of the City dated the date hereof and related proceedings. We have examined, and in expressing the opinions hereinafter described we rely upon, certificates of the City and such other agreements, documents and matters as we deem necessary to render our opinions. We have not undertaken an independent investigation of the matters described or contained in the foregoing certificates, agreements and documents. We have assumed, without undertaking to verify, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as certified copies, the genuineness of all signatures, the due and legal execution and delivery thereof by, and validity against, any parties other than the City, and the accuracy of the statements contained in such documents.

Based upon the foregoing and our examination of existing law, we are of the opinion that:

1. The Bonds have been duly authorized, executed and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City for the payment of which the City has validly pledged its faith and credit, and all real property within the City subject to taxation by the City is subject to the levy by the City of ad valorem taxes, without limit as to rate or amount, for payment of the principal of and interest on the Bonds.

2. Interest on the Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof, including the City.

NORTON ROSE FULBRIGHT

3. The City has covenanted in a tax certificate dated the date hereof to comply with certain provisions of the Internal Revenue Code of 1986, as amended to the date hereof (the “Code”), relating to the exclusion from gross income of the interest on the Tax-Exempt Bonds for purposes of federal income taxation. Assuming compliance by the City with such covenants, interest on the Tax-Exempt Bonds will be excludable from the gross income of the owners thereof for federal income tax purposes.

4. Interest on the Tax-Exempt Bonds is not an item of tax preference for purposes of the federal alternative minimum tax. The Code contains other provisions that could result in tax consequences, upon which we render no opinion, as a result of ownership of such Tax-Exempt Bonds or the inclusion in certain computations of interest that is excluded from gross income.

We express no opinion with respect to any other federal, state or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Furthermore, we express no opinion as to the effect on the exclusion from gross income of interest on the Tax-Exempt Bonds of any action (including without limitation a change in the interest rate mode with respect to any of the Tax-Exempt Bonds) taken or not taken after the date of this opinion without our approval. Ownership of tax-exempt obligations such as the Tax-Exempt Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain foreign corporations doing business in the United States, “S” corporations with subchapter C earnings and profits, owners of an interest in a financial asset securitization investment trust, individual recipients of Social Security or Railroad Retirement Benefits, individuals otherwise qualifying for the earned income tax credit and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors’ rights heretofore or hereafter enacted, to the extent constitutionally applicable, and the enforcement of related contractual and statutory covenants of the City and the State may also be subject to the exercise of the State’s police powers and of judicial discretion in appropriate cases.

Our opinions are based on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may hereafter come to our attention or to reflect any changes in any law that may hereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

Very truly yours,

BRYANT RABBINO LLP
650 Fifth Avenue, Suite 3300, New York, NY 10019
Tel: 212-967-1800 Fax: 212-967-1811
www.bryantrabbino.com

August 13, 2019

Honorable Scott M. Stringer
Comptroller
The City of New York
Municipal Building
New York, New York 10007

Dear Comptroller Stringer:

We have acted as Co-Bond Counsel to The City of New York (the "City"), a municipal corporation of the State of New York (the "State"), in connection with the issuance by the City on the date hereof of its General Obligation Bonds, Fiscal 2020 Subseries A-1 (the "Tax-Exempt Bonds"), General Obligation Bonds, Fiscal 2020 Subseries A-2, and General Obligation Bonds, Fiscal 2020 Subseries A-3 (said Subseries A-2 Bonds and Subseries A-3 Bonds, together with the Tax-Exempt Bonds, the "Bonds").

The Bonds are issued pursuant to the Constitution of the State, the Local Finance Law of the State, and the Charter of the City, and in accordance with a certificate of the Deputy Comptroller for Public Finance of the City dated the date hereof and related proceedings. We have examined, and in expressing the opinions hereinafter described we rely upon, certificates of the City and such other agreements, documents and matters as we deem necessary to render our opinions. We have assumed, with your permission, that capital projects of the City to be financed with proceeds of the Bonds, and reviewed by other bond counsel for the City, have been properly designated by the City in the City's financial management system as eligible for financing with such proceeds under applicable State law, including the Local Finance Law, and, with respect to projects to be financed with proceeds of the Tax-Exempt Bonds, under the Code (as defined below). We have not undertaken an independent investigation of the matters described or contained in the foregoing certificates, agreements and documents. We have assumed, without undertaking to verify, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as certified copies, the genuineness of all signatures, the due and legal execution and delivery thereof by, and validity against, any parties other than the City, and the accuracy of the statements contained in such documents.

