

NEW YORK CITY HOUSING AUTHORITY

NEW YORK, NEW YORK



**NEW YORK CITY
HOUSING
AUTHORITY**

A Component Unit of The City of New York

**COMPREHENSIVE
ANNUAL FINANCIAL REPORT
FOR THE
YEARS ENDED
DECEMBER 31, 2019 AND 2018**



Gregory Russ
Chair & Chief Executive Officer



Vito Mustaciuolo
General Manager
& Chief Operating Officer



Annika Lescott
Executive Vice-President
& Chief Financial Officer



Jeffrey Lesnoy
Controller



Government Finance Officers Association

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New York City Housing Authority
New York

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2018

Christopher P. Morill

Executive Director/CEO

New York City Housing Authority

New York, New York

Comprehensive Annual Financial Report

For the Years Ended December 31, 2019 and 2018

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Marble Hill Houses, Bronx



Kingsborough Houses, Brooklyn



Pomonok Houses, Queens



RIIS Houses, Manhattan



South Beach, Staten Island



NEW YORK CITY HOUSING AUTHORITY

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GREGORY RUSS

CHAIR & CHIEF EXECUTIVE OFFICER

September 17, 2020

Members of the Authority
New York City Housing Authority
250 Broadway – 12th Floor
New York, New York 10007

The Real Estate Assessment Center (“REAC”) of the U.S. Department of Housing and Urban Development (“HUD”) requires that all public housing authorities publish, within nine months of the close of each fiscal year, a complete set of financial statements presented in conformity with accounting principles generally accepted in the United States of America (“GAAP”) and audited in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* by a firm of independent certified public accountants. Pursuant to that requirement, we hereby issue the Comprehensive Annual Financial Report (“CAFR”) of the New York City Housing Authority (the “Authority” or “NYCHA”) for the year ended December 31, 2019. The Audit Committee of the Authority’s board reviewed and approved the statements on September 17, 2020.

This report consists of management’s representations concerning the finances of the Authority. Consequently, management is responsible for the completeness and reliability of all the information presented in this report. To provide for a reasonable basis for making these representations, management of the Authority has established a comprehensive internal control framework that is designed both to protect its assets from loss, theft, or misuse and to compile sufficient reliable information for the preparation of the Authority’s financial statements in conformity with GAAP. Because the cost of internal controls should not outweigh its benefits, the Authority’s comprehensive framework of internal controls has been designed to provide reasonable rather than absolute assurance that the financial statements will be free of material misstatement. As management, we assert that to the best of our knowledge and belief, this financial report is complete and reliable in all material respects.

The Authority’s 2019 financial statements have been audited by independent public accountants, Deloitte & Touche, LLP. The purpose of the independent audit is to provide reasonable assurance that the financial statements of the Authority present fairly, in all material respects, the financial position of the Authority.

The independent audit involved performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors’ judgment, including the assessment of the risks of material misstatement of the financial

statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

The independent auditors issued an unmodified opinion on the Authority's financial statements for the years ended December 31, 2019 and December 31, 2018, indicating that they were fairly presented, in all material respects, and in conformity with GAAP. The independent auditors' report is presented as the first component of the financial section of this CAFR.

GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis ("MD&A"). This letter of transmittal is designed to complement MD&A and should be read in conjunction with it. The Authority's MD&A can be found immediately following the independent auditors' report.

Profile of the Authority

The Authority, created in 1934, is a public benefit corporation chartered under New York State Public Housing Law. The Authority is a component unit of The City of New York.

The Authority provides affordable housing to approximately 357,000 low and moderate income New York City residents in 311 housing developments with approximately 173,000 apartments in the five boroughs. Through the Section 8 Housing Choice Voucher Program, the Authority assists approximately 88,000 families in locating and renting housing in privately owned buildings, housing approximately 199,000 residents.

The Authority's basic financial statements consist of a single enterprise fund, which includes the following programs:

- Low Rent Housing Program
- Public Housing Capital Fund Program
- Section 8 Housing Choice Voucher Program
- Section 8 Rental New Construction Program
- Other Grant Programs

Please refer to Note 1 to the financial statements for a description of Authority programs. For further analysis, we have also included supplemental financial schedules for the programs individually, which can be found following the notes to the basic financial statements.

The Authority's basic financial statements also include the following blended component units:

- NYCHA Public Housing Preservation I, LLC

- NYCHA Public Housing Preservation II, LLC

Please refer to Note 23 to the financial statements for a description of these component units.

HUD Agreement and Pollution Remediation

The U.S. Department of Housing and Urban Development (“HUD”) found NYCHA in “substantial default” of the U.S. Housing Act on January 31, 2019 following a federal lawsuit. HUD found that NYCHA failed to follow laws and regulations concerning lead-based paint; failed to provide decent, safe and sanitary conditions; and engaged in deceptive practices to hide the condition of NYCHA properties. As a result, NYCHA signed an agreement with HUD, the United States Attorney’s Office for the Southern District of New York (“SDNY”), and the City of New York effective January 31, 2019 (the “Agreement”) to remedy the physical deficiencies at NYCHA properties, ensure the Authority’s compliance with federal law, and reform NYCHA’s management structure. The obligations of this agreement apply to apartment units, common areas, residential buildings, and building sites consisting of public housing owned or operated by NYCHA and receiving funding through Section 9 of the Housing Act. The Agreement appointed a federal Monitor to oversee the Authority’s compliance and to approve Action Plans that NYCHA has submitted to achieve all the requirements of the Agreement for the six pillar areas: lead, mold, heat, elevators, PHAS inspections, and pests.

NYCHA agreed to perform lead-based paint interim controls, follow lead-safe work practices mandated by HUD and the U.S. Environmental Protection Agency (EPA), and perform specified lead-based paint abatement activities. These requirements include all apartments and interior common areas that contain lead-based paint in the same building as those units, in addition to all exterior common areas. Timelines are subject to a phased approach over the 20-year term of the Agreement. Based on its current evaluation, NYCHA has recorded \$2.8 billion of pollution remediation costs (lead-based paint) in 2019. While work streams and cash outlays will occur over the 20-year term of the Agreement, GASB 49 requires that the lifetime estimate of the costs be recorded upon the triggering of the obligation. Total costs are subject to variations in testing, timing of when remediation and abatement can be executed, variation in contractor costs, and other factors.

As part of the Agreement, the City of New York committed to provide \$2.2 billion in capital funds over ten years to assist NYCHA in meeting its various obligations in the Agreement. NYCHA is not yet in full compliance with the requirements of the Agreement and lead-based paint regulations but continues to work with the Monitor to improve its compliance

Financial Results

The Authority’s *Loss before Special Item and Capital Contributions* for 2019 was \$451 million, compared to a loss of \$268 million for 2018. The increase in the loss for 2019 was mainly the result of \$132 million decrease in Insurance recoveries relating to Superstorm Sandy, an \$89 million impairment on an asset relating to a real estate transaction and a \$80 million Note receivable valuation reduction on a real estate transaction, partially offset by increases in both federal operating subsidies and developer fees.

While the Federalization of the State- and City-built developments has helped to reduce the Authority's historical budget deficits, ongoing structural operating deficits are projected to continue, primarily attributable to federal underfunding of public housing and increased employee entitlement costs.

The Authority incurred *Special item* costs of \$2.751 billion in 2019 for Pollution remediation (lead-based paint), resulting in a Loss before Capital Contributions of \$3.203 billion, \$2.934 billion higher than 2018.

Factors Affecting Financial Condition

To assess the Authority's overall financial condition, the following information contained within the Authority's financial statements should be considered in connection with an understanding of the following major factors affecting its financial condition:

Congressional Budget and HUD Policy. As a public housing authority ("PHA"), the Authority's primary source of funding is HUD. The amount of funding received from HUD is affected by Congressional housing legislation and the federal budget. The Authority continually monitors changes and trends in the Congressional Budget and HUD policy and adjusts its strategy and financial planning accordingly.

Public Housing Subsidies - Operating Fund Program. HUD's Public Housing Operating Fund provides subsidies to PHAs nationwide to operate and maintain public housing in local communities. However, appropriations have generally fallen short of the funding levels required to fully fund public housing operations in accordance with HUD's eligibility formula. It is also important to note that while HUD's formula takes location into account, New York City has long advocated that the system is inequitable when one considers the City's uniquely high construction and employment costs in comparison to authorities across the US. In FY 2019, PHAs nationwide were eligible to receive \$4.65 billion. However, the final appropriation was \$4.55 billion, which translates to 97.8 cents for every dollar PHAs were eligible for based on operating formula (effective proration at 97.8 percent) owing to intervention from Congress. 2019 appropriations are an increase over the 94.7% from 2018. This resulted in the Authority receiving \$1,001 million of operating subsidy during the year or a \$64 million increase over 2008. The 2020 plan assumes an effective proration at 95 percent based on projected eligibility of the previous three years (2017-2019). Owing to intervention from Congress, 2020 appropriations are higher than anticipated; with an expected proration of 96.6 percent. In 2020, NYCHA will receive approximately \$17 million greater than projected.

Public Housing Subsidies- Capital Fund Program. The Capital Fund Program provides financial assistance in the form of grants to public housing authorities to carry out capital and management activities, including those listed in Section 9(d)(1) of the United States Housing Act of 1937. Congress provides Capital Funds through annual appropriations. The Capital Fund formula factors modernization backlog (existing modernization needs) and accrual needs in the calculation. The Capital Fund Rule became effective on November 25, 2013, and combined the exiting Capital Fund and development regulations into a consolidated regulation. The Authority received \$346

million in funding from HUD for the Public Housing Capital Fund Program. The Authority's 2019 Capital Fund allocation was \$ 552 million.

Section 8 Housing Choice Voucher Program. The Housing Choice Voucher (HCV) Program is a federally funded program that provides rental assistance to eligible low-income families to fund affordable housing in the private rental market. The Authority's HCV program is the largest in the United States. Nearly 25,000 property owners currently participate in the program. During 2019, the Authority received \$1,185 million in subsidies from HUD for the Section 8 Housing Voucher Programs.

Federalization of New York State and City of New York Developments. Subsidy funding for 21 developments originally built by the State of New York and the City of New York was eliminated by the State in 1998 and by the City in 2003. A first step in addressing the funding shortfall for these 21 State- and City-built developments was taken on September 21, 2008, when the Authority received approval of its management plan for its Section 8 Voluntary Conversion Program. Through the end of 2017, the Authority converted 4,700 units in the State- and City-built developments to Section 8 funding. The American Recovery and Reinvestment Act of 2009 (ARRA) presented PHAs across the country with an opportunity to re-invest in and develop public housing units. NYCHA capitalized on this opportunity to seek funding for the 21 State- and City-built developments. NYCHA became eligible to receive approximately \$65 million in recurring annual operating and capital subsidies for nearly 12,000 units at these developments. During 2019, 2018, and 2017, the Authority received \$71 million, \$67 million, and \$61 million, respectively, in operating subsidies for these units.

Five-Year Operating Plan. NYCHA's 2019-2023 Operating Plan includes initiatives to increase revenue, contain costs, and operate as a more efficient landlord. In December 2018, the Authority unveiled NYCHA 2.0, a comprehensive plan to preserve public housing which will resolve \$24 billion, or up to 75 percent, of NYCHA's estimated \$31.8 billion overall capital need. This plan will include:

- Permanent Affordability Commitment Together (PACT) – PACT will center on the conversion of public housing funding to Section 8 project-based vouchers and the creation of public- private partnerships. Under PACT, NYCHA seeks to identify resources and opportunities to make major physical and operational improvements, while preserving long term affordability, maintaining strong resident rights and stabilizing developments by providing them with a more stable flow of federal subsidy.
- Built to Preserve – develop new mixed-income buildings on select NYCHA campuses with proceeds from new construction to be used to renovate adjacent and other NYCHA developments.
- 100% Affordable Housing and Seniors First – plan to create new Senior housing on underused NYCHA properties through long term ground leases to developers which will construct new developments on property.

In addition, a variety of operational enhancements have been initiated including:

- Implemented electronic invoicing- created efficiencies in vendor invoice submission and elimination of manual data entry.
- Central office space consolidation – in process and expected to be largely completed by end of 2020.
- Alternative work schedule – to expand front-line service hours at developments to 13 hours per day/7 days per week.
- Creation of new departments – funded the new Environmental Health and Safety and Quality Assurance Departments and expanded the Compliance Department to ensure quality standards and services, and accountability for residents.

With new initiatives underway, the Authority is working to strengthen our organization and our delivery of services to residents, and ensure the longevity of public housing in New York City.

Physical Needs Assessment. In 2016, NYCHA engaged a consulting firm to perform a Physical Needs Assessment (PNA) of the complete NYCHA portfolio of buildings. The goal was to get a sound and thorough understanding of the existing conditions of NYCHA buildings and grounds. The PNA concluded that the total projected cost of all needs - repair and replacement - over the next five years is \$31.8 billion. The bulk of this need is due to the aging NYCHA portfolio; the average age of a NYCHA building is roughly 60 years, and 70 percent of the portfolio was built prior to 1970. Under current accounting rules, there is no requirement to record or disclose the costs of such deferred maintenance within the financial statements.

Rental Income. Rent provides a significant portion of the Authority’s income. After review of the household composition, income, assets, and expenses, the Authority sets a household’s rent at either 30% of the household’s adjusted gross income or the flat rent, whichever is lower. Adjusted gross income is the household’s gross income plus the cash value of assets minus any exclusions and allowable deductions. In comparison, flat rent is set at 80 percent of Fair Market Rent (FMR), and is based on rent charged for similar units in the private, non-subsidized rental market. Tenant revenue, in 2019 was \$1.033 billion which was net of \$29 million provision for bad debts.

Blueprint for Change. In July 2020, NYCHA Chair and CEO Greg Russ presented “A Blueprint for Change,” a comprehensive set of ideas that outlines potential pathways for the Authority’s reorganization and investing of capital to stabilize and improve its properties, with additional impacts that could drive jobs and recovery strategies. The capital strategy includes the creation of a Public Housing Preservation Trust that would enable the Authority to address \$18 billion to \$25 billion in capital need across roughly 110,000 apartments. When combined with NYCHA 2.0 strategies across the other 62,000 apartments, the stabilization strategy will address the physical needs across the entire portfolio. Through this plan, the Authority would address all compliance elements of the HUD Agreement and meet basic housing quality standards.

GFOA. The Government Finance Officers Association of the United States and Canada (“GFOA”) awarded a *Certificate of Achievement for Excellence in Financial Reporting* to the Authority for its comprehensive annual financial report for the fiscal year ended December 31, 2018. This was the sixteenth consecutive year that the Authority achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and

efficiently organized comprehensive annual financial report that demonstrates a constructive “spirit of full disclosure.” This report must satisfy both generally accepted accounting principles and applicable legal requirements. A copy of the 2018 *Certificate of Achievement for Excellence in Financial Reporting* can be found at the front of this CAFR.

The Authority issued its audited financial statements for the year ended December 31, 2019 and accompanying Single Audit Report within the extended guidelines established by HUD and GFOA as a result of the COVID-19 pandemic. This timely issuance has once again afforded the Authority the opportunity to compete for the Government Finance Officers Association’s *Certificate of Achievement for Excellence in Financial Reporting*. We believe that the current comprehensive annual financial report continues to meet the Certificate of Achievement Program’s rigorous requirements. NYCHA will submit the CAFR for the year ending December 31, 2019 to the GFOA for award consideration.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Annika Lescott". The signature is fluid and cursive, with a large initial "A" and a long horizontal stroke at the end.

Annika Lescott
Executive Vice President and Chief Financial Officer



Wagner Houses, Manhattan



Eastchester Gardens, Bronx



Castle Hill Houses, Bronx



Douglas Houses, Manhattan

NEW YORK CITY HOUSING AUTHORITY
LIST OF PRINCIPAL OFFICIALS
September 17, 2020

NAME	TITLE
NYCHA BOARD	
Gregory Russ.....	Chair & Chief Executive Officer
Vacant.....	Resident Board Member
Joseph Adams, Sr.....	Board Member
Paula Gavin.....	Board Member
Victor A. Gonzalez.....	Resident Board Member
Matt Gewolb.....	Board Member
Jacqueline Young.....	Resident Board Member
SENIOR MANAGEMENT	
Vito Mustaciuolo.....	General Manager & Chief Operating Officer
Patti Bayross.....	Executive Vice-President and Chief Information Officer
Annika Lescott.....	Executive Vice-President and Chief Financial Officer
Kerri Jew.....	Executive Vice-President and Chief Administrative Officer
Eva Trimble.....	Executive Vice-President for Strategy & Innovation
Lisa Bova-Hiatt.....	Executive Vice-President for Legal Affairs & General Counsel
Johnathan Gouveia.....	Executive Vice-President for Real Estate
Lakesha Miller.....	Executive-Vice President for Leased Housing
J. Steven Lovci.....	Executive Vice-President for Capital Projects
Sideya Sherman.....	Executive Vice-President Community Engagement & Partnerships
Barbara Brancaccio.....	Chief Communications Officer
Daniel Greene.....	Chief Compliance Officer
Joey Koch.....	Chief of Staff
Vilma Huertas.....	Special Advisor to the Chair
Jeffrey Lesnoy.....	Controller

FINANCIAL

SECTION

REPORT OF INDEPENDENT AUDITORS

INDEPENDENT AUDITORS' REPORT

Board of Directors and the Audit Committee of the
New York City Housing Authority

Report on the Financial Statements

We have audited the accompanying statements of net position of the New York City Housing Authority (the "Authority"), a component unit of The City of New York, as of December 31, 2019 and 2018, and the related statements of revenues, expenses and changes in net position and cash flows for the years then ended, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of December 31, 2019 and 2018, and the changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Changes in NYCHA's Total OPEB Liability and Related Ratios, Schedule of the Authority's Contributions to the New York City Employees' Retirement System (NYCERS), and Schedule of the Authority's Proportionate Share of the Net Pension Liability of NYCERS, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The Introductory Section and Statistical Section, listed in the foregoing table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Introductory Section and Statistical Section have not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Deloitte & Touche LLP

September 17, 2020

**MANAGEMENT'S
DISCUSSION
AND ANALYSIS
(UNAUDITED)**

NEW YORK CITY HOUSING AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

The following is a narrative overview and analysis of the Authority's financial activities for the years ended December 31, 2019 and 2018. Please read it in conjunction with the transmittal letter at the beginning of this report, the Authority's financial statements following this section and the notes to the financial statements.

OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

The **Statements of Net Position** present the Authority's *assets, deferred outflows, liabilities, and deferred inflows* at the end of the year. *Net position* is the difference between (a) assets and deferred outflows and (b) liabilities and deferred inflows. Over time, increases or decreases in *Net Position* is a useful indicator as to whether the Authority's financial health is improving or deteriorating.

The **Statements of Revenues, Expenses, and Changes in Net Position** report the Authority's operating results and how its Net Position changed during the year. All Revenues, Expenses, and Changes in Net Position are reported on an *accrual basis* of accounting, which reports events as they occur, rather than when cash changes hands (*cash basis* of accounting).

The **Statements of Cash Flows** report how the Authority's cash and cash equivalents increased or decreased during the year. The statements report how cash and cash equivalents were provided by and used in the Authority's operating, non-capital financing, capital and related financing, and investing activities. The Authority uses the direct method of presenting cash flows, which includes a reconciliation of operating income or loss to cash flows related to operating activities.

The **Notes to the Financial Statements** are an integral part of the financial statements, disclosing information which is essential to a full understanding of the statements.

REQUIRED SUPPLEMENTARY AND STATISTICAL INFORMATION

The **Required Supplementary Information** presents information regarding: (1) the Authority's changes in total OPEB Liability and related ratios; (2) the Authority's contributions to the New York City Employees' Retirement System ("NYCERS"), and (3) the Authority's proportionate share of the Net Pension Liability of NYCERS.

The **Statistical Section** provides information on the Authority's overall economic condition. The major categories presented are: (1) financial trends; (2) revenue capacity; (3) debt capacity; (4) demographic and economic information; and (5) operating information.

FINANCIAL HIGHLIGHTS AND ANALYSIS

The Authority's *Loss before capital contributions* for 2019 was \$3,203 million, compared to a loss of \$268 million for 2018. This unfavorable variance of \$2,935 million is due primarily to current year costs of \$2,751 million for lead based paint remediation and abatement (see Note 11) which has been reflected as a *Special item*. *Non-operating revenues, net* also incurred an unfavorable variance of \$138 million and *Operating Expenses* had an unfavorable variance of \$73 million, partially offset by a favorable variance of \$27 million in *Operating Revenues*.

The \$2,751 million *Special item* costs for lead based paint remediation and abatement costs represents NYCHA's estimated costs to comply with the HUD/SDNY agreement (see Note 27) effective January 31, 2019 and New York City Local Law 1. While workstreams and cash outlays will occur over the 20-year term of the agreement, GASB 49 requires that the lifetime estimate of the costs be recorded upon the triggering of the obligation. Total costs are subject to variations in testing, timing of when remediation and abatement can be executed, variation and inflation in contractor costs, and other microeconomic and macroeconomic factors. Costs recorded do not include components that are not reasonably estimable such as exterior building surfaces, fences and soil where the Authority does not have reliable information to reasonably estimate lead findings and related costs at this time.

The \$27 million increase in *Operating revenues* represents an increase of \$39 million in *Other income*, of which \$31 million is developer fees, partially offset by a decrease of \$12 million in *Tenant revenue*, of which \$5 million is due to an increase in collection losses.

The increase of \$73 million in *Operating expenses* is led by an increase of \$59 million in *General administrative*, of which \$25 million is for claims and insurance and the balance primarily represents increases for computer, fire safety, and staff augmentation costs. *Rent for leased dwellings* increased by \$55 million due to an increase in the average per unit voucher cost. These increases are partially offset by a decrease of \$41 million in *Utilities*, primarily for electricity and heating gas. It must be noted that while *Maintenance and operations* are flat in the aggregate, there are offsetting variances in each year as follows. In 2019, there was a \$26 million increase in heating and boiler maintenance, a \$20 million increase in labor (seasonal employees and overtime), a \$15 million increase in mold remediation costs and a \$21 million increase in ordinary maintenance operations. In 2018, NYCHA recorded Maintenance and operations expense for a one-time \$92 million cost for x-ray fluorescence (XRF) tests to better survey the properties for the presence of positive lead-based paint components.

The \$138 million unfavorable variance in *Non-operating revenues, net*, primarily represents an unfavorable variance of \$161 million in *Real Estate Transactions*, largely due to an \$80 million decrease in the net value of a Notes Receivable and an \$89 million impairment of an asset; both relating to the Ocean Bay-Bayside transaction (see Note 21). *Insurance recoveries* relating to Superstorm Sandy also decreased by \$132 million. These decreases are partially offset by an increase of \$131 million in *Subsidies and grants* (see Note 19) and a \$27 million increase in *Investment related activity* due to changes in interest rates. The increase in subsidies is primarily comprised of a) \$64 million growth in the Federal Operating Subsidy due to an increase in the eligible amount due from HUD, b) an increase in the pro-ration factor from 94.74% to 97.77%, c) \$44 million increase in Section 8 Housing Assistance Programs ("HAP") subsidy to cover higher costs in the Leased Housing Program, and d) \$22 million increase from the City of New York.

Summary of Net Position (\$ in thousands)

	2019	2018	2017
Current and other assets	\$ 2,918,049	\$ 2,902,022	\$ 2,577,292
Capital assets, net	<u>7,520,684</u>	<u>7,040,782</u>	<u>6,581,745</u>
Total Assets	<u>10,438,733</u>	<u>9,942,804</u>	<u>9,159,037</u>
Deferred Outflows of Resources	<u>560,184</u>	<u>176,125</u>	<u>186,564</u>
Current liabilities	1,392,980	1,187,976	1,051,354
Non-current liabilities	<u>7,877,658</u>	<u>5,069,063</u>	<u>5,156,744</u>
Total Liabilities	<u>9,270,638</u>	<u>6,257,039</u>	<u>6,208,098</u>
Deferred Inflows of Resources	<u>621,286</u>	<u>431,108</u>	<u>259,180</u>
Net investment in capital assets	6,897,324	6,450,404	5,995,349
Unrestricted deficit	<u>(5,790,331)</u>	<u>(3,019,622)</u>	<u>(3,117,026)</u>
Total Net Position	<u>\$ 1,106,993</u>	<u>\$ 3,430,782</u>	<u>\$ 2,878,323</u>

December 31, 2019 vs. December 31, 2018 (\$ in thousands)

- The Authority's *Net Position* decreased by \$2,323,789 from the prior year, comprised of a *Loss before capital contributions* of \$3,202,690, partially offset by *Capital contributions* of \$878,901.
- The *Loss before Capital contributions* of \$3,202,690 includes a *Special Item* of \$2,751,291, representing the current year pollution remediation costs for lead based paint (see Note 11).
- The \$16,027 increase in *Current and other assets* is due primarily to an increase of \$45,811 in Accounts Receivable, net and an increase of \$85,503 in Subsidies receivable (see Note 4), partially offset by a decrease of \$61,902 in Cash and investments (see Note 3), due largely to the decrease of restricted cash for the Sandy Recovery fund, and due to a \$54,926 decrease in Notes and loans receivable, net (see Note 5), primarily due to valuation decreases in real estate related receivables.
- The increase of \$479,902 in *Capital assets, net* represents the current year additions of \$852,166 less Depreciation expense of \$371,713 and the net book value of the capital assets sold or retired of \$551 (see Note 8).
- The increase of \$384,059 in *Deferred Outflows of Resources* from \$176,125 to \$560,184 is primarily comprised of increases of \$328,813 in deferred amount on OPEB, and \$55,422 in deferred amount on pensions, both due to differences between expected and actual experience.
- The \$205,004 increase in *Current liabilities* primarily represents an increase of \$129,881 in the current portion of the pollution remediation obligation for lead-based paint (see Note 11). Accrued liabilities also increased by \$64,878 (see Note 10).
- *Non-current liabilities* increased by \$2,808,595, primarily representing an increase of \$2,620,435 in the long-term portion of the pollution remediation obligation, due primarily to lead based paint (see Note 11). The OPEB liability also increased by \$254,146 (see Note 17), due primarily to unfavorable variances between expected and actual experience, partially offset by favorable variances in change in assumptions. The long-term portion of Claims payable increased \$38,849, primarily representing an increase in incurred losses for the self-insured general liability program (see Note 13). These increases are partially offset by a decrease of \$72,709 in the Net pension liability, due primarily to (1) favorable variances between projected and actual investment earnings on pension plan investments; and (2) a decrease in the Authority's employer allocation percentage in fiscal year 2019 (see Note 17). Long-term debt also decreased by \$41,671, primarily representing principal payments during the year (see Note 15).

- The *Deferred Inflows of Resources* increase of \$190,178 is due to increases in deferred inflow amounts of \$107,389 on OPEB, due primarily to changes in assumptions, and \$82,789 on pensions, primarily representing changes in proportion and differences between contributions subsequent to the measurement date.

December 31, 2018 vs. December 31, 2017 (\$ in thousands)

- The Authority's *Net Position* increased by \$552,459 from the prior year, comprised of *Capital contributions* of \$820,368, net of a *Loss before capital contributions* of \$267,909.
- The \$324,730 increase in *Current and other assets* is due primarily to increases of \$240,684 in Accounts Receivable, net and Notes and Loans Receivable, net and \$82,475 in Deposits and investments (see Note 3). The Account Receivable, net increase includes additional amounts due from HUD, The City or New York and from Insurance carriers. The increase in Notes Receivable, net reflects the recognition of additional amounts due relating to the 2018 Rental Assistance Demonstration ("RAD") Program conversion.
- The increase of \$459,037 in *Capital assets, net* is comprised of the current year additions of \$829,919 less Depreciation expense of \$366,632, less the net book value of the capital assets sold or retired of \$4,250 (see Note 8).
- The decrease of \$10,439 in *Deferred Outflows of Resources* from \$186,564 to \$176,125 is primarily comprised of a decrease of \$39,899 in deferred amount on pensions, due primarily to certain changes in pension assumptions. This is partially offset by an increase of \$32,505 in deferred amount on OPEB due to differences between expected and actual experience.
- The increase of \$136,622 in *Current liabilities* is primarily comprised of an increase of \$116,861 in pollution remediation obligations, primarily for lead based paint testing (see Note 11).
- The \$87,681 decrease in *Non-current liabilities* primarily represents a decrease of \$137,907 in the Net pension liability due primarily to (1) favorable variances between projected and actual investment earnings on pension plan investments; (2) favorable variances between expected and actual experience, due to changes in demographic data; and (3) a decrease in the Authority's employer allocation percentage in fiscal year 2018 (see Note 17). This decrease is partially offset by increases of \$37,779 in Long-term debt, due primarily to the issuance of new equipment purchase agreements to finance energy performance contracts (see Note 15), and \$16,882 in Claims payable (see Note 13).
- The *Deferred Inflows of Resources* increase of \$171,928 is due to increases in deferred inflow amounts of \$100,550 on OPEB, due primarily to changes in assumptions and \$71,378 on pensions representing differences between expected and actual experience.

Summary of Revenues, Expenses, and Changes in Net Position (\$ in thousands)

	2019	2018	2017
OPERATING REVENUES:			
Tenant revenue, net	\$ 1,058,488	\$ 1,070,022	\$ 1,051,628
Other income	75,762	36,751	56,766
Total Operating Revenues	<u>1,134,250</u>	<u>1,106,773</u>	<u>1,108,394</u>
OPERATING EXPENSES:			
Rent for leased dwellings	1,061,638	1,006,991	987,017
General and administrative	949,768	890,679	838,400
Maintenance and operations	875,510	875,431	673,678
Utilities	541,747	582,405	554,542
Depreciation	371,713	366,632	370,938
OPEB expense	127,536	129,110	136,767
Protective services	24,635	29,833	22,353
Tenant services	19,219	17,389	18,164
Total Operating Expenses	<u>3,971,766</u>	<u>3,898,470</u>	<u>3,601,859</u>
OPERATING LOSS	(2,837,516)	(2,791,697)	(2,493,465)
NON-OPERATING REVENUES (EXPENSES):			
Subsidies and grants	2,517,894	2,387,205	2,154,174
Insurance recoveries	-	131,972	809
Investment income	36,165	25,811	16,080
(Loss) Gain on real estate transactions	(146,483)	14,898	22,397
Change in fair value of investments	13,318	(3,304)	(745)
Interest expense	(34,777)	(32,794)	(30,184)
Total Non-Operating Revenues, Net	<u>2,386,117</u>	<u>2,523,788</u>	<u>2,162,531</u>
LOSS BEFORE SPECIAL ITEM AND CAPITAL CONTRIBUTIONS	(451,399)	(267,909)	(330,934)
SPECIAL ITEM:			
Pollution remediation costs - lead based paint	2,751,291	-	-
LOSS BEFORE CAPITAL CONTRIBUTIONS	(3,202,690)	(267,909)	(330,934)
CAPITAL CONTRIBUTIONS	<u>878,901</u>	<u>820,368</u>	<u>686,619</u>
CHANGE IN NET POSITION	(2,323,789)	552,459	355,685
NET POSITION, BEGINNING OF YEAR, as previously stated	3,430,782	2,878,323	2,575,363
Cumulative effect of implementing GASB 83	-	-	(52,725)
NET POSITION, BEGINNING OF YEAR, as restated	<u>3,430,782</u>	<u>2,878,323</u>	<u>2,522,638</u>
NET POSITION, END OF YEAR	<u>\$ 1,106,993</u>	<u>\$ 3,430,782</u>	<u>\$ 2,878,323</u>

2019 vs. 2018 (\$ in thousands)

- The *Operating Loss* for the Authority increased \$45,819 from \$2,791,697 in 2018 to \$2,837,516 in 2019, due to an increase of \$73,296 in *Operating Expenses*, partially offset by an increase of \$27,477 in *Operating Revenues*.
- The \$27,477 increase in *Operating Revenues* is comprised of an increase of \$39,011 in Other income, primarily representing increases of \$30,687 in developer fees and \$8,671 in insurance reimbursements, partially offset by a decrease of \$11,534 in Tenant revenue, net, of which \$5,252 represents an increase in rent collection losses and the balance is primarily due to a decrease in the average number of families on the rent roll.
- The \$73,296 increase in *Operating Expenses* is led by increases of \$59,089 in *General and administrative*, of which \$25,005 is for claims and insurance and the balance primarily represents increases in computer, fire safety, and staff augmentation costs. *Rent for leased dwellings* increased by \$54,647 due to an increase in the average per unit voucher cost. These increases are partially offset by a decrease of \$40,658 in *Utilities*, primarily for electricity and heating gas. It must be noted that while Maintenance and operations are flat in the aggregate, there are offsetting expenses in each year as follows. In 2019, there was a \$26 million increase in heating and boiler maintenance, a \$20 million increase in labor (seasonal employees and overtime), a \$ 15 million increase in mold remediation costs and a \$21 million increase in ordinary maintenance operations. In 2018, NYCHA recorded Maintenance and operations expense for a one-time \$ 92 million cost for x-ray fluorescence (XRF) tests to better survey the properties for the presence of positive lead- based paint components.
- *Non-operating revenues, net*, decreased by \$137,671, primarily representing an unfavorable variance of \$161,381 in *Real Estate transactions*, resulting in a loss of \$146,483, due to an \$80 million decrease in the net value of a Notes Receivable and an \$89 million impairment of an asset both relating to the Ocean Bay-Bayside transaction (see Note 21). *Insurance recoveries* relating to Superstorm Sandy decreased by \$131,972. These decreases are partially offset by an increase of \$130,689 in *Subsidies and Grants* (see Note 19) and an increase of \$26,976 in *Investment income* due to changes in interest rates. The increase in subsidies is primarily comprised of increases of \$64,482 in the Federal Operating Subsidy due to an increase in the eligible amount due from HUD and to an increase in the pro-ration factor from 94.74% to 97.77%, \$44,359 in Section 8 HAP subsidy to cover increased costs in the Leased Housing Program, and \$22,013 from the City of New York.
- The *Special item* costs of \$ 2,751,291 for lead based paint remediation and abatement (see Note 11) represents NYCHA’s estimated costs to comply with the HUD/SDNY agreement effective 1/31/19 (see Note 27) and New York City Local Law 1. While workstreams and cash outlays will occur over the 20-year term of the agreement, GASB 49 requires that the lifetime estimate of the costs be recorded upon the triggering of the obligation. Total costs are subject to variations in testing, timing of when remediation and abatement can be executed, variation and inflation in contractor costs, and other microeconomic and macroeconomic factors. Costs recorded do not include components that are not reasonably estimable such as exterior building surfaces, fences and soil where the Authority does not have reliable information to reasonably estimate lead findings and related costs at this time.
- *Capital Contributions* increased \$58,533 to \$878,901. The current year contributions are primarily comprised of \$370,718 from the Federal Emergency Management Agency (“FEMA”), \$219,613 for the Capital Fund Program, and \$148,553 from the City of New York within its “City Capital” program.

2018 vs. 2017 (\$ in thousands)

- The *Operating Loss* for the Authority increased \$298,232 from \$2,493,465 in 2017 to \$2,791,697 in 2018, due to an increase of \$296,611 in *Operating Expense* and a decrease of \$1,621 in *Operating Revenues*.
- The \$1,621 decrease in *Operating Revenues* is comprised of a decrease \$20,015 in Other income, partially offset by an increase of \$18,394 in Tenant revenue, net. The decrease in Other income primarily represents \$8,077 in contract retention liabilities in 2017 not repeated in 2018, \$6,579 in Developer Fees recognized primarily in connection with the Section 8 Recap transaction, and \$4,296 in Insurance and benefits reimbursements. The increase in Tenant revenue is due to an increase in the average monthly rent including households required to pay 30 percent of family income towards rent.
- The \$296,611 increase in *Operating Expenses* is led by an increase of \$201,753 in *Maintenance and operations*, of which \$100 million represents pollution remediation costs for lead based paint and mold, \$64,293 represents increases in other contract costs and \$15,620 represents an increase in the cost of materials. Other increases are \$52,279 in *General and administrative*, of which \$32,332 is for claims and insurance, \$27,863 in *Utilities*, primarily for electricity, heating gas, and fuel oil, and \$19,974 in *Rent for leased dwellings*, due to an increase in the average per unit voucher cost.
- *Non-operating revenues and expenses, net*, increased by \$361,257, primarily representing \$131,163 in insurance recoveries related to Superstorm Sandy and \$233,031 in *Subsidies and grants*. This latter increase in subsidies is primarily comprised of increases of \$85,769 from the City of New York, \$66,495 in Federal Capital Fund drawdowns for operating costs, \$46,980 in Federal Operating Subsidy, due to an increase in the eligible amount due from HUD and to an increase in the proration factor from 93.1% to 94.74%, and \$40,029 in Section 8 HAP subsidy to cover the increased costs in the Leased Housing Program. These increases are partially offset by a decrease of \$5,717 in subsidy from FEMA, mainly for the excess fuel costs for the mobile boilers related to Superstorm Sandy.
- *Capital Contributions* increased \$133,749 to \$820,368. The current year contributions are primarily comprised of \$370,839 from FEMA, \$225,026 for the Capital Fund Program, and \$100,436 for Community Development Block –DR (“CDBG”) grant relating to Superstorm Sandy.

Revenues and Expenses on a Gross Basis (\$ in thousands)

The following table shows revenues and expenses on a gross basis. Non-operating revenues are included in total program revenues and non-operating expenses are included in total program expenses. The components of this table are explained in the commentary following the Summary of Revenues, Expenses, and Changes in Net Position.

	2019	2018	2017
Program Revenues:			
Subsidies and grants	\$ 2,517,894	\$ 2,387,205	\$ 2,154,174
Operating revenues	1,134,250	1,106,773	1,108,394
Insurance recoveries	-	131,972	809
Investment income	36,165	25,811	16,080
Gain on real estate transactions	-	14,898	22,397
Change in fair value of investments	13,318	-	-
Total Program Revenues	<u>3,701,627</u>	<u>3,666,659</u>	<u>3,301,854</u>
Program Expenses:			
Operating expenses	3,971,766	3,898,470	3,601,859
Loss on real estate transactions	146,483	-	-
Interest expense	34,777	32,794	30,184
Change in fair value of investments	-	3,304	745
Total Program Expenses	<u>4,153,026</u>	<u>3,934,568</u>	<u>3,632,788</u>
Loss before Special Item and Capital Contributions	(451,399)	(267,909)	(330,934)
Special Item:			
Pollution remediation costs - lead based paint	2,751,291	-	-
Loss before Capital Contributions	(3,202,690)	(267,909)	(330,934)
Capital Contributions	<u>878,901</u>	<u>820,368</u>	<u>686,619</u>
Change in Net Position	(2,323,789)	552,459	355,685
Net Position, Beginning of Year, as previously stated	3,430,782	2,878,323	2,575,363
Cumulative effect of implementing GASB 83	-	-	(52,725)
Net Position, Beginning of Year, as restated	<u>3,430,782</u>	<u>2,878,323</u>	<u>2,522,638</u>
Net Position, End of Year	<u>\$ 1,106,993</u>	<u>\$ 3,430,782</u>	<u>\$ 2,878,323</u>

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets, net and the debt related to capital assets for the three years ended December 31 are as follows:

Net Investment in Capital Assets (\$ in thousands)

	2019	2018	2017
Land	\$ 687,958	\$ 687,507	\$ 689,847
Construction in progress	2,006,661	1,833,799	1,235,972
Buildings	3,144,810	3,146,465	3,173,239
Building improvements	9,893,189	9,313,734	9,170,548
Facilities and other improvements	509,803	492,910	489,879
Furniture and equipment	940,728	877,827	829,440
Leasehold improvements	113,105	113,185	112,994
Total Capital Assets	17,296,254	16,465,427	15,701,919
Less accumulated depreciation	9,775,570	9,424,645	9,120,174
Capital Assets, net	7,520,684	7,040,782	6,581,745
Less related debt	623,360	590,378	586,396
Net Investment in Capital Assets	<u>\$ 6,897,324</u>	<u>\$ 6,450,404</u>	<u>\$ 5,995,349</u>

For additional information on Capital Assets and Long-Term Debt see Note 8 and Note 15, respectively.