Based upon the foregoing and our examination of existing law, we are of the opinion that:

1. The Bonds have been duly authorized, executed and issued in accordance with the Constitution and statutes of the State and the Charter of the City and constitute valid and legally binding obligations of the City for the payment of which the City has validly pledged its faith and credit, and all real property within the City subject to taxation by the City is subject to the levy by the City of ad valorem taxes, without limit as to rate or amount, for payment of the principal of and interest on the Bonds.

2. Interest on the Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof, including the City.

3. The City has covenanted in a tax certificate dated the date hereof to comply with certain provisions of the Internal Revenue Code of 1986, as amended to the date hereof (the "Code"), relating to the exclusion from gross income of the interest on the Tax-Exempt Bonds for purposes of federal income taxation. Assuming compliance by the City with such covenants, interest on the Tax-Exempt Bonds will be excludable from the gross income of the owners thereof for federal income tax purposes.

4. Interest on the Tax-Exempt Bonds is not an item of tax preference for purposes of the federal alternative minimum tax. The Code contains other provisions that could result in tax consequences, upon which we render no opinion, as a result of ownership of such Tax-Exempt Bonds or the inclusion in certain computations of interest that is excluded from gross income.

We express no opinion with respect to any other federal, state or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Furthermore, we express no opinion as to the effect on the exclusion from gross income of interest on the Tax-Exempt Bonds of any action (including without limitation a change in the interest rate mode with respect to any of the Tax-Exempt Bonds) taken or not taken after the date of this opinion without our approval. Ownership of tax-exempt obligations such as the Tax-Exempt Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain foreign corporations doing business in the United States, "S" corporations with subchapter C earnings and profits, owners of an interest in a financial asset securitization investment trust, individual recipients of Social Security or Railroad Retirement Benefits, individuals otherwise qualifying for the earned income tax credit and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted, to the extent constitutionally applicable, and the enforcement of related contractual and statutory covenants of the City and the State may also be subject to the exercise of the State's police powers and of judicial discretion in appropriate cases.

Our opinions are based on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may hereafter come to our attention or to reflect any changes in any law that may hereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