BASIC FINANCIAL STATEMENTS

NEW YORK CITY HOUSING AUTHORITY

STATEMENTS OF NET POSITION DECEMBER 31, 2019 AND 2018

	2019	2018
	(\$ in Thousands)	
CURRENT ASSETS:		
Cash and cash equivalents	\$ 481,832	\$ 460,678
Accounts receivable, net	860,075	814,264
Investments	154,749	203,046
Prepaid expenses	106,514	104,611
Inventories, net	11,136	11,498
Notes and loans receivable, net	2,637	-
Total current assets	1,616,943	1,594,097
NON-CURRENT ASSETS:		
Land and construction in progress	2,694,619	2,521,306
Other capital assets, net of depreciation	4,826,065	4,519,476
Cash for claims payable	67,753	69,521
Investments for claims payable	370,668	330,051
Restricted cash and cash equivalents	634,134	707,791
Restricted investments	31,384	31,335
Subsidies receivable	85,503	-
Notes and loans receivable, net	111,664	169,227
Total non-current assets	8,821,790	8,348,707
Total assets	10,438,733	9,942,804
DEFERRED OUTFLOWS OF RESOURCES:		
Deferred amount on refunding	1,651	2,463
Deferred amount on asset retirement obligations	12,256	11,620
Deferred amount on OPEB	396,053	67,240
Deferred amount on pensions	150,224	94,802
Total deferred outflows of resources	560,184	176,125
CURRENT LIABILITIES:		
Accounts payable	165,430	137,249
Accrued liabilities	399,262	334,384
Claims payable	84,587	80,000
Current portion of long-term debt	43,975	39,130
Accrued leave time	74,803	73,987
Pollution remediation obligations	266,843	136,962
Unearned revenues and other current liabilities	358,080	386,264
Total current liabilities	1,392,980	1,187,976
NON-CURRENT LIABILITIES:		
Long-term debt	759,628	801,299
Claims payable	438,421	399,572
Unearned revenue	216,938	222,359
Accrued leave time	107,748	106,532
Net pension liability	822,109	894,818
OPEB liability	2,816,376	2,562,230
Asset retirement obligations	84,188	69,965
Pollution remediation obligations	2,622,413	1,978
Other liabilities	9,837	10,310
Total non-current liabilities	7,877,658	5,069,063
Total liabilities	9,270,638	6,257,039
DEFERRED INFLOWS OF RESOURCES:		
Deferred amount on OPEB	386,426	279,037
Deferred amount on pensions	234,860	152,071
Total deferred inflows of resources	621,286	431,108
NET POSITION:		
Net investment in capital assets	6,897,324	6,450,404
Unrestricted deficit	(5,790,331)	(3,019,622)
TOTAL NET POSITION	\$ 1,106,993	\$ 3,430,782

See notes to the financial statements.

NEW YORK CITY HOUSING AUTHORITY

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
	(\$ in Thousands)	
OPERATING REVENUES:		
Tenant revenue, net	\$ 1,058,488	\$ 1,070,022
Other income	<u>75,762</u>	<u>36,751</u>
Total operating revenues	<u>1,134,250</u>	<u>1,106,773</u>
OPERATING EXPENSES:		
Rent for leased dwellings	1,061,638	1,006,991
General and administrative	949,768	890,679
Maintenance and operations	875,510	875,431
Utilities	541,747	582,405
Depreciation	371,713	366,632
OPEB	127,536	129,110
Protective services	24,635	29,833
Tenant services	<u>19,219</u>	<u>17,389</u>
Total operating expenses	<u>3,971,766</u>	<u>3,898,470</u>
OPERATING LOSS	<u>(2,837,516)</u>	<u>(2,791,697)</u>
NON-OPERATING REVENUES (EXPENSES):		
Subsidies and grants	2,517,894	2,387,205
Insurance recoveries	-	131,972
Investment income	36,165	25,811
(Loss) Gain on real estate transactions	(146,483)	14,898
Change in fair value of investments	13,318	(3,304)
Interest expense	<u>(34,777)</u>	<u>(32,794)</u>
Total non-operating revenues, net	<u>2,386,117</u>	<u>2,523,788</u>
LOSS BEFORE SPECIAL ITEM AND CAPITAL CONTRIBUTIONS	(451,399)	(267,909)
SPECIAL ITEM:		
Pollution remediation costs - lead based paint	<u>2,751,291</u>	<u>-</u>
LOSS BEFORE CAPITAL CONTRIBUTIONS	(3,202,690)	(267,909)
CAPITAL CONTRIBUTIONS	<u>878,901</u>	<u>820,368</u>
CHANGE IN NET POSITION	(2,323,789)	552,459
NET POSITION, BEGINNING OF YEAR	<u>3,430,782</u>	<u>2,878,323</u>
NET POSITION, END OF YEAR	<u>\$ 1,106,993</u>	<u>\$ 3,430,782</u>

See notes to the financial statements.

NEW YORK CITY HOUSING AUTHORITY

STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
	(\$ in Thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash received from tenants	\$ 1,059,562	\$ 1,066,907
Other operating receipts	44,584	33,029
Cash payments to employees	(1,333,298)	(1,198,084)
Cash payments for other operating expenses	(2,162,334)	(2,125,067)
Net cash used in operating activities	<u>(2,391,486)</u>	<u>(2,223,215)</u>
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Subsidies and grants received	2,560,074	2,322,346
Insurance recoveries	57,605	74,367
Net cash provided by non-capital financing activities	<u>2,617,679</u>	<u>2,396,713</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Contributions for capital	620,004	739,651
Proceeds from the sale of long term debt	7,087	84,098
Proceeds from real estate transactions	6,150	18,407
Sale of capital assets	-	211
Development and modernization costs	(884,110)	(817,498)
Payments on long-term debt	(40,552)	(39,773)
Interest payments on bonds and mortgages	(38,165)	(36,622)
Notes and Loans Receivable	(8,445)	(61,408)
Net cash used in capital and related financing activities	<u>(338,031)</u>	<u>(112,934)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investment securities	(327,190)	(39,982)
Proceeds from sale and maturities of investment securities	348,139	96,496
Interest on investments	36,618	25,215
Net cash provided by investing activities	<u>57,567</u>	<u>81,729</u>
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(54,271)	142,293
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR:		
Cash and cash equivalents, including cash for claims payable	530,199	572,494
Restricted cash and cash equivalents	707,791	523,203
Total cash and cash equivalents, beginning of year	<u>1,237,990</u>	<u>1,095,697</u>
CASH AND CASH EQUIVALENTS, END OF YEAR:		
Cash and cash equivalents, including cash for claim payable	549,585	530,199
Restricted cash and cash equivalents	634,134	707,791
Total cash and cash equivalents, end of year	<u>\$ 1,183,719</u>	<u>\$ 1,237,990</u>

See notes to the financial statements.

(continued on the following page)

NEW YORK CITY HOUSING AUTHORITY

STATEMENTS OF CASH FLOWS (continued) FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
	(in Thousands)	
RECONCILIATION OF OPERATING LOSS TO NET CASH USED IN OPERATING ACTIVITIES:		
OPERATING LOSS	\$ (2,837,516)	\$ (2,791,697)
Adjustments to reconcile operating loss to net cash used in operating activities:		
Depreciation	371,713	366,632
(Increase) decrease in assets and deferred outflows:		
Tenants accounts receivable	(10,903)	(15,402)
Accounts receivable - other	(29,284)	(3,940)
Prepaid expenses	(1,903)	(2,648)
Inventories, net	362	1,077
Deferred outflows on pensions	(55,422)	39,899
Deferred outflows on OPEB	(328,813)	(32,505)
Deferred outflows on asset retirement obligations	(636)	2,017
Increase (decrease) in allowance for doubtful accounts - tenants	7,115	11,460
Increase (decrease) in allowance for doubtful accounts - other, net of non-capital financing activities	2,271	1,284
Increase (decrease) in liabilities and deferred inflows:		
Accounts payable	28,181	11,356
Accrued liabilities, net of interest and capital items	30,777	29,267
Claims payable	43,436	13,902
Accrued leave time	2,032	(7,373)
Unearned revenues and other current liabilities, net of prepaid subsidy and current portion of Section 8 Recap unearned revenue	2,714	889
Net pension liability	(72,709)	(137,907)
OPEB liability	254,146	(649)
Asset retirement obligation	14,223	1,540
Pollution remediation obligations	(975)	117,041
Other non-current liabilities	(473)	614
Deferred inflows on OPEB	107,389	100,550
Deferred inflows on pensions	82,789	71,378
Total adjustments	<u>446,030</u>	<u>568,482</u>
NET CASH USED IN OPERATING ACTIVITIES	<u>\$ (2,391,486)</u>	<u>\$ (2,223,215)</u>
SUPPLEMENTAL DISCLOSURES OF NON CASH ACTIVITIES:		
Investing activities:		
Unrealized gain (loss) on investments	\$ 13,318	\$ (3,304)
Capital and related financing activities:		
Amortization of deferred amount on refunding	(811)	(1,028)
Amortization of bond premium	3,362	4,063
Capital Contributions	22,780	14,515
Special Item: pollution remediation costs - lead based paint	2,751,291	-

See notes to the financial statements.

NEW YORK CITY HOUSING AUTHORITY

NOTES TO THE FINANCIAL STATEMENTS YEARS ENDED DECEMBER 31, 2019 AND 2018

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Organization

The New York City Housing Authority (the “Authority”), created in 1934, is a public benefit corporation chartered under New York State Public Housing Law. The Authority develops, constructs, manages and maintains affordable housing for eligible low-income families in the five boroughs of New York City. At December 31, 2019, the Authority maintained 311 housing developments encompassing approximately 173,000 total units, including 163,000 federally funded units, housing approximately 357,000 residents. The Authority also operates a leased housing program, which provides housing assistance payments to approximately 88,000 families, housing approximately 199,000 residents.

Substantial operating losses result from the costs of essential services that the Authority provides exceeding revenues. To meet the funding requirements of these operating losses, the Authority receives subsidies from: (a) the federal government, primarily the U.S. Department of Housing and Urban Development (“HUD”), in the form of annual grants for operating assistance, debt service payments, contributions for capital and reimbursement of expenditures incurred for certain federal housing programs; (b) New York State in the form of debt service and capital payments; and (c) The City of New York in the form of subsidies and capital payments. Subsidies are established through budgetary procedures, which establish amounts to be funded by the grantor agencies.

The Authority maintains its accounting records by program. The following programs are operated by the Authority:

Federal Programs - The Authority receives federal financial assistance from HUD in the form of annual contributions for debt service and operating subsidies for public housing developments, as well as rent subsidies for the Section 8 Housing Choice Voucher Program (“HCVP”). In addition, assistance is received under HUD’s Public and Indian Housing Development Programs, Capital Fund Program, and other programs.

Funds received are used to provide maintenance, operating, and administrative services to federally aided low rent public housing developments. HCVP funds are used to reimburse private landlords for their participation in providing housing for low-income families at reduced rents. The funds cover the differential between the reduced rents charged to tenants and prevailing fair market rates based on rent reasonableness. Debt service fund contributions provide for the payment of principal and interest on outstanding debt as it matures. Contributions for capital provide for modernization and development costs.

New York State and The City of New York Programs - The Authority receives financial assistance from New York State (the “State”) in the form of annual contributions for debt service and capital. The Authority also receives financial assistance from the City in the form of subsidies and contributions for capital.

Other Programs - The Authority receives funding for other programs, including Federal assistance from the U.S. Department of Agriculture for child and adult care food and summer food service programs, and from HUD, the State, and the City for several other grant programs.

B. Reporting Entity

The Authority is a component unit of the City, based upon criteria for defining the *reporting entity* as identified and described in the Governmental Accounting Standards Board’s (“GASB”) *Codification of Governmental Accounting and Financial Reporting Standards, Sections 2100 and 2600*.

The Authority’s operations include two blended component units which are included in the Authority’s basic financial statements, in compliance with GASB 61 *The Financial Reporting Entity: Omnibus – an amendment of GASB Statement No. 14 and No. 34*. These are legally separate entities with the same governing body as the Authority for which the Authority has operational responsibility and are controlled by the Authority. There is a financial benefit/burden relationship between the Authority and the component units since the Authority is responsible for providing operating and capital subsidies to the component units. The blended component units include:

- NYCHA Public Housing Preservation I, LLC
- NYCHA Public Housing Preservation II, LLC

Additional information relating to these blended component units can be found in Note 26 to the financial statements. NYCHA Public Housing Preservation I, LLC (“LLC I”) and NYCHA Public Housing Preservation II, LLC (“LLC II”) both issue stand-alone financial reports. These reports can be obtained from The New York City Housing Authority, 250 Broadway, New York, New York, 10007.

C. Basis of Accounting

The Authority’s financial statements are prepared in accordance with generally accepted accounting principles as prescribed by the GASB, using the economic resources measurement focus and the accrual basis of accounting wherein revenues are recognized when earned, and expenses are recognized when the liability is incurred.

The Authority’s primary source of nonexchange revenue relates to subsidies and grants. Subsidies and grants revenue is recognized at the time eligible program expenditures occur and/or the Authority has complied with the grant and subsidy requirements, in accordance with GASB Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions*.

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

Recently Adopted Accounting Standards

GASB Statement No. 95 (“GASB 95”), *Postponement of the Effective Dates of Certain Authoritative Guidance*. The primary objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. That objective is accomplished by postponing the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for periods beginning after June 15, 2018, and later. Depending on the pronouncement, postponement dates are either twelve or eighteen months from original effective date.

Accounting Standards Issued But Not Yet Adopted

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

GASB Statement No.	GASB Accounting Standard	Effective Calendar Year
87	<i>Leases</i>	2022
91	<i>Conduit Debt Obligations</i>	2022
92	<i>Omnibus 2020</i>	2022
93	<i>Replacement of Interbank Offered Rates</i>	2022
94	<i>Public-Private and Public-Public Partnerships and Availability Payment Arrangements</i>	2023
96	<i>Subscription-Based Information Technology Arrangements</i>	2023
97	<i>Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans</i>	2022

D. Cash and Cash Equivalents

Cash includes amounts on deposit with financial institutions, including bank accounts and certificates of deposit. The Authority considers investments in repurchase agreements and investments with a maturity of less than 90 days of purchase date as cash equivalents. The Authority considers cash and cash equivalents held for the repayment of the non-current portion of Claims payable to be non-current assets.

E. Accounts Receivable and Subsidies Receivable

Accounts Receivable include amounts expected to be received within one year from tenants and various governmental agencies. Subsidies Receivables include amounts from governmental agencies not expected to be received within one year. Tenants Receivable balances primarily consist of rents past due and due from vacated tenants. An allowance for uncollectable accounts is established to provide for tenant accounts which may not be collected in the future for any reason. The Authority recognizes both Account Receivable and Subsidies Receivables from HUD and other governmental agencies for amounts earned and billed but not received and for amounts earned but unbilled as of year-end.

F. Notes Receivable

Notes receivable are recorded based on the principal amount indicated in the underlying note agreement. An allowance is established where there is uncertainty regarding the collection of the note.

G. Investments

Investments with maturities of less than twelve months from the time of acquisition are carried at cost. Investments in guaranteed investment contracts are reported at an amount equal to principal and accrued interest. All other investments are recorded at fair value, which are based on quoted market prices. Income from investments is recognized on the accrual basis. Realized gains or losses on sales of investment securities are accounted for using the *specific identification* method. The Authority combines realized and unrealized gains and losses on investments.

H. Prepaid Expenses

Prepaid expenses represent amounts paid as of year-end which will benefit future operations.

I. Inventories

Inventories consist of materials and supplies at the central warehouses, and fuel oil. Materials and supplies are valued using the *average moving cost* method on a first in – first out basis. Fuel oil is valued using *weighted average cost*. Materials and supplies are expensed when shipped from central warehouses to the developments. The Authority maintains an allowance for obsolete inventory.

J. Capital Assets

Capital assets include land, structures and equipment recorded at cost and is comprised of initial development costs, property betterments and additions, and modernization program costs. The Authority depreciates these assets over their estimated useful lives, under normal operating conditions, using the straight-line method of depreciation. The Capitalization Policy is as follows:

Capital Asset Category	Capitalization Threshold	Useful Life-Years
Buildings	\$50,000	40
Building Improvements	\$50,000	25
Leasehold Improvements	\$50,000	Up to 15
Facilities & Other Improvements	\$50,000	10
Computer Software	\$50,000	5
Telecommunication Equipment	\$50,000	5
Computer Hardware	\$5,000	5
Furniture and Equipment	\$5,000	5 to 10
Ranges and Refrigerators	All	10

K. Accrued Liabilities

The Authority recognizes a liability for goods and services received but not paid for as of year-end. The Authority recognizes a liability for wages and fringe benefits relating to expired collective bargaining agreements based on its best estimate of such future payments. These estimates are based on prior patterns and the current status of negotiations among other factors.

L. Claims Payable

The Authority recognizes a liability for general liability and workers' compensation claims based upon an estimate of all probable losses incurred, both reported and not reported. The liability for these claims is reported in the Statement of Net Position at a discounted amount.

M. Accrued Leave Time

Accumulated unpaid leave time is accrued at the estimated amounts of future benefits attributable to services already rendered.

N. Unearned Revenue

The Authority's unearned revenue includes the prepayment of rent by residents and the receipt of governmental program funding where certain eligibility requirements have not been met. In addition, purchase price and lease payments received on Real Estate transactions are being reflected in Unearned Revenue and are recognized over the shorter of the lease term, when the Purchase Option or Right of First Refusal can be exercised or the fifteen-year low income housing tax credit compliance period.

O. Premium Amortization

The Authority amortizes debt premium amounts over the life of the bonds using the *effective interest rate through maturity* methodology.

P. Deferred Outflows and Inflows of Resources

In accordance with GASB 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, the Authority reports deferred outflows of resources in the *Statement of Financial Position* in a separate section following Assets and deferred inflows of resources in a separate section following liabilities. Gains and losses in connection with advanced refunding of debt are recorded as either a deferred outflow (loss) or as a deferred inflow (gain) of resources and amortized as a component of interest expense over the shorter of the remaining life of the old or the new debt. Pension contributions made to NYCERS subsequent to the actuarial measurement date and prior to the Authority's fiscal year-end are reported as deferred outflows of resources. The net differences between projected and actual earnings on pension plan investments, changes in assumptions for pensions and OPEB, and differences in expected and actual experience for pensions and OPEB are recorded as either a deferred outflow or as a deferred inflow. Section 8 Housing Choice Voucher Subsidies received prior to the funding period are reported as deferred inflow of resources. Deferred outflows are recognized on asset retirement obligations.

Q. Use of Restricted Net Position

When both restricted and unrestricted resources are available for a particular restricted use, it is the Authority's policy to use restricted resources first, and then unrestricted resources as needed.

R. Operating Revenues and Expenses

The Authority defines its operating revenues as income derived from charges to residents and others for rent and services provided including developer fees. Its operating expenses are costs incurred in the operation of its program activities to provide services to residents and others. The Authority classifies other revenues and expenses as non-operating.

S. Capital Contributions

Capital Contributions are recognized at the time eligible program expenditures occur and/or the Authority has complied with the grant requirements.

T. Taxes

The Authority is a public benefit corporation chartered under the New York State Public Housing Law and as such is exempt from income taxes and certain other Federal, state and local taxes.

U. Other Postemployment Benefits

The Authority's Total OPEB Liability is calculated based on an amount that is actuarially determined (see Note 17).

V. Net Pension Liability

The Authority's proportionate share of the net pension liability, deferred outflows of resources and deferred inflows of resources, and expense associated with the Authority's requirement to contribute to the New York City Employees' Retirement System ("NYCERS") have been determined on the same basis as they are reported by NYCERS.

2. RECLASSIFICATION OF 2018

During 2019, the Authority reclassified amounts previously reported for 2018 as follows (\$ in thousands):

Description	As Previously Reported	Adjustments	As Reclassified
Notes and loans receivable, current	\$ 169,227	\$ (169,227)	\$ -
Notes and loans receivable, non-current	-	169,227	169,227

3. DEPOSITS AND INVESTMENTS

Deposits

At December 31, 2019, the Authority's deposits had a carrying amount of \$743,533,000 and a bank balance of \$741,454,000. These deposits were insured up to \$250,000 per bank by the Federal Deposit Insurance Corporation ("FDIC"). Deposits in excess of FDIC coverage were fully collateralized, with the collateral being held in segregated custodial accounts in the Authority's name. Collateral coverage is monitored and maintained on a daily basis.

Deposits were comprised of the following at December 31, 2019 and 2018 (\$ in thousands):

<u>Unrestricted</u>	<u>2019</u>	<u>2018</u>
FDIC insured	\$ 1,256	\$ 1,127
Collateralized	<u>114,379</u>	<u>104,209</u>
Subtotal	<u>115,635</u>	<u>105,336</u>
<u>Restricted</u>		
FDIC insured	43,409	43,534
Collateralized	<u>582,410</u>	<u>655,847</u>
Subtotal	<u>625,819</u>	<u>699,381</u>
Total Deposits	<u>\$ 741,454</u>	<u>\$ 804,717</u>

Unrestricted deposits totaling \$115,635,000 were largely comprised of operating balances for both LLC I and LLC II and replacement reserves for LLC I, totaling \$97,901,000. The remaining balances totaling \$17,734,000 are eligible for working capital and future liabilities, including self-insurance programs. The Authority's unrestricted deposits are held at various banks in interest-bearing accounts and demand deposit accounts (DDA) without interest. The maximum exposure of deposits, represented by the highest daily cash balance held in all deposit accounts maintained by the Authority during the year, was \$322,760,000.

At December 31, 2019, restricted deposits totaling \$625,819,000 included funds held in depository accounts on behalf of Sandy Recovery, escrow funds for several Energy Performance Contracts, escrow funds for vendor retention, reserves supporting the 2010 mixed-finance transaction, Certificates of Deposit for tenant security, and tenant participation activity HUD subsidies for use by resident councils for residents. The Certificates of Deposits for tenant security will be maturing on March 31, 2020 and will be reinvested for one year through March 31, 2021. The liability related to these deposits is included in unearned revenues and other current liabilities (see Note 14).

3. DEPOSITS AND INVESTMENTS (continued)

Investments

In accordance with GASB 72, NYCHA discloses its investments at fair value. The Authority invests only in securities that fall under GASB's Level 2 fair market valuation grouping (there are 3 levels in total), as there are comparable and observable traded securities that can be used to accurately value the Authority's portfolio of securities. The Authority uses the Bloomberg financial data system to determine the fair value of its entire portfolio of securities. As of December 31, 2019, and 2018, all of the Authority's long-term investment holdings were in U.S. Governmental agency securities and GASB 72 requires their fair value be based on similar bonds that are being traded.

Unrestricted Investments

The Authority's investment policies comply with HUD's guidelines. These policies restrict the Authority's investments to obligations of the U.S. Treasury, U.S. Government agencies, and their instrumentalities. All investments are held in a secured custody account in the name of the Authority. All investments are publicly traded, and the fair value was based on published quoted values. Accrued interest receivable on unrestricted investments was \$1,970,000 and \$2,580,000 at December 31, 2019 and 2018.

Unrestricted investments stated at fair value, consist of the following at December 31, 2019 and 2018 (\$ in thousands):

Unrestricted	2019	2018
U.S. Government Agency Securities	\$ 525,417	\$ 533,097
Repurchase Agreements	<u>430,825</u>	<u>420,870</u>
Total Unrestricted investments, including cash equivalents	956,242	953,967
Less: amount reported as unrestricted cash equivalents	<u>430,825</u>	<u>420,870</u>
Total Unrestricted investments	<u>\$ 525,417</u>	<u>\$ 533,097</u>

Cash equivalents include investments in repurchase agreements. The maximum exposure of investments held in repurchase agreements during the year was \$778,963,000. At December 31, 2019, the Authority held \$430,825,000 in repurchase agreements yielding 1.78 percent. At December 31, 2018, the Authority held \$420,870,000 in repurchase agreements yielding 2.70 percent.

The maturities of the Authority's unrestricted investments at December 31, 2019 and 2018 are as follows (\$ in thousands):

Security Type	As of December 31, 2019				As of December 31, 2018			
	Total	<1 year	1 - 5 years	>5 years	Total	<1 year	1 - 5 years	>5 years
U.S. Govt Agency Securities	<u>\$525,417</u>	<u>\$ 62,029</u>	<u>\$ 373,165</u>	<u>\$ 90,223</u>	<u>\$533,097</u>	<u>\$ 101,313</u>	<u>\$ 318,694</u>	<u>\$ 113,090</u>

3. DEPOSITS AND INVESTMENTS

Unrestricted Investments (continued)

At December 31, 2019 and 2018, the Authority's weighted average term to maturity for unrestricted investments is 3.54 years and 3.14 years, respectively. The Authority determines maturity levels based upon current available interest rates, expectations for future rates and the appropriate amount of liquidity needed for operations. While HUD's policy limits the maturities of investments held by housing authorities to three years, the Authority has received a HUD waiver to invest long-term reserves up to seven years.

The U.S. Government Agency security balance is comprised of obligations issued by the Federal Home Loan Mortgage Corporation, the Federal Home Loan Bank, Federal Farm Credit Bank and the Federal National Mortgage Association. At December 31, 2019 and 2018, the fair value of the Authority's long-term investments was \$525,417,000 and \$533,097,000, respectively, and these amounts are designated to fund the Authority's self-insurance programs.

Restricted Investments

At December 31, 2019 and 2018, NYCHA's total restricted investments had a fair value of \$40,745,000 and \$39,693,000, respectively. These funds were held in Trust supporting loans from NYC HDC for the 2013 Capital Fund Financing Program Bonds and the 2010 mixed-finance transaction. The restricted total was comprised of \$31,384,000 in restricted investments and \$9,361,000 in restricted cash equivalents at December 31, 2019 and \$31,335,000 in restricted investments and \$8,358,000 in restricted cash equivalents at December 31, 2018.

Of the \$31,384,000 in restricted investments, \$29,824,000 represents debt service reserves for the 2013 Capital Fund Financing Program Bonds, and the remaining \$1,560,000 represents debt service reserves for the 2010 mixed-finance transaction. Accrued interest receivable on restricted investments, including the tenant certificate of deposits was \$1,339,000 and \$1,184,000 at December 31, 2019 and 2018.

3. DEPOSITS AND INVESTMENTS

Restricted Investments (continued)

Restricted investments stated at fair value, consisted of the following at December 31, 2019 and 2018 (\$ in thousands):

Restricted	2019	2018
Forward Delivery Agreement (debt service reserves)	\$ 29,824	\$ 29,824
Repurchase Agreements	9,361	8,358
Municipal Bonds	1,560	1,511
Total Restricted investments, including cash equivalents	40,745	39,693
Less amount reported as restricted cash equivalents	9,361	8,358
Total Restricted investments (not including cash equivalents)	<u>\$ 31,384</u>	<u>\$ 31,335</u>

The maturities of the Authority restricted investments at December 31, 2019 and 2018 were as follows (\$ in thousands):

Security Type	As of December 31, 2019				As of December 31, 2018			
	Total	<1 year	1 - 5 years	>5 years	Total	<1 year	1 - 5 years	>5 years
Forward Delivery Agreement	\$ 29,824	\$ -	\$ -	\$ 29,824	\$ 29,824	\$ -	\$ -	\$ 29,824
Municipal Bonds	\$ 1,560	\$ -	\$ 1,560	\$ -	\$ 1,511	\$ -	\$ 1,511	\$ -
Total	<u>\$ 31,384</u>	<u>\$ -</u>	<u>\$ 1,560</u>	<u>\$ 29,824</u>	<u>\$ 31,335</u>	<u>\$ -</u>	<u>\$ 1,511</u>	<u>\$ 29,824</u>

At December 31, 2019 and 2018, the Authority's weighted average term to maturity for restricted investments was 12.94 years and 13.94 years, respectively. The Fiscal Agents determine maturity levels based upon current available interest rates, expectations for future rates and the appropriate amount of liquidity needed for NYCHA's operations.

Policies governing investments: The Authority has adopted the HUD investment policy outlined in HUD Notice PIH-2002-13 (HA), as its formal investment policy. In accordance with its Annual Contributions Contract (the "ACC") with HUD, the Authority is required to comply with this HUD Notice. These guidelines require the Authority to deposit funds in accordance with the terms of a General Depository Agreement, which must be in a form approved by HUD and executed between the Authority and its depository institutions, and restricts the Authority's investments to HUD-authorized securities, such as those issued by the U.S. Treasury, U.S. Government agencies and their instrumentalities, and requires that all investments be held in a segregated custodial account in the name of the Authority. Similarly, the bond proceeds that remain in Trust supporting loans from NYC HDC are invested in accordance with the investment policy of NYC HDC, which are very similar.

The Authority's investment strategy involves consideration of the basic risks of fixed-income investing, including interest rate risk, market risk, credit risk, and concentration risk. In managing these risks, the primary factors considered are safety of principal, yield, liquidity, maturity, and administrative costs.

3. DEPOSITS AND INVESTMENTS

Restricted Investments (continued)

Interest rate risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the Authority's investment portfolio. In accordance with the Authority's investment policy, interest rate risk is mitigated by holding the securities in the Authority's portfolio until maturity, except when a reinvestment strategy may be appropriate. As an additional manner of minimizing interest rate risk, the securities of the Authority's fixed income portfolio have historically only had fixed coupon rates, and therefore the cash flows will not fluctuate with changes in interest rates.

Credit Risk: It is the Authority's policy to limit its investments to HUD-authorized investments issued by the U.S. Government, by a U.S. Government agency, or by a Government-sponsored agency. The Authority's policy is to invest primarily in Governmental agency and U.S. Treasury securities which are AA+ and Aaa rated by Standard and Poor's ("S&P") or Moody's, or to place balances in fully collateralized money market deposit accounts and interest-bearing bank accounts at banks rated A or better by Moody's or S&P. As of December 31, 2019, each of the agency securities that were in the NYCHA investment portfolio had bond ratings as follows: Moody's Aaa and S&P AA+. Depository bank accounts maintaining federal funds are fully collateralized, in excess of FDIC insurance, with Treasury and/or Governmental agency securities.

Concentration Risk: The Authority strives to invest in only AA+ and Aaa rated Governmental Agency and/or U.S. Treasury securities. Therefore, the Authority's policy does not place a limit on investments with any one issuer. The Authority's cash deposits are maintained in fully collateralized money market deposit accounts and fully collateralized interest-bearing and non-interest bearing (if required) bank accounts. Consequently, the Authority does not limit deposits to any one bank. Nonetheless, the Authority strives to diversify holdings in investments, cash and cash equivalents, whenever possible, to further minimize any potential concentration risk.

Custodial credit risk: The Authority maintains a perfected security interest in the collateral held on its behalf by its custodial agents. Custodial credit risk is the risk that the Authority will not be able to recover its collateral held by a third-party custodian, in the event that the custodian defaults. The Authority has no custodial credit risk due to the Authority's perfected security interest in its collateral in a segregated custodian account, which is registered in the Authority's name. The Authority's policy requires that all securities shall be maintained in a third-party custodian account and the manner of collateralization shall provide the Authority with a continuing perfected security interest in the collateral for the full term of the deposit, in accordance with applicable laws and Federal regulations. Such collateral shall, at all times, have a market value at least equal to the amount of deposits so secured.

4. ACCOUNTS AND SUBSIDIES RECEIVABLE

Accounts Receivable

Accounts receivable at December 31, 2019 and 2018 are comprised of the following (\$ in thousands):

	<u>2019</u>	<u>2018</u>
U.S. Department of Housing and Urban Development	\$ 165,553	\$ 186,786
Federal Emergency Management Agency	412,062	284,452
Due from The City of New York	136,918	154,255
Community Development Block Grant	33,305	-
Due from other government agencies	31,980	80,764
Tenants accounts receivable	111,068	100,165
Insurance Receivable - Superstorm Sandy	-	57,605
Other	56,493	28,155
Total accounts receivable	947,379	892,182
Less allowance for uncollectable accounts	87,304	77,918
Accounts receivable, net	<u>\$ 860,075</u>	<u>\$ 814,264</u>

Accrued interest receivable on investments of \$3,310,000 and \$3,763,000 at December 31, 2019 and 2018, respectively, is included in Other.

The allowance for uncollectable accounts at December 31, 2019 and 2018 consists of the following (\$ in thousands):

	<u>2019</u>	<u>2018</u>
Tenants accounts receivable	\$ 72,052	\$ 64,937
Other	15,252	12,981
Total allowance for uncollectable accounts	<u>\$ 87,304</u>	<u>\$ 77,918</u>

The provision for bad debts related to tenant revenue is \$28,545,000 and \$23,263,000 for 2019 and 2018, respectively, reflected in tenant revenue, net on the Statements of Revenues, Expenses, and Changes in Net Position.

Subsidies Receivable

Subsidies receivable at December 31, 2019 is comprised of the following (\$ in thousands):

	<u>2019</u>
Community Development Block Grant	\$ 43,503
City of New York	42,000
Total subsidies receivable	<u>\$ 85,503</u>

5. NOTES AND LOANS RECEIVABLE

Notes and Loans Receivable at December 31, 2019 and 2018 are comprised of the following (\$ in thousands):

	<u>2019</u>	<u>2018</u>
Ocean Bay - RAD	\$ 200,345	\$ 177,044
PACT Transactions (see Note 21)	239,217	160,625
Section 8 Transaction	59,491	54,404
Randolph	41,021	40,152
Prospect II	12,718	12,718
Prospect I	9,552	9,552
Multifamily Home Ownership Program	8,558	8,558
1070 Washington Avenue	5,064	5,064
Betances	2,820	2,654
Fulton	2,000	2,000
Betances V	1,500	-
Other	15,104	17,265
Total Notes and Loans Receivable	<u>597,390</u>	<u>490,036</u>
Less allowance for uncollectable accounts	<u>483,089</u>	<u>320,809</u>
Notes and Loans Receivable, net	114,301	169,227
Less Current portion	<u>2,637</u>	<u>-</u>
Notes and Loans Receivable - non-current portion	<u>\$ 111,664</u>	<u>\$ 169,227</u>

6. PREPAID EXPENSES

Prepaid expenses at December 31, 2019 and 2018 are comprised of the following (\$ in thousands):

	<u>2019</u>	<u>2018</u>
Water charges	\$ 87,380	\$ 86,473
Insurance premiums	15,822	15,427
Rent, leases and other	3,312	2,711
Total prepaid expenses	<u>\$ 106,514</u>	<u>\$ 104,611</u>

7. INVENTORIES

Inventories at December 31, 2019 and 2018 are summarized as follows (\$ in thousands):

	<u>2019</u>	<u>2018</u>
Supplies inventory	\$ 6,469	\$ 6,573
Allowance for obsolete inventory	<u>(512)</u>	<u>(531)</u>
Supplies inventory (net)	5,957	6,042
Fuel oil inventory	<u>5,179</u>	<u>5,456</u>
Total inventories, net	<u>\$ 11,136</u>	<u>\$ 11,498</u>

8. CAPITAL ASSETS, NET

A summary of the changes in capital assets, net, which is comprised of land, structures and equipment, is as follows:

Summary of Changes in Capital Assets, Net (\$ in thousands)

Description	January 1, 2019	Additions/ Transfers In	Deletions/ Transfers Out	December 31, 2019
Capital Assets not being depreciated:				
Land	\$ 687,507	\$ 451	\$ -	\$ 687,958
Construction in progress	1,833,799	851,715	(678,853)	2,006,661
Total Capital Assets not being depreciated	<u>2,521,306</u>	<u>852,166</u>	<u>(678,853)</u>	<u>2,694,619</u>
Capital Assets being depreciated:				
Buildings	3,146,465	-	(1,655)	3,144,810
Building improvements	9,313,734	587,655	(8,200)	9,893,189
Facilities and other improvements	492,910	16,893	-	509,803
Furniture and equipment	877,827	74,305	(11,404)	940,728
Leasehold improvements	113,185	-	(80)	113,105
Total Capital Assets being depreciated	<u>13,944,121</u>	<u>678,853</u>	<u>(21,339)</u>	<u>14,601,635</u>
Less Accumulated Depreciation:				
Buildings	2,926,183	22,435	(1,652)	2,946,966
Building improvements	5,184,028	302,263	(8,092)	5,478,199
Facilities and other improvements	455,042	7,819	-	462,861
Furniture and equipment	756,905	36,893	(11,044)	782,754
Leasehold improvements	102,487	2,303	-	104,790
Total Accumulated Depreciation	<u>9,424,645</u>	<u>371,713</u>	<u>(20,788)</u>	<u>9,775,570</u>
Total Capital Assets being depreciated, net	<u>4,519,476</u>	<u>307,140</u>	<u>(551)</u>	<u>4,826,065</u>
Capital Assets, Net	<u>\$ 7,040,782</u>	<u>\$ 1,159,306</u>	<u>\$ (679,404)</u>	<u>\$ 7,520,684</u>

8. CAPITAL ASSETS, NET (continued)

Summary of Changes in Capital Assets, Net (\$ in thousands)

Description	January 1, 2018	Additions/ Transfers In	Deletions/ Transfers Out	December 31, 2018
Capital Assets not being depreciated:				
Land	\$ 689,847	\$ -	\$ (2,340)	\$ 687,507
Construction in progress	1,235,972	829,919	(232,092)	1,833,799
Total Capital Assets not being depreciated	<u>1,925,819</u>	<u>829,919</u>	<u>(234,432)</u>	<u>2,521,306</u>
Capital Assets being depreciated:				
Buildings	3,173,239	-	(26,774)	3,146,465
Building improvements	9,170,548	175,642	(32,456)	9,313,734
Facilities and other improvements	489,879	3,031	-	492,910
Furniture and equipment	829,440	53,228	(4,841)	877,827
Leasehold improvements	112,994	191	-	113,185
Total Capital Assets being depreciated	<u>13,776,100</u>	<u>232,092</u>	<u>(64,071)</u>	<u>13,944,121</u>
Less Accumulated Depreciation:				
Buildings	2,930,106	22,851	(26,774)	2,926,183
Building improvements	4,914,618	299,973	(30,563)	5,184,028
Facilities and other improvements	448,081	6,961	-	455,042
Furniture and equipment	728,275	33,454	(4,824)	756,905
Leasehold improvements	99,094	3,393	-	102,487
Total Accumulated Depreciation	<u>9,120,174</u>	<u>366,632</u>	<u>(62,161)</u>	<u>9,424,645</u>
Total Capital Assets being depreciated, net	<u>4,655,926</u>	<u>(134,540)</u>	<u>(1,910)</u>	<u>4,519,476</u>
Capital Assets, Net	<u>\$ 6,581,745</u>	<u>\$ 695,379</u>	<u>\$ (236,342)</u>	<u>\$ 7,040,782</u>

9. ACCOUNTS PAYABLE

Accounts payable at December 31, 2019 and 2018 consist of the following (\$ in thousands):

	<u>2019</u>	<u>2018</u>
Contract retentions	\$ 79,413	\$ 57,223
Vouchers payable	27,960	28,704
Employee benefits	13,650	25,196
Other	<u>44,407</u>	<u>26,126</u>
Total accounts payable	<u>\$ 165,430</u>	<u>\$ 137,249</u>

10. ACCRUED LIABILITIES

Accrued liabilities at December 31, 2019 and 2018 consist of the following (\$ in thousands):

	<u>2019</u>	<u>2018</u>
Capital Programs	\$ 172,360	\$ 137,420
Operating Programs	137,080	101,706
Utilities	51,018	26,524
Wages and payroll taxes	15,463	47,525
Interest	12,286	13,125
Other	<u>11,055</u>	<u>8,084</u>
Total accrued liabilities	<u>\$ 399,262</u>	<u>\$ 334,384</u>

11. POLLUTION REMEDIATION OBLIGATIONS

The Authority accounts for its pollution remediation obligations (“PRO”) in accordance with GASB Statement No. 49 (“GASB 49”) Accounting and Financial Reporting for Pollution Remediation Obligations. As a result, the Authority has recorded in the statements of net position a PRO liability in the amount \$2,889,256,000 and \$138,940,000 as of December 31, 2019 and 2018, respectively. The liability as of December 31, 2019 includes \$2,751,291,000 of current year costs for lead based paint remediation and abatement being treated as a Special item on the Statements of Revenues, Expenses, and Changes in Net Position. NYCHA has classified the lead-based paint costs as a Special item as it meets the criteria of being infrequent, although not unusual for a housing authority, and is within management’s control to abate. The unusual criteria are triggered as this is the first time in close to ninety years since NYCHA’s inception, where a comprehensive plan to lead abatement has been implemented. The Authority’s PRO is measured based on the expected costs of future activities, estimating a reasonable range of potential outlays and multiplying these outlays by their probability of occurring. The estimate of the liability does not include cost components that are not yet reasonably measurable.

11. POLLUTION REMEDIATION OBLIGATIONS (continued)

The Authority has separated its pollution remediation obligations into four groups: lead based paint, oil spills, asbestos, and mold.

Lead Based Paint

Lead-based paint presents a threat to the health of residents and workers. Per HUD regulations (24CFR Part 35) an annual lead visual assessment is required of all target housing built prior to 1978, unless such housing is exempt pursuant to those regulations. New York City Local Law 1 (NYC Admin. Code section 27-2056) requires landlords of buildings built before 1960 (or built between 1960 and 1978 if known to have lead based paint) to take certain actions to prevent lead poisoning in children under 6 years old, including conducting annual inspections, remediating or abating any chipped or peeling paint, and completely removing lead-based paint from certain building components upon vacancy of an apartment.