Very truly yours,

APPENDIX D

VARIABLE RATE BONDS

Variable Rate Demand Bonds

Series	Outstanding Principal Amount	Provider	Facility Type	Expiration
2004A-4	$ 25,000,000	Bank of Montreal	LOC[1]	August 12, 2020
2004A-5	50,000,000	Bank of Montreal	LOC	August 12, 2020
2004H-5	21,210,000	Dexia Crédit Local	LOC	February 2, 2022
2004H-6	25,320,000	Bank of America, N.A.	LOC	February 28, 2022
2004H-8	17,040,000	Bank of America, N.A.	LOC	February 28, 2022
2006E-2	87,530,000	Bank of America, N.A.	LOC	August 1, 2022
2006E-3	87,530,000	Bank of America, N.A.	LOC	August 1, 2022
2006E-4	87,525,000	Bank of America, N.A.	LOC	August 1, 2022
2006F-3	75,000,000	Sumitomo Mitsui Banking Corporation	LOC	September 17, 2021
2006F-4A	40,000,000	Sumitomo Mitsui Banking Corporation	LOC	September 17, 2021
2006F-4B[2]	35,000,000	Bank of Tokyo-Mitsubishi UFJ, LTD	LOC	November 15, 2019
2006H-1[2]	50,535,000	JPMorgan Chase Bank, N.A.	SBPA[3]	October 14, 2019
2006H-2[2]	50,530,000	JPMorgan Chase Bank, N.A.	SBPA	October 14, 2019
2006I-3	50,000,000	Bank of America, N.A.	LOC	May 12, 2020
2006I-4	125,000,000	TD Bank, N.A.	LOC	May 24, 2024
2006I-7	50,000,000	Bank of America, N.A.	LOC	May 12, 2020
2006I-8	50,000,000	State Street Bank and Trust Company	SBPA	September 10, 2019
2008D-3	50,000,000	Bank of Montreal	SBPA	December 3, 2019
2008D-4	50,000,000	Bank of Montreal	SBPA	December 3, 2019
2008J-5	31,855,000	Bank of America, N.A.	SBPA	March 29, 2021
2008J-6	111,225,000	Landesbank Hessen-Thüringen Girozentrale	LOC	December 14, 2020
2008J-8[3]	28,900,000	Sumitomo Mitsui Banking Corporation	LOC	August 2, 2021
2008J-10	100,000,000	Bank of Tokyo-Mitsubishi UFJ, LTD.	LOC	April 27, 2020
2008L-3	80,000,000	Bank of America, N.A.	LOC	April 21, 2020
2008L-4	100,000,000	US Bank, N.A.	LOC	December 18, 2020
2008L-5	145,400,000	Bank of America, N.A.	SBPA	April 19, 2021
2009B-3	100,000,000	TD Bank, N.A.	LOC	January 15, 2020
2010G-4	150,000,000	Barclays Bank, PLC	SBPA	March 29, 2024
2012A-3	25,000,000	Landesbank Hessen-Thüringen Girozentrale	SBPA	December 14, 2020
2012A-4	100,000,000	Bank of Tokyo-Mitsubishi UFJ, LTD.	LOC	June 26, 2020
2012D-3A	76,665,000	The Bank of New York Mellon	SBPA	October 30, 2020
2012G-3	300,000,000	Citibank, N.A.	LOC	March 30, 2021
2012G-4	100,000,000	Citibank, N.A.	LOC	March 30, 2021
2012G-6	200,000,000	Mizuho Bank, Ltd.	LOC	March 16, 2021
2012G-7	85,000,000	Bank of Tokyo-Mitsubishi UFJ, LTD	LOC	April 1, 2021
2013A-2	100,000,000	Mizuho Bank, Ltd.	LOC	October 9, 2021
2013A-3	100,000,000	Mizuho Bank, Ltd.	LOC	October 9, 2021
2013A-4	75,000,000	Sumitomo Mitsui Banking Corporation	LOC	October 15, 2020
2013A-5	50,000,000	Sumitomo Mitsui Banking Corporation	LOC	October 15, 2020
2013F-3	180,000,000	Bank of America, N.A.	SBPA	March 15, 2022
2014D-3[4]	225,000,000	JPMorgan Chase Bank, N.A.	SBPA	October 14, 2019
2014D-4	100,000,000	TD Bank, N.A.	LOC	October 16, 2023
2014D-5	75,000,000	PNC Bank, National Association	LOC	October 14, 2019

See footnotes on page D-2

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, 2024
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
2019D-4	150,000,000	Barclays Bank, PLC	SBPA	December 16, 2022
	$4,847,265,000			

Index Rate Bonds(5)

Series	Outstanding Principal Amount	Step up Date
1994E-4	$ 50,000,000	none
1995F-4	20,800,000	none
2006I-5	75,000,000	May 16, 2024
2006I-6	75,000,000	May 16, 2022
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(6)	200,000,000	August 15, 2019
2015F-7	50,000,000	June 28, 2022
2018E-4	200,000,000	March 1, 2023
	$ 845,800,000	

Auction Rate Bonds

Series	Outstanding Principal Amount
Various	$ 634,900,000

(1) Letter of Credit.

(2) Expected to be converted to fixed rate on the date of delivery of the Bonds.

(3) Standby Bond Purchase Agreement.

(4) Expected to be converted to fixed rate step coupon on the date of delivery of the Bonds.

(5) 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.

(6) Expected to be converted to variable rate on the date of delivery of the Bonds.