As per Paragraph 11 of GASB 49, an obligating event is one that triggers the potential recognition of a pollution remediation liability. Such obligating event may occur in certain instances including but not limited to when the government is compelled to take action because of imminent danger to public health, when the government commences remediation efforts or when the government is named by a regulator as a potentially responsible party. In the case of NYCHA, all three of these obligating events have been triggered. On January 31, 2019 NYCHA entered into an agreement with HUD, the United States Attorney's Office for the Southern District of New York ("SDNY"), and the City of New York (the "Agreement"). Among many requirements within, NYCHA agreed to perform lead-based paint interim controls ("remediation"), follow lead-safe work practices mandated by HUD and the United States Environmental Protection Agency (EPA), and perform specified lead-based paint abatement activities. Per the Agreement, among other things, NYCHA is required to perform annual visual assessments, control lead-based paint hazards identified by the visual assessments (until abatement is performed), abate lead in all apartments and interior common areas that contain lead-based paint in the same building as those units within 20 years, and abate lead in exterior common areas at a timeline to be determined. NYCHA must also provide a certification every six months describing its compliance with certain EPA and HUD regulations.

NYCHA presumes the presence of lead-based paint in target housing built prior to 1978 unless the unit is exempt due to negative lead findings of an inspection, exemption or record of prior abatement. Of the total 173,000 units in the NYCHA portfolio, the target housing consists of approximately 134,000 units and associated common areas, however, the specific requirements for individual units and common areas differ dependent upon prior lead-based paint inspection results and abatement activities. The Authority has attempted to perform visual assessments for substantially all target apartments subject to HUD requirements in both 2018 and 2019. In addition, the Authority has entered into contracts with third parties to perform x-ray fluorescence (XRF) tests and lab analysis of paint chips to better survey the portfolio for positive lead-based paint components. At December 31, 2018, minimal XRF testing had been performed and as a result the Authority could not reasonably estimate the costs to remediate and abate lead. As a result, the lead-based paint liability at December 31, 2018 included \$92 million estimated costs of the XRF testing.

11. POLLUTION REMEDIATION OBLIGATIONS

Lead Based Paint (continued)

For the year ended 2019, the Authority has considered XRF results of apartment units through May 31, 2020, for which 41,000 units (30%) have been tested. The Authority believes that this represents a sufficient amount of testing to reasonably estimate positive lead findings and related remediation and abatement costs across the effected target units. XRF testing is not expected to be completed until the end of 2021. Due to the large portfolio, and 70% of the apartment units still to be tested, actual test results and related costs may vary from estimates presented herein.

Based on XFR testing results to date, management estimated that 32% of target units will have positive lead findings and will be subject to further remediation and abatement workstreams. Aggregate liability at December 31, 2019 relating to such activities, including testing and inspections, is \$2.8 billion. This amount includes \$92 million for XRF testing, \$1.601 billion costs for remediation and \$1.145 billion for abatement. The current year costs are reflected as a Special item in the Statements of Revenues, Expenses and Changes in Net Position. Such costs are consistent with the timelines set in the Agreement in which apartment units and interior common areas in select developments are abated within 5 years of the effective date, 50% of all units and interior common areas in the same building as those units are abated within 10 years of the effective date, 75% are abated within 15 years of the effective date, and 100% are abated within 20 years of the effective date. All above milestones are subject to Force Majeure circumstances that may arise. Total costs are subject to variations in actual results of XRF tests versus estimates, timing of when remediation and abatement can be executed, variation and inflation in contractor costs, and other microeconomic and macroeconomic factors.

The \$2.8 billion liability, as of December 31, 2019, includes management's estimates to remediate and abate lead in target apartment units, interior common space of buildings, community centers and playgrounds. The estimate of the liability does not include cost components that are not reasonably estimable as per GASB 49 (paragraph 26). Such components not deemed estimable include exterior building surfaces, fences and soil where the Authority does not have reliable information to reasonably estimate lead findings and related costs at this time.

As part of the Agreement referenced above, the City of New York has agreed to provide incremental financial support to NYCHA of \$2.2 billion over a ten-year period in order to assist the Authority in meeting its obligations under the Agreement. Such funding requests must be supported by an Action Plan approved by the Monitor which identifies projects and related spending plans. As lead-based paint remediation and abatement is one of the six pillars reflected within the agreement, it is expected that significant funding will be allocated to these efforts. However, the specific amount has not yet been determined. The timing and amount of related revenue recognition is subject to uncertainty and as a result, revenue pursuant to the Agreement has not been recognized for the year ended December 31, 2019.

Oil Spills

To comply with NYS Department of Environmental Conservation ("DEC") rules and regulations, the Authority is continuing a program started in 1992 to remediate contaminated soil related to fuel storage tanks on the Authority property as required.

11. POLLUTION REMEDIATION OBLIGATIONS

Oil Spills (continued)

As of December 31, 2019, and 2018, the number of open active fuel oil spills on record with DEC was 32 and 42, respectively. The spills are categorized by the Authority as either Class A spills which are pending closure, Class B spills which require further investigation or Class C spills which have been investigated and have a remedial plan in place. The number of open active fuel oil spills is as follows:

Description of Oil Spills	2019	2018
Pending closure	6	9
Require further investigation	10	16
Have been investigated and have a remedial plan in place	16	17
Total number of spills on record with the DEC	32	42

In connection with petroleum bulk storage remediation, the Authority's liability was \$3,690,000 and \$4,178,000 as of December 31, 2019 and 2018, respectively, as shown below, which represents the remaining estimated cost to close the Class A spills, investigate the Class B spills, and remediate and re-investigate the Class C spills.

Liability to Remediate Oil Spills (\$ in thousands)

Description of Oil Spills	2019	2018
Pending closure	\$ 23	\$ 37
Require further investigation	463	752
Have been investigated and have a remedial plan in place	3,204	3,389
Total Liability to Remediate Oil Spills	\$ 3,690	\$ 4,178

The Authority has estimated the remaining cost of outlays and time to remediate the Class C spills based on an evaluation of each oil spill. Using that data, the liability was measured using the expected cash flow technique. The Authority has not recognized any clean-up remediation activity liabilities for Class B spills since those costs are not reasonably estimable. The Authority does not expect any recoveries related to fuel oil spills.

Asbestos Remediation

During the course of building rehabilitation and modernization, the exposure of lead-based paint or asbestos presents a threat to the health of residents and workers. Upon commencement of the rehabilitation and modernization projects these hazards are identified and remediated, and the remediation costs are expensed. As of December 31, 2019, and 2018, commitments related to the remediation of lead-based paint and asbestos portions of active contracts were \$127,105,000 and \$126,762,000, respectively. A portion of building rehabilitation and modernization outlays are reimbursable from HUD through its Capital Fund Program.

11. POLLUTION REMEDIATION OBLIGATIONS

Asbestos Remediation (continued)

Per HUD Regulations, an annual lead paint inspection is required of all target housing built prior to January 1, 1978. For NYCHA, the target housing consists of approximately 135,000 units. Through 2018, NYCHA had completed visual inspections of all target units. The visual inspections identified areas with the possible presence of lead paint. To determine if lead paint is present in excess of legal thresholds NYCHA has entered into contracts totaling \$92,000,000 to conduct x-ray fluorescence (XRF) testing at all units built prior to 1978. NYCHA cannot reasonably estimate the range of cleanup outlays because it has not completed the lead paint testing.

Mold Remediation

Based on a 2018 settlement agreement, the Authority is required to complete mold repairs in no more than fifteen (15) days after a mold or excessive moisture condition is detected or reported. There were approximately 9,400 and 3,500 open work orders for mold as of December 31, 2019 and 2018. The estimated cost to remediate these mold conditions was \$11,654,000 and \$8,000,000, respectively.

The Authority's total pollution remediation obligations for 2019 and 2018 are summarized as follows (\$ in thousands):

Description	TOTAL	Lead Based			
		Paint	Oil Spills	Asbestos	Mold
Liability at December 31, 2017	\$ 21,899	\$ -	\$ 4,798	\$ 17,101	\$ -
Current year costs	134,626	92,000	1,487	33,139	8,000
Payments made during the year	(17,585)	-	(2,107)	(15,478)	-
Liability at December 31, 2018	138,940	92,000	4,178	34,762	8,000
Current year costs	2,804,728	2,751,291	581	30,328	22,528
Payments made during the year	(54,412)	(4,484)	(1,069)	(29,985)	(18,874)
Liability at December 31, 2019	\$ 2,889,256	\$ 2,838,807	\$ 3,690	\$ 35,105	\$ 11,654

The above liability is subject to change due to price increases or reductions, changes in technology, or changes in applicable laws or regulations. The Authority classifies the total pollution remediation obligations as of December 31, 2019 and 2018 as follows (\$ in thousands):

Description	2019	2018
Current portion	\$ 266,843	\$ 136,962
Long-term portion	2,622,413	1,978
Total pollution remediation obligations	\$ 2,889,256	\$ 138,940

12. ASSET RETIREMENT OBLIGATIONS

The Department of Environmental Protection ("DEP") regulations require certain activities to be followed in connection with the retirement of fuel oil tanks. As of December 31, 2019, and 2018, the Authority had 312 and 334 fuel oil tanks, respectively, that are expected to be retired within the next five years. The estimated cost to retire these tanks is \$84,188,000 and \$69,965,000 at December 31, 2019 and 2018, respectively. This expense is being recognized over the useful life of the assets. The remaining useful life of the fuel oil tanks range from 1 to 19 years.

Amounts reported as Deferred Outflows of Resources of \$12,256,000 as of December 31, 2019 will be recognized in Repair and Maintenance expense as follows (\$ in thousands):

Year	Total
2020	\$ 2,272
2021	2,080
2022	1,889
2023	1,619
2024	1,309
2025-2029	2,723
2030-2034	322
2035-2038	42
Total	\$ 12,256

13. CLAIMS PAYABLE

General Liability - The Authority maintains a self-insurance program to provide for all claims arising from injuries to persons other than employees. The Authority has insurance to cover all liabilities in excess of a self-insured retention. From January 1, 2018 through July 31, 2018, the Authority's insurance coverage was \$100,000,000 per occurrence and \$130,000,000 in the aggregate, with a self-insured retention of \$1,000,000 per occurrence. From August 1, 2018 through July 31, 2019, the Authority's insurance coverage was \$100,000,000 per occurrence and \$177,000,000 in the aggregate, with a self-insured retention of \$1,000,000 per occurrence. From August 1, 2019 through December 31, 2019, the Authority's insurance coverage was \$120,000,000 per occurrence and \$120,000,000 in the aggregate with a self-insured retention of \$5,000,000 per occurrence. The self-insured retention for Employee Benefits Liability limit (a component of the General Liability program) was \$500,000 per occurrence for the period of January 1, 2018 through July 31, 2019, and \$5,000,000 each occurrence for the period of August 1, 2019 through December 31, 2019. In addition, contractors performing work for the Authority are required to carry liability insurance protecting the contractor and the Authority.

The general liability program is primarily funded based upon an amount which is actuarially determined and charged to individual developments. In addition, a liability is established based upon an estimate of all probable losses, including an estimate of losses incurred but not yet reported. At December 31, 2019 and 2018, the total undiscounted liability for such claims was \$242,475,000 and \$193,359,000, respectively.

13. CLAIMS PAYABLE (continued)

At December 31, 2019 and 2018, the liability for these claims was reported at discounted amounts of \$229,927,000 and \$183,591,000 using a discount rate of 1.50 percent. Payments made for claims amounted to \$49,224,000 and \$53,912,000 for the years ended December 31, 2019 and 2018, respectively.

Workers' Compensation – The Authority maintains a self-insurance program for workers' compensation claims. The workers' compensation program is primarily funded based upon an amount which is actuarially determined and charged to individual developments. At December 31, 2019 and 2018, the total undiscounted liability for such claims was \$342,019,000 and \$350,674,000, respectively.

At December 31, 2019 and 2018, these amounts were reported at discounted amounts of \$293,081,000 using a discount rate of 2.00 percent and \$295,981,000 using a discount rate of 2.25 percent, respectively. Payments made for claims amounted to \$37,143,000 and \$41,098,000 for the years ended December 31, 2019 and 2018, respectively.

The Authority's total claims payable for 2019 and 2018 are summarized as follows (\$ in thousands):

Summary of Claims Payable (\$ in thousands)

Description	TOTAL	General Liability	Workers' Comp.
Claim Reserve at December 31, 2017	\$ 465,670	\$ 168,226	\$ 297,444
Losses incurred during the year	108,912	69,277	39,635
Losses paid during the year	<u>(95,010)</u>	<u>(53,912)</u>	<u>(41,098)</u>
Claim Reserve at December 31, 2018	479,572	183,591	295,981
Losses incurred during the year	129,803	95,560	34,243
Losses paid during the year	<u>(86,367)</u>	<u>(49,224)</u>	<u>(37,143)</u>
Claim Reserve at December 31, 2019	<u>\$ 523,008</u>	<u>\$ 229,927</u>	<u>\$ 293,081</u>

The claim reserves are reported by management at the 75 percent confidence level for 2019 and 2018. The Authority classifies the estimated claims that will be paid out in the next year as a current liability and the balance as a non-current liability, as shown below for the years ended December 31, 2019 and 2018 (\$ in thousands):

Description	Total		General Liability		Workers' Comp.	
	2019	2018	2019	2018	2019	2018
Current	\$ 84,587	\$ 80,000	\$ 43,352	\$ 37,723	\$ 41,235	\$ 42,277
Non-current	<u>438,421</u>	<u>399,572</u>	<u>186,575</u>	<u>145,868</u>	<u>251,846</u>	<u>253,704</u>
Total	<u>\$ 523,008</u>	<u>\$ 479,572</u>	<u>\$ 229,927</u>	<u>\$ 183,591</u>	<u>\$ 293,081</u>	<u>\$ 295,981</u>

14. UNEARNED REVENUES AND OTHER CURRENT LIABILITIES

Unearned revenues and other current liabilities at December 31, 2019 and 2018 are comprised of the following (\$ in thousands):

	2019	2018
FEMA - Superstorm Sandy	\$ 247,094	\$ 273,633
Tenant security deposits	44,099	42,327
Tenant prepaid rent	26,141	22,247
Development transactions	21,388	20,158
Dormitory Authority - State of New York	10,378	19,086
Prepaid subsidy	6,749	6,868
Other	2,231	1,945
Total unearned revenues and other current liabilities	<u>\$ 358,080</u>	<u>\$ 386,264</u>

15. LONG - TERM DEBT

HDC Loans

On September 10, 2013, the Authority entered into a Loan Agreement with New York City Housing Development Corporation (“HDC”), borrowing approximately \$701 million of bond proceeds issued under the Capital Fund Grant Revenue Bond Program at a weighted average interest rate of 4.8%. The face amount of the bonds consisted of \$185,785,000 of Series 2013 A bonds (“Series A bonds”) and \$470,300,000 of Series 2013 B (“Series B bonds”). The Series B bonds had two sub-series: Series 2013 B-1 \$348,130,000 and Series 2013 B-2 \$122,170,000. The bond premiums were \$15,020,118 and \$29,695,129 on the Series A bonds and Series B bonds, respectively. The proceeds of the face amount of these bonds were loaned to the Authority by HDC.

The Series 2013 A bonds proceeds were issued at a weighted average rate of 4.4% and were used together with other available funds from the prior Series 2005 A bond issuance as an advance refund of the remaining balance of the pre-existing Series 2005 A bonds and to defease the existing debt. The bond proceeds of the new Series 2013 A bonds were deposited in an irrevocable trust with an escrow agent to provide for all remaining debt service payments on the Series 2005 A bonds. The 2005 A bonds were fully paid in July 2005. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt of \$10,388,000. This difference, a deferred amount on refunding, is being amortized through the year 2025 using the effective-interest method. The Authority completed the advance refunding to reduce total debt service payments over 11 years by \$7.0 million and to obtain an economic gain of \$2.9 million.

The Series 2013 B bond proceeds were issued with a weighted average rate of 5.0% to fund acquisition, construction or rehabilitation, and to make capital improvement at 34 Authority developments. Capital improvements primarily include “building envelope” work on roofs, brickwork, and windows, etc. The proceeds of these bonds that have been loaned to the Authority by HDC were placed in escrow accounts with the Trustee banks. The capital improvements for this program was completed and on June 7, 2017, the Authority made its final draw of the loan proceeds.

15. LONG-TERM DEBT

Certificates of Indebtedness

The State of New York has loaned the Authority funds to finance the construction of State-aided developments from proceeds of State Housing Bonds. The Authority has acknowledged its indebtedness for such loans by issuance of Certificates of Indebtedness. Debt service payments are made from funds provided by the State of New York.

Mortgage Loans

As part of the Authority's March 16, 2010 mixed-finance transaction (see Note 21), HDC issued bonds totaling \$477,455,000. The bonds issued by HDC were comprised of seven different series as follows: \$23,590,000 2009 Series L-1, \$68,000,000 2009 Series L-2, \$150,000,000 2010 Series B (Bridge Bonds), \$140,000,000 2011 Series A (Bridge Bonds), \$25,325,000 2010 Series A-1, \$3,000,000 2010 Series A-2 (Fixed-Rate Taxable Bonds), and \$67,540,000 2012 Series A (Index Floating Rate).

The bond proceeds were used to provide financing in the form of mortgage loans to LLC I and LLC II. Of the seven different series of bonds issued as part of the mixed-finance transaction, four series were paid in full in 2013, and three series were outstanding as of December 31, 2019. Specifically, 2009 Series L-2, 2010 Series B, 2011 Series A, and 2012 Series A were paid in full, while the three outstanding are 2009 Series L-1, 2010 Series A-1, and 2010 Series A-2. In September 2013, the three remaining loans were converted from construction to permanent loans, with principal and interest payable monthly.

For LLC I, the proceeds from the mortgage issued in connection with the \$23,590,000 2009 Series L-1 Bonds were used to finance the acquisition of the developments. These mortgage loans are secured by the net operating income of the respective development's Section 8 rental revenue.

The LLC II financing structure for rehabilitation provided private activity bond proceeds from a long-term bond issue of \$25,325,000 2010 Series A-1 Bonds. Similarly, acquisition funds were provided from the proceeds of the \$3,000,000 2010 Series A-2 Bonds. These mortgage loans are secured by the net operating income of the respective development's Section 8 rental revenue.

2013 Equipment Lease/Purchase Agreement

In January 2013, the Authority entered into a 13-year Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp ("BAPCC") in the amount of \$18,046,000 to finance an Energy Performance Contract ("EPC"). This financing agreement and EPC have enabled the Authority to upgrade boilers, instantaneous water heaters, apartment temperature sensors, and upgrade computerized heating automated systems at (6) developments, and upgrade apartment convectors at one of these six developments. The Equipment Lease/Purchase Agreement with BAPCC will mature in 2026. This EPC plan provides HUD-sponsored EPC funding for projects at these 6 developments, which were previously earmarked to be funded with Federal Capital subsidies, thereby enabling the Authority to use its Federal Capital funds for other critical capital improvements pursuant to the Authority's Five-Year Capital Plan.

15. LONG-TERM DEBT

2016 Equipment Lease/Purchase Agreement for Ameresco A

In December 2016, the Authority entered into a 20-year Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp in the amount of \$51,548,000 to finance an Energy Performance Contract. This financing agreement and EPC will enable the Authority to upgrade common area and apartment lighting at sixteen (16) developments and to replace a boiler plant and upgrade a comprehensive heating system at one development. The Equipment Lease/Purchase Agreement with BAPCC will mature in June 2036. This EPC plan provides HUD-sponsored EPC funding at these 16 developments, thereby enabling the Authority to use its Federal Capital funds for other capital improvements pursuant to the Authority's Five-Year Capital Plan.

2017 Equipment Lease/Purchase Agreement for Sandy-A

In December 2017, the Authority entered into a 20-year Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp ("BAPCC") in the amount of \$43,000,000 to finance an Energy Performance Contract ("EPC"). This financing agreement and EPC will enable the Authority to upgrade common area and apartment lighting at eighteen (18) developments and heating controls at 17 developments. The Equipment Lease/Purchase Agreement with BAPCC will mature in December 2037. This EPC plan provides HUD-sponsored EPC funding at these 18 developments, thereby enabling the Authority to use its Federal Capital funds for other capital improvements pursuant to the Authority's Five-Year Capital Plan.

2017 Equipment Lease/Purchase Agreement for Brooklyn Queens Demand Management ("BODM")

In December 2017, the Authority entered into a 20-year Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp ("BAPCC") in the amount of \$60,133,000 to finance an Energy Performance Contract ("EPC"). This financing agreement and EPC will enable the Authority to upgrade common area and apartment lighting, and apartment heating controls at twenty-three (23) developments. The Equipment Lease/Purchase Agreement with BAPCC will mature in December 2037. This EPC plan provides HUD-sponsored EPC funding at these 23 developments, thereby enabling the Authority to use its Federal Capital funds for other capital improvements pursuant to the Authority's Five-Year Capital Plan.

2018 Equipment Lease/Purchase Agreement for Ameresco B (EPC007)

In August 2018, the Authority entered into a 20-year Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp ("BAPCC") in the amount of \$79,462,000 to finance an Energy Performance Contract ("EPC"). This financing agreement and EPC have enabled the Authority to fund energy conservation work to upgrade common area and apartment lighting, and apartment heating controls at fifteen (15) developments. The Equipment Lease/Purchase Agreement with BAPCC will mature in July 2038. This EPC plan provides HUD-sponsored EPC funding at these 15 developments, thereby enabling the Authority to use its Federal Capital funds for other capital improvements pursuant to the Authority's Five-Year Capital Plan.

15. LONG - TERM DEBT (continued)

The tables that follow provide information about the change in long term debt over the past two years for the Authority and its blended component units (\$ in thousands):

Description of Long Term Debt	Jan. 1, 2019	Proceeds	Payments & Amortization	Dec. 31, 2019	Due Within One Year
Bonds:					
State Guaranteed Certificates of Indebtedness Outstanding (State Program) three issues remaining bearing interest of 3.5% to 3.75% per annum maturing annually through July 2024.	\$ 7,102	-	\$ (1,462)	\$ 5,640	\$ 1,462
State Guaranteed Certificates of Indebtedness Outstanding (incorporated into the Federal Housing Program), three issues remaining bearing interest of 3.5% to 4.75% per annum, maturing annually through July 2024.	1,155	-	(244)	911	244
Loans Funded by:					
HDC Capital Fund Program Revenue Bonds, Series 2013 A (\$185,785,000); Loan Agreement with an interest rate of 3.0% to 5.0% per annum, maturing annually through July 2025.	122,400	-	(15,095)	107,305	15,840
HDC Capital Fund Program Revenue Bonds, Series 2013 B-1 (\$348,130,000); Loan Agreement with an interest rate of 5.0% to 5.25% per annum, maturing annually through July 2033.	276,070	-	(18,345)	257,725	19,265
HDC Capital Fund Program Revenue Bonds, Series 2013 B-2 (\$122,170,000); Loan Agreement with an interest rate of 5.0% to 5.25% per annum, maturing annually through July 2032.	122,170	-	-	122,170	-
Loan Payable - 2013 Equipment Lease/Purchase Agreement; with BAPCC for Energy Performance Contract (\$18,045,580) at an interest rate of 1.98% per annum, maturing January 19, 2026.	12,420	-	(2,878)	9,542	1,327
Loan Payable - 2016 Equipment Lease/Purchase Agreement; (Ameresco A) with BAPCC for Energy Performance Contract (\$51,548,356) at an interest rate of 3.27% per annum, maturing June 28, 2036.	53,389	-	(1,610)	51,779	1,817
Loan Payable - 2017 Equipment Lease/Purchase Agreement; (BQDM); with BAPCC for Energy Performance Contract (\$60,132,977.75) at an interest rate of 3.6178% per annum, maturing December 15, 2037.	62,328	2,275	-	64,603	1,856
Loan Payable - 2017 Equipment Lease/Purchase Agreement; (SANDY A); with BAPCC for Energy Performance Contract (\$43,000,000) at an interest rate of 3.6178% per annum, maturing December 22, 2037.	44,570	1,627	-	46,197	1,194
Loan Payable - 2018 Equipment Lease/Purchase Agreement; (Ameresco B); with BAPCC for Energy Performance Contract (\$79,461,775.81) at an interest rate of 4.75% per annum, maturing July 1, 2038.	79,462	3,185	-	82,647	-
HDC 2009 Series L-1 Bonds (\$23,590,000); Permanent Mortgage Loan at an interest rate of 6.3% per annum, maturing November 2043; secured by mortgage.	21,940	-	(381)	21,559	405
HDC 2010 Series A-1 Bonds (\$25,325,000); Permanent Mortgage Loan at an interest rate of 5.1% per annum, maturing November 2041; secured by mortgage.	20,086	-	(480)	19,606	505
HDC 2010 Series A-2 Bonds (\$3,000,000); Permanent Mortgage Loan at an interest rate of 5.1% per annum, maturing May 2041; secured by mortgage.	2,365	-	(57)	2,308	60
Long Term Debt (before Premium)	825,457	7,087	(40,552)	791,992	43,975
Add Premium on HDC Revenue Bond Loan Agreements	14,972	-	(3,361)	11,611	-
TOTAL LONG TERM DEBT	\$ 840,429	\$ 7,087	\$ (43,913)	\$ 803,603	\$ 43,975

In July 2019, a prepayment of \$1,449,290 for the Hope Gardens development was made for the 2013 Equipment Lease/Purchase Agreement including principal, interest and a \$28,417 prepayment penalty.

In February 2020, prepayments for the William Plaza and Independence Towers developments were made totaling \$2,542,000 for the 2010 Series A-1 Bonds and \$615,000 for the 2010 Series A-2 Bonds.

15. LONG - TERM DEBT (continued)

Description of Long Term Debt	Jan. 1, 2018	Proceeds	Payments & Amortization	Dec. 31, 2018	Due Within One Year
Bonds:					
State Guaranteed Certificates of Indebtedness Outstanding (State Program) three issues remaining bearing interest of 3.5% to 3.75% per annum maturing annually through July 2024.	\$ 8,564	-	\$ (1,462)	\$ 7,102	\$ 1,462
State Guaranteed Certificates of Indebtedness Outstanding (incorporated into the Federal Housing Program), three issues remaining bearing interest of 3.5% to 4.75% per annum, maturing annually through July 2024.	1,399	-	(244)	1,155	243
Loans Funded by:					
HDC Capital Fund Program Revenue Bonds, Series 2013 A (\$185,785,000); Loan Agreement with an interest rate of 3.0% to 5.0% per annum, maturing annually through July 2025.	136,815	-	(14,415)	122,400	15,095
HDC Capital Fund Program Revenue Bonds, Series 2013 B-1 (\$348,130,000); Loan Agreement with an interest rate of 5.0% to 5.25% per annum, maturing annually through July 2033.	293,535	-	(17,465)	276,070	18,345
HDC Capital Fund Program Revenue Bonds, Series 2013 B-2 (\$122,170,000); Loan Agreement with an interest rate of 5.0% to 5.25% per annum, maturing annually through July 2032.	122,170	-	-	122,170	-
Loan Payable - 2013 Equipment Lease/Purchase Agreement; with BAPCC for Energy Performance Contract (\$18,045,580) at an interest rate of 1.98% per annum, maturing January 19, 2026.	13,812	-	(1,392)	12,420	1,457
Loan Payable - 2016 Equipment Lease/Purchase Agreement; (Ameresco A) with BAPCC for Energy Performance Contract (\$51,548,356) at an interest rate of 3.27% per annum, maturing June 28, 2036.	53,247	871	(729)	53,389	1,610
Loan Payable - 2017 Equipment Lease/Purchase Agreement; (BQDM); with BAPCC for Energy Performance Contract (\$60,132,977.75) at an interest rate of 3.6178% per annum, maturing December 15, 2037.	60,133	2,195	-	62,328	-
Loan Payable - 2017 Equipment Lease/Purchase Agreement; (SANDY A); with BAPCC for Energy Performance Contract (\$43,000,000) at an interest rate of 3.6178% per annum, maturing December 22, 2037.	43,000	1,570	-	44,570	-
Loan Payable - 2018 Equipment Lease/Purchase Agreement; (Ameresco B); with BAPCC for Energy Performance Contract (\$79,461,775.81) at an interest rate of 4.75% per annum, maturing July 1, 2038.	-	79,462	-	79,462	-
HDC 2009 Series L-1 Bonds (\$23,590,000); Permanent Mortgage Loan at an interest rate of 6.3% per annum, maturing November 2043; secured by mortgage.	22,298	-	(358)	21,940	381
HDC 2010 Series A-1 Bonds (\$25,325,000); Permanent Mortgage Loan at an interest rate of 5.1% per annum, maturing November 2041; secured by mortgage.	23,389	-	(3,303)	20,086	480
HDC 2010 Series A-2 Bonds (\$3,000,000); Permanent Mortgage Loan at an interest rate of 5.1% per annum, maturing May 2041; secured by mortgage.	2,770	-	(405)	2,365	57
Long Term Debt (before Premium)	781,132	84,098	(39,773)	825,457	39,130
Add Premium on HDC Revenue Bond Loan Agreements	19,035	-	(4,063)	14,972	-
TOTAL LONG TERM DEBT	\$ 800,167	\$ 84,098	\$ (43,836)	\$ 840,429	\$ 39,130

In December 2018, the Authority closed on a PACT transaction involving both Baychester Houses and Murphy Houses. This closing necessitated prepayments of \$2,783,000 toward the 2010 Series A-1 Bonds and \$344,000 toward the 2010 Series A-2 Bonds. (see Note 21).

15. LONG TERM DEBT (continued)

Pledged Revenue

CFFP Series 2013A & B Bonds - As security for the Series 2013 A, B-1, and B-2 CFFP Bonds which were issued by HDC, the Authority pledged future HUD Capital Fund Program grant revenue to service the bond debt (thereby satisfying the Authority's loans payable to HDC). With HUD's approval, the Authority pledged as sole security for the bonds, a portion of its annual appropriation from HUD. The bonds are payable with pledged revenue through 2033. The Authority has committed to appropriate capital contributions of the Capital Fund Program in amounts sufficient to cover the scheduled principal and interest requirements of the debt. Total principal and interest paid for 2019 and 2018, by the Authority was \$59,559,000 and \$59,544,000, respectively. As of December 31, 2019, total principal and interest remaining on the combined debt for Series 2013 A, B-1, and B-2 are \$487,200,000 and \$180,451,000, respectively, with annual debt service ranging from \$59,565,000 in the coming year 2020 to \$38,792,000 in the final year 2033.

2013 Equipment Lease/Purchase Agreement - As security for the Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp, the Authority pledged HUD Operating Subsidy revenue to service the loan debt. With HUD's approval, the Authority pledged as security, a portion of its annual appropriation from HUD that consists of HUD Financial Incentive Payments. The loan is payable with pledged revenue through 2026. The Authority has committed to appropriate HUD Operating Subsidy revenue in amounts sufficient to cover the scheduled principal and interest requirements of the debt. Total principal and interest paid for 2019 and 2018, by the Authority was \$3,117,000 and \$1,659,000 respectively. As of December 31, 2019, total principal and interest remaining on the Equipment Lease/Purchase Agreement are \$9,542,000 and \$679,000, with annual debt service ranging from \$1,510,000 in the coming year 2020 to \$743,000 in the final year 2026.

2016 Equipment Lease/Purchase Agreement for Ameresco A - As security for the Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp, the Authority pledged HUD Operating Subsidy revenue to service the loan debt. With HUD's approval, the Authority pledged as security, a portion of its annual appropriation from HUD that consists of HUD Financial Incentive Payments. The loan is payable with pledged revenue through 2036. The Authority has committed to appropriate HUD Operating Subsidy revenue in amounts sufficient to cover the scheduled principal and interest requirements of the debt. As of December 31, 2019, total principal and interest remaining on the Equipment Lease/Purchase Agreement are \$51,779,000 and \$16,704,000, with annual debt service payments ranging from \$3,495,000 in the coming year 2020 to \$2,439,000 in the final year 2036.

15. LONG-TERM DEBT (continued)

2017 Equipment Lease/Purchase Agreement for Sandy A - As security for the Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp, the Authority pledged HUD Operating Subsidy revenue to service the loan debt. With HUD's approval, the Authority pledged as security, a portion of its annual appropriation from HUD that consists of HUD Financial Incentive Payments. The loan is payable with pledged revenue through 2037. The Authority has committed to appropriate HUD Operating Subsidy revenue in amounts sufficient to cover the scheduled principal and interest requirements of the debt. As of December 31, 2019, total principal and interest remaining on the Equipment Lease/Purchase Agreement are \$46,197,000 and \$18,406,000, with annual debt service payments ranging from \$2,854,000 in the coming year 2020 to \$4,271,000 in the final year 2037. During the construction period and prior to beginning debt service payments, the interest will be added to the principal of the loan. In 2019 and 2018, the Authority added \$1,627,000 and \$1,570,000 respectively, in interest to this loan.

2017 Equipment Lease/Purchase Agreement for BQDM - As security for the Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp, the Authority pledged HUD Operating Subsidy revenue to service the loan debt. With HUD's approval, the Authority pledged as security, a portion of its annual appropriation from HUD that consists of HUD Financial Incentive Payments. The loan is payable with pledged revenue through 2037. The Authority has committed to appropriate HUD Operating Subsidy revenue in amounts sufficient to cover the scheduled principal and interest requirements of the debt. As of December 31, 2019, total principal and interest remaining on the Equipment Lease/Purchase Agreement are \$64,603,000 and \$25,593,000, with annual debt service payments ranging from \$4,177,000 in the coming year 2020 to \$5,640,000 in the final year 2037. During the construction period and prior to beginning debt service payments, the interest will be added to the principal of the loan. In 2019 and 2018, the Authority added \$2,275,000 and \$2,195,000 respectively, in interest to this loan.

2018 Equipment Lease/Purchase Agreement for Ameresco B (EPC007) - As security for the Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp, the Authority pledged HUD Operating Subsidy revenue to service the loan debt. With HUD's approval, the Authority pledged as security, a portion of its annual appropriation from HUD that consists of HUD Financial Incentive Payments. The loan is payable with pledged revenue through 2038. The Authority has committed to appropriate HUD Operating Subsidy revenue in amounts sufficient to cover the scheduled principal and interest requirements of the debt. As of December 31, 2019, total principal and interest remaining on the Equipment Lease/Purchase Agreement are \$82,648,000 and \$50,783,000, with no annual debt service payments due during the coming year 2020 to \$8,841,000 in the final year 2038. Debt service payments will begin in January 2021. During the construction period and prior to beginning debt service payments, the interest will be added to the principal of the loan. In 2019, the Authority added \$3,186,000 in interest to this loan.

15. LONG-TERM DEBT (continued)

Pledged Assets

The Authority has five Equipment Lease/Purchase Agreements supporting energy performance contracts with Banc of America Public Capital Corp. As of December 31, 2019, the restricted bank balances that were held in escrow and pledged as collateral for these four leases totaled \$178,055,000 and the related equipment serving as collateral for these EPCs totaled \$82,270,000. In addition, the Authority has four loan agreements outstanding with HDC. As of December 31, 2019, the restricted cash balances that were held in debt service reserve accounts and serving as collateral for these four loans totaled \$31,384,000.

Combined Debt of the Authority

During 2019 and 2018, the Authority made principal payments on its outstanding long-term debt totaling \$40,552,000 and \$39,773,000, respectively. Interest rates on outstanding debt range from 1.98 percent to 6.30 percent.

Future principal and interest payments of all the Authority's outstanding long-term debt (excluding amortized bond premium) at December 31, 2019 are payable as follows (\$ in thousands):

	<u>Years</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Current portion	2020	\$ 43,975	\$ 36,907	\$ 80,882
Long-term portion:				
	2021	44,320	34,986	79,306
	2022	51,021	32,775	83,796
	2023	53,189	30,398	83,587
	2024	55,298	27,901	83,199
	2025-2029	225,829	105,030	330,859
	2030-2034	231,224	48,729	279,953
	2035-2039	78,508	9,918	88,426
	2040-2043	<u>8,628</u>	<u>864</u>	<u>9,492</u>
Total long-term portion		<u>748,017</u>	<u>290,601</u>	<u>1,038,618</u>
Total payments		<u>\$ 791,992</u>	<u>\$ 327,508</u>	<u>\$ 1,119,500</u>

16. ACCRUED LEAVE TIME

Accumulated unpaid leave time is accrued at estimated amounts of future benefits attributable to services already rendered. The liability for compensated absences is calculated for all active employees and is based upon the leave time policy of the Authority, of which two of the major policy factors are retirement eligibility requirements and days eligible for payment.

The liability is comprised of three components: (1) liability for unused leave time (days and hours), (2) liability for bonus retirement leave for employees currently eligible to retire, and (3) liability for bonus retirement leave for employees not currently eligible to retire.

The liability for those employees who are retirement eligible is classified as a current liability, while the liability of those employees not currently eligible to retire is classified as a long-term liability.

The changes in accrued leave time for the years ending December 31, 2019 and 2018 are as follows:

Summary of Accrued Leave Time (\$ in thousands)

Description of Liability	Dec. 31, 2017	Increases	Decreases	Dec. 31, 2018	Increases	Decreases	Dec. 31, 2019
Unused leave time	\$ 93,172	\$ 10,808	\$ (16,269)	\$ 87,711	\$ 13,293	\$ (12,174)	\$ 88,830
Bonus:							
Retirement eligible	36,023	7,491	(7,693)	35,821	7,430	(6,981)	36,270
Not retirement eligible	45,345	6,615	(7,801)	44,159	6,654	(6,335)	44,478
Total Bonus	81,368	14,106	(15,494)	79,980	14,084	(13,316)	80,748
Subtotal	174,540	24,914	(31,763)	167,691	27,377	(25,490)	169,578
Employer FICA	13,352	1,906	(2,430)	12,828	2,094	(1,949)	12,973
Leave Time Liability	\$ 187,892	\$ 26,820	\$ (34,193)	\$ 180,519	\$ 29,471	\$ (27,439)	\$ 182,551

The current and long-term portions of leave time liability as of December 31, 2019 and 2018 are as follows (\$ in thousands):

Description of Liability	2019	2018
Current portion	\$ 74,803	\$ 73,987
Long-term portion	107,748	106,532
Total accrued leave time	\$ 182,551	\$ 180,519

17. EMPLOYEE BENEFITS

Deferred Compensation Plan

The Authority does not have its own Deferred Compensation Plan. The Authority's employees participate in The City of New York Deferred Compensation Plan, which offers a 457 Plan, a 401(k) Plan, and a Roth 401(k) Plan, through payroll deductions. Employees may choose to make pre-tax contributions and/or Roth (after-tax) contributions in the 457 Plan. The plan allows employees to save regularly, in certain cases, with before-tax dollars while deferring federal, state and local income taxes. The pre-tax contributions will remain tax deferred until withdrawn through plan benefit payments.

Pension Plan

The Authority follows the provisions of GASB Statement No. 68 *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*. This Statement establishes financial reporting standards for state and local governments for pensions (see Note 1).

Plan Description. Authority employees are members of the New York City Employees' Retirement System, a multiple employer, cost-sharing, public employee retirement system. NYCERS provides retirement, as well as death and disability benefits. The NYCERS plan combines the features of a defined benefit pension plan with those of a defined contribution pension plan, but is considered a defined benefit plan for financial reporting purposes. NYCERS administers the New York City Employees Retirement System qualified pension plan.

NYCERS issues a stand-alone financial report, which is included in The City of New York Comprehensive Annual Financial Report as a pension trust fund. This financial report may be obtained from the New York City Employees' Retirement System, 335 Adams Street, Suite 2300, Brooklyn, N.Y. 11201-3724, or from the website of NYCERS at <http://nycers.org>.

All persons holding permanent civil service positions in the competitive or labor class are required to become members of the system six months after their date of appointment, but may voluntarily elect to join the system prior to their mandated membership date. All other eligible employees have the option of joining the system upon appointment or anytime thereafter.

Tier 1 - All members who joined prior to July 1, 1973.

Tier 2 - All members who joined on or after July 1, 1973 and before July 27, 1976.

Tier 3 - Only certain members who joined on or after July 27, 1976 and prior to April 1, 2012.

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

Tier 6 – Members who joined on or after April 1, 2012.

The 63/10 Retirement Plan (“Tier 6 Basic Plan”), changed the vesting period from five years of credited service to ten years of credited service.

NYCERS provides three main types of retirement benefits: Service Retirements, Ordinary Disability Retirements, which are non-job-related disabilities, and Accident Disability Retirements, which are job-related disabilities, to participants generally based on salary, length of service, and member Tiers. The Service Retirement benefits provided to Tier 1 participants fall into four categories according to the level of benefits provided and the years of service required. Three of the four categories provide annual benefits of 50% to 55% of final salary after 20 or 25 years of service, with additional benefits equal to a specified percentage per year of service, currently 1.2% to 1.7%, of final salary. The fourth category has no minimum service requirement and instead provides an annual benefit for each year of service equal to a specified percentage, currently 0.7% to 1.53%, of final salary.

Pension Plan (continued)

Funding Policy. Benefit and contribution provisions, which are contingent upon the time at which the employee last entered qualifying service, salary, and length of credited service, are established by State law and may be amended only by the State Legislature. The plan has contributory and non-contributory requirements, with retirement age of 55 or older depending upon when an employee last entered qualifying service, except for employees in physically taxing titles and those who can retire at age 50 with proper service.

Employees entering qualifying service on or before June 30, 1976 are enrolled in a non-contributory plan. Employees entering qualifying service after June 30, 1976, but before June 29, 1995, are enrolled in a plan which required a 3 percent contribution of their salary. This 3 percent required contribution was eliminated for employees who reached 10 years of service, effective October 1, 2000. Employees entering qualifying service after June 28, 1995 are enrolled in a plan which requires a 4.85 percent contribution of their salary, or a 6.83 percent contribution for physically taxing positions.

Under the Tier 6 Basic Plan, employees who joined NYCERS between April 1, 2012 and March 31, 2013 are required to contribute 3 percent of gross wages. On April 1, 2013 a new contribution structure took effect which ranges from 3 percent to 6 percent dependent upon annual wages earned during the “plan year”. The Authority’s contributions for the years ended December 31, 2019 and 2018 were \$163,186,000 and \$164,165,000 respectively. The Authority’s contractually required contributions for the years ended December 31, 2019 and 2018 as a percentage of covered payroll were 20.01% and 21.38%, respectively.

Pension Plan (continued)

Net Pension Liability. As of December 31, 2019, and 2018, the Authority reported a liability of \$822,109,000 and \$894,818,000, respectively, for its proportionate share of NYCERS's net pension liability, as calculated by the New York City Office of the Actuary. The net pension liability was measured as of June 30, 2019 and June 30, 2018 and the total pension liability used to calculate the net pension liability was determined by actuarial valuations as of June 30, 2018 and June 30, 2016, respectively. The Authority's proportion of the net pension liability was based on a projection of the Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. At June 30, 2019 and 2018 the Authority's proportion of net pension liability was 4.439% and 4.885%, respectively. For the years ended December 31, 2019 and 2018, the Authority recognized pension expense of \$117,844,000 and \$137,537,000, respectively. At December 31, 2019 and 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (\$ in thousands):

Deferred Outflows of Resources - 2019		Deferred Inflows of Resources - 2019	
Change of assumptions	\$ 525	Change in assumptions	\$ 34,472
Difference between expected and actual experience	68,744	Difference between expected and actual experience	57,108
Net difference between projected and actual earnings on pension plan investments	-	Net difference between projected and actual earnings on pension plan investments	51,012
Total contributions subsequent to the measurement date	<u>80,955</u>	Changes in proportion and differences between contributions subsequent to the measurement date	<u>92,268</u>
Total	<u>\$ 150,224</u>	Total	<u>\$ 234,860</u>

Deferred Outflows of Resources - 2018		Deferred Inflows of Resources - 2018	
Change of assumptions	\$ 13,130	Difference between expected and actual experience	\$ 83,216
Changes in proportion and differences between contributions subsequent to the measurement date	-	Net difference between projected and actual earnings on pension plan investments	48,323
Total contributions subsequent to the measurement date	<u>81,672</u>	Changes in proportion and differences between contributions subsequent to the measurement date	<u>20,532</u>
Total	<u>\$ 94,802</u>	Total	<u>\$ 152,071</u>

Pension Plan (continued)

Deferred outflows of resources related to pensions resulting from Authority contributions subsequent to the measurement date of \$80,955,000 will be recognized as a reduction of the net pension liability in the year ended December 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (\$ in thousands):

<u>Year</u>	<u>Total</u>
2020	\$ (38,134)
2021	(61,740)
2022	(32,876)
2023	(23,376)
2024	(8,619)
2025	(846)
Total	<u>\$ (165,591)</u>

Actuarial Methods and Assumptions. The total pension liability in the June 30, 2018 and June 30, 2016 actuarial valuations used, respectively, by the Authority in 2019 and in 2018 were both determined using the following actuarial assumptions, applied to all periods included in the measurement:

Investment Rate of Return	7% per annum, net of investment expenses
Salary Increases	3.0% per annum general, merit and promotion increases plus assumed general wage increases
Cost of Living Adjustments	1.5% and 2.5% per annum for certain tiers

In October 2015 the independent actuarial auditor, Gabriel, Roeder, Smith & Company (“GRS”), issued a report on their NYC Charter-mandated actuarial experience studies for the four-year and ten-year periods ended June 30, 2013 (the GRS Report).

Based, in part on the GRS Report, on published studies of mortality improvement, and on input from the City’s outside consultants, the Actuary proposed, and the Boards of Trustees of the NYCERS adopted, new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement mortality are based primarily on the experience of the NYCERS (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015 (the Valuation Tables). Scale MP-2015 replaced Mortality Improvement Scale AA.

In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be within a 20% corridor of the Market Value of Assets.

Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded New York City Retirement Systems (“NYCRS”) are conducted every two years.

Pension Plan

Actuarial Methods and Assumptions (continued)

Finally, in June 2019, Bolton, Inc. issued their actuarial experience study report for the four-year and ten-year periods ended June 30, 2017. Based, in part, on this report, the Actuary proposed and the Boards of Trustees of the NYCERS adopted changes in actuarial assumptions including a change to Mortality Improvement Scale MP-2018 beginning in Fiscal Year 2019.

Expected Rate of Return on Investments. The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Asset Allocation	Long-Term Expected Real Rates of Return
U.S. Public Market Equities	29.00%	7.00%
International Public Market Equities	13.00%	7.10%
Emerging Public Market Equities	7.00%	9.40%
Private Market Equities	7.00%	10.50%
Fixed Income	33.00%	2.20%
Alternatives (Real Assets, Hedge Funds)	<u>11.00%</u>	5.70%
Total	<u>100.00%</u>	

The City has determined its long-term expected rate of return on investments to be 7.00%. This is based upon an expected real rate of return of 5.7% and a long-term Consumer Price Inflation assumption of 2.5% per year, which is reduced by investment related expenses.

Discount Rate. The discount rate used to measure the total pension liability was 7.00% as of June 30, 2019 and June 30, 2018. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made based on rates determined by the Actuary. Based on those assumptions, the NYCERS fiduciary net position was projected to be available to make all projected future benefit payments of current active and non-active NYCERS members. Therefore, the long-term expected rate of return on NYCERS investments was applied to all periods of projected payments to determine the total pension liability.

Pension Plan

Discount Rate (continued)

The following presents the Authority’s proportionate share of the net pension liability as of December 31, 2019 and 2018, calculated using the discount rate of 7%, as well as what the Authority’s proportionate share of the net pension liability would be if it were calculated using a discount rate that is one-percentage point lower (6%) or one-percentage point higher (8%) than the current rate (\$ in thousands):

NYCHA's proportionate share of the net pension liability	1% decrease (6%)	Discount rate (7%)	1% increase (8%)
2019	\$ 1,268,135	\$ 822,109	\$ 445,516
2018	\$ 1,371,679	\$ 894,818	\$ 492,502

The fiduciary net position and additions to and deductions from the fiduciary net position have been determined on the same basis as reported by NYCERS. For this purpose, benefits and refunds are recognized when due and payable in accordance with the terms of the Plan; investments are reported at fair value.

Other Postemployment Benefits

The Authority follows the provisions of GASB Statement No. 75 (“GASB 75”), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which was implemented in 2017 (see Note 2). GASB 75 replaces the requirements of Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employee Plans*.

Plan Description. The Authority is a component unit of The City and a member of the New York City Health Benefits Program. The New York City Health Benefits Program (the “Plan”), administered by the City of New York, is a single-employer defined benefit healthcare plan which provides OPEB to eligible retirees and beneficiaries. Retirees are eligible to participate if they have at least 10 years of credited service as a member of the NYCERS (5 years of credited service if employed on or before December 31, 2001), 15 years of service if a member of TRS or BERS, or receives a pension check from NYCERS. OPEB includes health insurance, Medicare Part B reimbursements, and welfare fund contributions.

Funding Policy. The Administrative Code of The City of New York (“ACNY”) defines OPEB to include Health Insurance and Medicare Part B reimbursements; Welfare Benefits stem from the Authority’s many collective bargaining agreements. The Authority is not required by law or contractual agreement to provide funding for OPEB other than the pay-as-you go amount necessary to provide current benefits to retirees and eligible beneficiaries/dependents. For the calendar years ended December 31, 2019 and 2018, the Authority paid \$94.8 million and \$61.7 million, respectively, to the Plan. Based on current practice, (the Substantive Plan which is derived from ACNY), the Authority pays the full cost of basic coverage for non-Medicare-eligible/Medicare-eligible retiree participants. The costs of these benchmark plans are reflected in the annual June 30th actuarial

Other Postemployment Benefits (continued)

valuations by using age-adjusted premium amounts. Plan retiree participants who opt for other basic or enhanced coverage must contribute 100% of the incremental costs above the premiums for the benchmark plans. The Authority also reimburses covered employees 100% of the Medicare Part B premium rate applicable to a given year. The Authority pays per capita contributions to the welfare funds the amounts of which are based on negotiated contract provisions. There is no retiree contribution to the welfare funds.

Census Data. The following table presents the NYCHA census data used in the June 30, 2018 and June 30, 2017 OPEB valuations which were used to measure the Total OPEB Liability at December 31, 2019 and December 31, 2018, respectively.

Status	Number of Participants	
	June 30, 2018	June 30, 2017
Active	9,192	9,535
Inactives	784	1,031
Deferred Vested	1,468	566
Retired	<u>9,126</u>	<u>8,939</u>
Total	<u>20,570</u>	<u>20,071</u>

Total OPEB Liability. The Entry Age Actuarial Cost Method used in the current OPEB actuarial valuation is unchanged from the prior actuarial valuation.

Under this method, the Actuarial Present Value (“APV”) of Benefits (“APVB”) of each individual included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The employer portion of this APVB allocated to a valuation year is the Employer Normal Cost. The portion of this APVB not provided for at a valuation date by the APV of Future Employer Normal Costs is the Total OPEB Liability.

Increases (decreases) in liabilities due to benefit changes, actuarial assumption changes and /or actuarial method changes are also explicitly identified and amortized in the annual expense.

Other Postemployment Benefits (continued)

Changes in Total OPEB Liability. Changes in the Authority’s Total OPEB Liability for the years ended December 31, 2019 and December 31, 2018 are as follows (\$ in thousands)

Description	Total OPEB Liability	
	2019	2018
Total OPEB Liability at the Beginning of the Year	\$ 2,562,230	\$ 2,562,879
Changes for the Year:		
Service Cost	97,836	116,663
Interest	94,828	85,032
Differences between Expected and Actual Experience	417,892	48,400
Change in Assumptions	(221,694)	(176,030)
Contributions - Employer	(94,814)	(61,714)
Implicit Rate Subsidy	(16,000)	(13,000)
Other Changes*	(23,902)	-
Net Changes	254,146	(649)
Total OPEB Liability at the End of the Year	\$ 2,816,376	\$ 2,562,230

* Repeal of Cadillac Tax

Sensitivity Analysis. The following presents the Total OPEB Liability of the Authority, as well as what the Authority’s Total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage point higher than the discount rates of 3.26% and 3.64% used to measure the Total OPEB Liability at December 31, 2019 and December 31, 2018, respectively (\$ in thousands):

1% decrease (2.26%)	Discount rate (3.26%) 2019	1% increase (4.26%)
\$ 3,210,489	\$ 2,816,376	\$ 2,491,038
1% decrease (2.64%)	Discount rate (3.64%) 2018	1% increase (4.64%)
\$ 2,959,420	\$ 2,562,230	\$ 2,247,413

Other Postemployment Benefits (continued)

The following presents the total OPEB Liability of the Authority, as well as what the Authority's total OPEB Liability would be if it were calculated using health care cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates (\$ in thousands):

1% decrease	Current healthcare cost trend rates	1% increase
2019	2019	2019
\$ 2,385,178	\$ 2,816,376	\$ 3,372,032
2018	2018	2018
\$ 2,150,087	\$ 2,562,230	\$ 3,133,866

OPEB Expense. The OPEB expense recognized by the Authority for the years ended December 31, 2019 and 2018 are \$127,536,000 and \$129,110,000, respectively.

Deferred Outflows of Resources and Deferred Inflows of Resources. Deferred outflows of resources and deferred inflows of resources by source reported by the Authority at December 31, 2019 and December 31, 2018, respectively, are as follows (\$ in thousands):

Deferred Outflows of Resources - 2019		Deferred Inflows of Resources - 2019	
Difference between expected and actual experience	\$ 375,851	Difference between expected and actual experience	\$ 32,756
Changes in assumptions	<u>20,202</u>	Changes in assumptions	<u>353,670</u>
Total	<u>\$ 396,053</u>	Total	<u>\$ 386,426</u>

Deferred Outflows of Resources - 2018		Deferred Inflows of Resources - 2018	
Difference between expected and actual experience	\$ 39,772	Difference between expected and actual experience	\$ 44,538
Changes in assumptions	<u>27,468</u>	Changes in assumptions	<u>234,499</u>
Total	<u>\$ 67,240</u>	Total	<u>\$ 279,037</u>

Other Postemployment Benefits (continued)

Amounts reported as Deferred Outflows of Resources of \$396,053,000 and Deferred Inflows of Resources of \$386,426,000 related to OPEB as of December 31, 2019 will be recognized in OPEB Expense as follows (\$ in thousands):

Year	Total
2020	\$ (25,225)
2021	(18,115)
2022	8,088
2023	20,483
2024	24,396
Total	<u>\$ 9,627</u>

Funding Status and Funding Progress. As of December 31, 2019, the most recent roll-forward actuarial valuation date, the Plan was not funded. The total OPEB liability for benefits was \$2,816,376,000, all of which is unfunded. There were no assets accumulated in a trust. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The determined actuarial valuations of OPEB incorporated the use of demographic and salary increase assumptions among others as reflected below. Amounts determined regarding the funded status and the annual expense of the Authority are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of changes in the net OPEB liability and related ratios shown in the RSI section immediately following the notes to financial statements presents GASB Statement No. 75 results of OPEB valuations for Fiscal Years 2019 and 2018.

Actuarial Methods and Assumptions. The actuarial assumptions used in the 2019 and the 2018 OPEB valuations are a combination of those used in the NYCERS pension actuarial valuations and those specific to the OPEB valuations.

These assumptions are generally unchanged from the previous valuation except as noted below. The NYCERS pension assumptions are provided in the five “Silver Books” available on the Reports page of the OA website (www.nyc.gov/actuary).

The probability of retirement set out in each of the Silver books is assumed to be 100% at either age 63 or 70, depending upon the program of benefits for the individual employee. For the OPEB valuation, 100% of the individuals remaining in service at these ages are assumed to either retire with a benefit or to terminate employment without a benefit, depending upon whether they have attained the requisite service.

For the 2016 OPEB and pension valuations, new tables of postretirement mortality were proposed by the Actuary and adopted by each of the NYCERS Boards during Fiscal Year 2016. These tables were based primarily on the experience of each system and the application of Mortality Improvement Scale MP-2015 published by the Society of Actuaries in October 2015. Scale MP-2015 applied on a generational basis replaced Mortality Improvement Scale AA which was applied on a static projection basis.

Other Postemployment Benefits (continued)

The OPEB-specific actuarial assumptions primarily used in the Fiscal Year 2019 and Fiscal Year 2018 OPEB actuarial valuations of the Plan are as follows:

<i>Valuation Date</i>	June 30, 2018 and June 30, 2017
<i>Measurement Date</i>	December 31, 2019 and December 31, 2018
<i>Discount Rate</i>	3.26% ⁽¹⁾ per annum for the December 31, 2019 measurement date 3.64% ⁽¹⁾ per annum for the December 31, 2018 measurement date
<i>Actuarial Cost Method</i>	Entry Age Normal cost method, level percent of pay calculated on an individual basis.
<i>Per-Capita Claims Costs</i>	EBCBS and GHI plans are insured via a Minimum Premium arrangement while the HIP and many of the other HMOs are community rated. Costs reflect age-adjusted premiums for all plans.

⁽¹⁾ As required under GASB 75 the discount rates are based on the S&P Municipal Bond 20 Year High Grade Index, since there is no pre-funding assumed for this plan.

Initial monthly premium rates used in the valuation are as follows:

Plan	Monthly Rates	
	FY 2019	FY 2018
HIP HMO		
Non-Medicare		
Single	\$ 729.97	\$ 652.44
Family	1,783.60	1,598.47
Medicare	170.84	164.98
GHI/EBCBS:		
Non-Medicare		
Single	\$ 741.40	\$ 620.08
Family	1,947.32	1,652.27
Medicare	191.64	172.42
Others:		
Non-Medicare Single	\$ 1,075.01 (A)	\$ 1,018.56 (A)
Non-Medicare Family	2,409.82 (A)	2,223.80 (A)
Medicare Single	338.86 (A)	311.79 (A)
Medicare Family	668.49 (A)	621.50 (A)

(A) Other HMO premiums represent the total premium for medical (not prescription drug) coverage including retiree contributions.

Other Postemployment Benefits (continued)

Additionally, the individual monthly rates at age 65 used in the valuations are shown below:

Plan	Monthly Rates @ Age 65 FY 2019
HIP HMO	
Non-Medicare	\$ 1,641.20
Medicare	170.84
GHI/EBCBS	
Non-Medicare	\$ 1,690.38
Medicare	187.24
Other HMOs	Varies by system

Welfare Funds

The Welfare Fund Contribution reported as of the valuation date, June 30, 2018 and June 30, 2017, respectively, (including any reported retroactive amounts) was used as the per capita cost for valuation purposes.

The calculations reflect an additional one-time \$100 contribution for Fiscal Year 2019 in July 2018 and Fiscal Year 2020 in July 2019.

Reported annual contribution amounts for the last three years are shown in the Fiscal Year 2019 GASB 74/75 report in Section VII, Tables VII-h to VII-l. Welfare Fund Rates are based on actual reported Union Welfare Fund code for current retirees. Weighted average annual contribution rates used for future retirees, based on Welfare Fund enrollment of recent retirees, are shown in the following table.

	Annual Rate	
	2019	2018
NYCERS	\$ 1,870	\$ 1,850
BERS	1,926	1,903

Medicare Part B Premiums

Calendar Year	Monthly Premium
2013-15	\$ 104.90
2016	109.97
2017	113.63
2018	125.85
2019	134.43 *

* Reflected only in the FY 2019 valuation

Other Postemployment Benefits (continued)

Medicare Part B Premium reimbursement amounts have been updated to reflect actual premium rates announced for calendar years through 2019. Due to limited cost-of living adjustment in Social Security benefits for Calendar Years 2017, 2018, and 2019, some Medicare Part B participants will not be charged the Medicare Part B premium originally projected or ultimately announced for those years. Thus, the valuation uses a blended estimate as a better representation of future Part B premium costs.

For the 2019 OPEB actuarial valuation the annual premium used was \$1,561.68, which is equal to 12 times an average of the Calendar Year 2018 and 2019 monthly premiums shown.

For the Year 2019, the monthly premium of \$134.43 was determined as follows:

- 3.5% of the basic \$104.90 monthly hold-harmless amount assuming that there would be no claims made for the slight increase in Part B premiums for continuing retirees, and
- 96.5% of the announced premium of \$135.50 for Calendar Year 2019, representing the approximate percentage of the Medicare population that will pay the announced amount.

For the Year 2018, the monthly premium of \$125.85 was determined similarly:

- 28% of the basic \$104.90 monthly hold-harmless amount
- 72% of the \$134.00 rate that was in effect for Calendar Year 2018.

Overall Medicare Part B Premium amounts are assumed to increase by the following percentages to reflect the income-related increases in Medicare Part B Premiums for high income individuals.

Other Postemployment Benefits (continued)

Medicare Part B Prem. (cont.)

<u>Fiscal Year</u>	<u>Income-Related Part B Increase</u>	
	<u>2019</u>	<u>2018</u>
2018	N/A	4.5%
2019	5.0%	5.0%
2020	5.2%	5.2%
2021	5.3%	5.3%
2022	5.4%	5.4%
2023	5.5%	5.5%
2024	5.6%	5.6%
2025	5.8%	5.8%
2026	5.9%	5.9%
2027 and later	6.0%	6.0%

*Medicare Part B
Reimbursement Assumption*

90% of Medicare participants are assumed to claim reimbursement; based on historical data (unchanged from last year).

*Health Care Cost
Trend Rate (HCCTR)*

Health trend information from various sources was reviewed, including City premium trend experience for HIP HMO and GHI/EBCBS, public sector benchmark survey for other large plan sponsors, the Medicare Trustees' Report, and the SOA Getzen model. Based on the review, no trend changes were made to the Medicare Part B premium and Welfare Fund contributions, but the medical trends have been updated for the FY 2019 valuation as follows:

HCCTR ASSUMPTIONS - 2019				
Fiscal Year	Pre-Medicare	Medicare	Medicare Part B	Welfare Fund
Ending	Plans	Plans	Premium	Contributions
2019	7.00%	5.00%	5.88% (1)	3.50%
2020	7.00%	5.00%	5.00%	3.50%
2021	6.75%	4.90%	5.00%	3.50%
2022	6.50%	4.90%	5.00%	3.50%
2023	6.25%	4.80%	5.00%	3.50%
2024	6.00%	4.80%	5.00%	3.50%
2025	5.75%	4.70%	5.00%	3.50%
2026	5.50%	4.70%	5.00%	3.50%
2027	5.25%	4.60%	5.00%	3.50%
2028	5.00%	4.60%	5.00%	3.50%
2029	4.75%	4.50%	5.00%	3.50%
2030 and Later	4.50%	4.50%	5.00%	3.50%

(1) Medicare Part B Premium reflects actual calendar year premium for the first 6 months of FY20 (July 2019 to December 2019) and 5% trend for the remaining 6 months.

Other Postemployment Benefits (continued)

*Health Care Cost
Trend Rate (HCCTR)*

For 2018 covered medical expenses were assumed to increase by the following percentages. For purposes of measuring entry age calculations, actual historic plan increases are reflected to the extent known.

HCCTR ASSUMPTIONS - 2018				
Fiscal Year Ending	Pre-Medicare Plans	Medicare Plans	Medicare Part B Premium	Welfare Fund Contributions
2018 **	7.61%	2.42%	7.73% (*)	0.0%
2019	7.0%	5.0%	5.0%	3.5%
2020	6.5%	5.0%	5.0%	3.5%
2021	6.0%	5.0%	5.0%	3.5%
2022	5.5%	5.0%	5.0%	3.5%
2023 and later	5.0%	5.0%	5.0%	3.5%

* Medicare Part B premium trend reflects actual calendar year premium for the first 6 months of FY19 (July 2018 to December 2018) and 5.0% trend for the remaining 6 months.

** Actual amounts based on the *2015 Health Care Savings Agreement Initiative Report of Status of Healthcare Savings* dated March 29, 2018. Welfare Fund contribution rates assumed to increase based on current pattern bargaining (additional \$25 for 2018).

Participation Rates

Participation assumptions were updated as part of the Fiscal Year 2017 valuation to reflect recent experience. The Office of the Actuary reviewed recent experience to confirm these assumptions were still reasonable for the Fiscal Year 2019 valuation. Actual elections are used for current retirees. Some current retirees not eligible for Medicare are assumed to change elections upon attaining age 65 based on patterns of elections of Medicare-eligible retirees.

For current retirees who appear to be eligible for health coverage but have not made an election (non-filers), the valuation reflects single GHI/EBCBS coverage and Part B premium benefits only, to approximate the obligation if these individuals were to file for coverage. For future retirees, the portion assumed to file for future benefits, and therefore valued similarly, are as follows:

	2019	2018
NYCERS (NYCHA)	13%	13%
BERS	12%	12%

Other Postemployment Benefits (continued)

Participation Rates

Participants who do not qualify for coverage because they were working less than 20 hours a week at termination are assumed to be reflected in waivers and non-filers.

Detailed assumptions for future Program retirees are presented below:

Plan Participation Assumptions - 2019 and 2018		
Benefits:	NYCERS-NYCHA	BERS
<u>Pre-Medicare</u>		
GHI/EBCBS	65%	70%
HIP HMO	26%	16%
Other HMO	4%	2%
Waiver	5%	12%
<u>Medicare</u>		
GHI	72%	78%
HIP HMO	20%	16%
Other HMO	4%	2%
Waiver	4%	4%
<u>Post-Medicare Migration</u>		
Other HMO to GHI	0%	0%
HIP HMO to GHI	23%	0%
Pre-Med. Waiver		
** to GHI @ 65	10%	67%
** to HIP @ 65	10%	0%

Demographic Assumptions

The actuarial assumptions used in the 2019 and the 2018 OPEB valuations are a combination of those used in the NYCERS pension actuarial valuations and those specific to the OPEB valuations.

Cadillac Tax

The high cost plan excise tax (“Cadillac Tax”) was repealed effective December 20th, 2019. This repeal has been reflected in the December 31, 2019 liabilities.

AOP (Actives Off Payroll) Liabilities

The actuarial assumptions used in the FY 2019 and the FY 2018 OPEB valuations assumed 40% of the measured liability of the AOP population, which is roughly equivalent to assuming 60% of the AOP members will terminate membership prior to vesting and not receive OPEB.

18. OPERATING REVENUES

Operating revenues include tenant revenue, net and other income and are comprised of the following for the years ended December 31, 2019 and 2018 are (\$ in thousands):

DESCRIPTION	2019	2018
Tenant revenue, net:		
Rental revenue, net	\$ 1,033,084	\$ 1,046,734
Other	<u>25,404</u>	<u>23,288</u>
Total tenant revenue, net	<u>1,058,488</u>	<u>1,070,022</u>
Other income:		
Developer fees	35,121	4,434
Insurance and benefits reimbursements	15,385	6,714
Commercial and community center revenue	13,266	13,925
Sub-let income	3,737	3,335
Energy rebates	2,214	2,580
Section 8 income	948	720
Other	<u>5,091</u>	<u>5,043</u>
Total other income	<u>75,762</u>	<u>36,751</u>
Total operating revenues	<u>\$ 1,134,250</u>	<u>\$ 1,106,773</u>

19. SUBSIDIES AND GRANTS

Subsidies include operating subsidies to fund all the Authority's programs, as well as to fund interest on outstanding debt. Subsidies to fund operations are received periodically and recorded when due. Grants are awarded by the federal, state or city governments to provide funding for administration and program operations. Subsidies and grants for the years ended December 31, 2019 and 2018 are as follows (\$ in thousands):

DESCRIPTION	2019	2018
Section 8 Housing Assistance Programs	\$ 1,185,074	\$ 1,140,715
Federal Operating Subsidy	1,001,065	936,583
City of New York Subsidies	187,925	165,912
Federal Capital Funds used for operating purposes	126,669	120,513
FEMA	15,898	22,463
Other	<u>1,263</u>	<u>1,019</u>
Total subsidies and grants	<u>\$ 2,517,894</u>	<u>\$ 2,387,205</u>

The Authority participates in a number of programs, funding for which is provided by Federal, State and City agencies. These grant programs are subject to financial and compliance audits by the grantors or their representatives.

20. OPERATING EXPENSES

Operating expenses for the years ended December 31, 2019 and 2018 are as follows (\$ in thousands):

Description	2019	2018
Personnel services	\$ 1,277,973	\$ 1,248,207
Program costs	2,322,080	2,283,631
Depreciation	<u>371,713</u>	<u>366,632</u>
Total operating expenses	<u>\$ 3,971,766</u>	<u>\$ 3,898,470</u>

Operating expenses include general and administrative, utilities, and maintenance and operations in the following amounts for the years ended December 31, 2019 and 2018 (\$ in thousands):

DESCRIPTION	2019	2018
General and administrative:		
Salaries	\$ 231,302	\$ 226,298
Employee benefits	385,621	383,106
Claims and insurance expense	163,683	138,678
Contracts	61,059	41,782
Professional services	47,039	37,216
Rental and lease expense	42,958	40,628
Other	<u>18,106</u>	<u>22,971</u>
	<u>\$ 949,768</u>	<u>\$ 890,679</u>
Maintenance and operations:		
Labor	\$ 493,594	\$ 473,213
Contract costs	297,028	321,060
Materials	<u>84,888</u>	<u>81,158</u>
	<u>\$ 875,510</u>	<u>\$ 875,431</u>
Utilities:		
Water	\$ 181,130	\$ 182,969
Electricity	159,363	169,610
Heating gas	154,544	180,171
Fuel oil	12,308	14,243
Steam	7,557	7,945
Cooking gas	6,406	8,251
Labor	<u>20,439</u>	<u>19,216</u>
	<u>\$ 541,747</u>	<u>\$ 582,405</u>

21. REAL ESTATE TRANSACTIONS

Section 8 Transaction

On December 23, 2014, the Authority completed a transaction, referred to as “Section 8 Recap”, in which six project-based Section 8 developments, comprising 875 housing units, were sold to a newly formed limited liability company, Triborough Preservation LLC (“Triborough”), in which NYCHA retains a 0.005% membership interest. This Section 8 Recap transaction is intended to result in the rehabilitation of these developments by the new owner.

The total amount of the transaction was \$300 million of which Triborough has paid \$254 million to date. The remaining portion of \$46 million is secured by a Purchase Money Note (the “Note”) bearing simple interest at 6% per annum. There is no required annual payment of principal and interest, except to the extent of cash flow, however, the entire principal plus unpaid interest is immediately due and payable on the maturity date of December 2044.

The transaction agreements contain put options that can require the Authority to repurchase the property after the expiration of the fifteen-year low income tax credit compliance period. Due to this continuing involvement, the Authority will recognize the cash received as revenue over the fifteen-year compliance period, in accordance with GASB Statement No. 62. During both 2019 and 2018 the Authority recognized \$16,946,000 as revenue from this transaction. The resulting unearned revenue is as follows (\$ in thousands):

Description of Liability	2019	2018
Current portion	\$ 16,946	\$ 16,946
Long-term portion	152,144	169,090
Unearned revenue from Section 8 Recap	<u>\$ 169,090</u>	<u>\$ 186,036</u>

The following amounts were received relating to this transaction (\$ in thousands):

Description	2014	2017	2020	Total
Note Interest	\$ -	\$ 12,701	\$ 2,157	\$ 14,858
Fees and related	-	1,135	4,863	5,998
Subtotal - recognized as income (a)	-	13,836	7,020	20,856
Note Principal (b)	158,882	95,311		254,193
Total Cash Received	\$ 158,882	\$ 109,147	\$ 7,020	\$ 275,049

(a) \$13,836 was accrued for and fully recognized as revenue in 2016. \$7,020 was accrued for and fully recognized as revenue in 2019.

(b) Note principal received will be recognized as a gain on sale over the fifteen year tax credit compliance period beginning 2014

Remaining principal balance on Triborough note as of 12/31/19 is \$45,807 and accrued interest is \$13,684

In accordance with GASB Codification Section 2250.110, the Note Principal, Interest as well as various fees (including Developer Fees) were not previously recognized since these items were contingent on events that may not have materialized. However, these estimates were adjusted when cash was received. The Seller Note Principal payments will be recognized as gain on sale over the fifteen-year tax credit compliance period beginning December 23, 2014. NYCHA has been granted a Right of First Refusal which states that at the end of the fifteen-year Compliance Period and for the twelve months thereafter, Triborough will not sell or otherwise dispose of the property without first offering it to NYCHA for a period of thirty days.

21. REAL ESTATE TRANSACTIONS (continued)

Ocean Bay – Bayside Transaction

On December 29, 2016, the Authority completed a transaction in which Ocean Bay – Bayside, comprising 1,395 units and a community center (Parcel A) was leased to a newly formed limited liability company, Ocean Bay RAD, LLC, in which NYCHA retains a 0.005% membership interest. Concurrently, in a related transaction, the Authority entered into a lease agreement with a newly formed corporation, Bayside Land Lease Corporation, in which NYCHA retains a 50% ownership interest for the purpose of making improvements to the land (Parcel B) funded by FEMA proceeds.

The purchase price for Parcel A's leasehold interest was \$109 million. The Authority received an upfront payment of \$43 million at the closing and the remaining \$66 million was financed through a Seller Note ("Note") which has an interest rate of 7.50%. The Seller's note is secured by a Purchase Money Mortgage, for the land, buildings and improvements, as defined by the transaction agreements and is payable from cash flow as defined. Through December 31, 2018, the remaining note balance of \$66 million, in addition to accrued interest of \$17 million, was fully reserved against.

The Authority also holds certain rights to repurchase the leasehold interest held by the owner as set forth in the Right of First Refusal and Purchase Option Agreement. Under the Authority's right of first refusal, the owner cannot sell or transfer Parcel A to a third-party without first offering it to the Authority for one hundred twenty days at a price equal to the outstanding debt plus taxes attributable to the sale. If the Authority notifies the owner that it is exercising its right of first refusal, the sale must take place within one hundred twenty days after the Authority provides notice. The Authority's right of first refusal terminates five years following the close of the tax credit compliance period. In accordance with the Parcel B lease, the Parcel B lease will terminate upon the Authority's exercise of its Right of First Refusal and Purchase Option Agreement. The transaction agreements contain put options that can require the Authority to repurchase the property after the expiration of the fifteen-year low income tax credit compliance period. Due to this continuing involvement, the Authority will recognize the cash received on the Seller Note as revenue over the fifteen-year compliance period, in accordance with GASB Statement No. 62. Cash received for developer fees will be accrued and recognized as revenue when collection is probable.

NYCHA has also expended capital improvements for Parcels A and B, largely in prior years, from funds received from FEMA. The expenditures related to Parcel A of \$104 million were recorded as a Note Receivable and the expenditures related to Parcel B of \$89 million were considered a capital contribution and recorded as construction in progress at December 31, 2018. The FEMA related Notes Receivables has an interest rate of 7.50% and accrued interest was fully reserved for in prior years. The principal value of the Notes Receivable and the construction in progress were recorded at full face value in prior years.

As part of its 2019 financial statement review, NYCHA engaged a third-party appraisal firm to support a valuation of its Notes Receivable. Based upon the appraisal, NYCHA adjusted its net book value of the Notes, as of December 31, 2019, consistent with the appraised values as reflected below (\$ in thousands). The resulting adjustments were treated as changes in estimates and were given effect in 2019.

Seller Note	\$ 16,189
FEMA related note	\$ 23,523

21. REAL ESTATE TRANSACTIONS

Ocean Bay – Bayside Transaction (continued)

As a result of these estimate adjustments, the FEMA related note net value was reduced by \$80 million with an offsetting expense recorded within (Loss) Gain on Real Estate transactions. The Sellers Note net value was increased by \$16 million with a corresponding increase to unearned revenue to be recognized over the 15-year tax compliance period beginning December 29, 2016.

NYCHA determined that the \$89 million construction in progress relating to Parcel B did not increase the underlying land value. Accordingly, this asset was fully impaired in 2019 with an offsetting expense recorded within (Loss) Gain on Real Estate transactions.

In addition, during 2020, \$25 million of developer fees were received, which was recognized as revenue in 2019 based on underlying accounting policy.

The resulting unearned revenue as of December 31, 2019 and 2018 is as follows (\$ in thousands):

Description of Liability	2019	2018
Current portion	\$ 3,915	\$ 2,836
Long-term portion	<u>43,052</u>	<u>34,017</u>
Unearned Revenue from RAD	<u>\$ 46,967</u>	<u>\$ 36,853</u>

2018 and 2019 PACT Transactions

The Authority entered into real estate transactions under the PACT (“Permanent Affordability Commitment Together”) program including the following:

2018 Transaction

Twin Parks West
Betances
Highbridge/Franklin
Baychester/Murphy

2019 Transaction

Hope Gardens/Bushwick
Betances 5
Bryant Avenue

PACT is the Authority’s preservation initiative, which centers on the conversion of public housing funding to Section 8 project-based vouchers and the creation of public-private partnerships to address the needs of NYCHA’s developments. Under PACT, the Authority seeks to identify resources and opportunities to make major physical and operational improvements while preserving long term affordability, maintaining strong resident rights, and stabilizing developments by placing them on a more solid financial footing.

21. REAL ESTATE TRANSACTIONS

2018 and 2019 PACT Transactions (continued)

Under the 2018 and 2019 PACT transactions, the Authority leased the properties to newly formed developer entities with NYCHA retaining a minority interest in these entities. The total amount of the transactions was \$180 million in 2018 and \$73 million in 2019. In 2018, the Authority was paid \$20 million in cash at closing and issued Purchase Money Notes for the remaining portion of \$160 million. In 2019, the Authority issued Purchase Money/Promissory Notes for \$71 million and received \$2 million in cash. The Notes bear interest ranging from 1% to 5.54% per annum. There is no required annual payment of principal and interest except to the extent of cash flow. The leases include a Purchase Option and Right of First Refusal which permits the Authority to acquire the leasehold interest from the other member after a specified period of time, with the exception of the Baychester/Murphy transaction. The Authority will recognize the cash received under this transaction as revenue under the operating lease method over the shorter of the lease term, when the Purchase Option or Right of First Refusal can be exercised or the tax compliance period. Any developer fees will be recorded when earned, if collected or if collection is reasonably probable.

The resulting unearned revenue as of December 31, 2019 and 2018 is as follows (\$ in thousands):

Description of Liability	2019	2018
Current portion	\$ 528	\$ 376
Long-term portion	<u>21,741</u>	<u>19,252</u>
Unearned Revenue from PACT	<u>\$ 22,269</u>	<u>\$ 19,628</u>

22. SUPERSTORM SANDY

On October 29, 2012, Sandy made landfall, causing significant damage in New York City as well as other states and cities along the U.S. eastern seaboard. Certain Authority developments sustained substantial damage to buildings and equipment, including their infrastructure and mechanical and electrical systems. Through December 2019, NYCHA has been awarded approximately \$3,225,000,000 in disaster recovery grants from FEMA. Approximately \$2,957,000,000 of the FEMA award is for permanent repairs and mitigation at various developments with the remaining \$268,000,000 for emergency protective measures, debris removal, and temporary boilers. An additional \$30,000,000 award for temporary boilers is expected to be approved by FEMA in 2020.

The permanent repairs and mitigation include long-term repairs or new construction required to bring the facilities back to their pre-disaster condition as well as permanently installed equipment and new buildings to protect existing structures and critical services (e.g., heat, electrical, etc.) from future storm events.

Through December 2019, approximately \$1,356,000,000 has been expended for the permanent repairs and mitigation with \$265,000,000 for emergency protective measures, debris removal, and temporary boilers. Expenditures for temporary boilers will continue beyond December 2019 until permanent new boiler installations are completed at the developments where the temporary boilers are in use. The FEMA funding for the temporary boilers is currently expected to be available through the duration of the temporary boiler use.

22. SUPERSTORM SANDY (continued)

NYCHA has recovered approximately \$458,475,000 from its insurance carriers for Sandy related damages with no further recovery expected. It is expected that approximately \$427,500,000 of the insurance will be duplicative of the FEMA award and will be applied to reduce the FEMA award as required by regulation with the balance to be applied against Sandy expenses not otherwise paid for by FEMA. Insurance recoveries are reported as non-operating revenue.

23. RELATED PARTY TRANSACTIONS

Mixed-Finance Transactions

On March 16, 2010, the Authority closed two mixed-finance transactions in which 21 NYCHA developments, comprising 20,139 housing units, were sold to two newly-created, limited liability companies. Thirteen developments, containing 14,465 dwelling units, were sold to NYCHA Public Housing Preservation I, LLC, in which NYCHA I Housing Development Fund Corporation, a component unit of NYCHA, is the sole managing member and has a 0.01% membership interest in LLC I. LLC I is a Low Income Housing Tax Credit LLC. Eight developments, containing 5,674 dwelling units, were sold to NYCHA Public Housing Preservation II, in which NYCHA II Housing Development Fund Corporation, a component unit of NYCHA, is the sole managing member and has a 49.9% membership interest in LLC II.

The LLCs were created in connection with the mixed-finance transactions and are considered blended component units for financial reporting purposes. The Authority served as developer and continues to be the property manager for both LLCs.

The total acquisition price for the developments sold to LLC I was \$590,250,000. At closing, LLC I paid \$53,733,000 in cash using a combination of mortgage proceeds of \$32,809,000 and equity contributions of \$20,924,000 from the equity investor limited partner. NYCHA issued a Seller Note to LLC I for the remaining portion of \$536,517,000, with interest on the Note accruing at 2.69%. As of December 31, 2019, there is an outstanding balance of \$59,001,000, including interest of \$34,755,000 on the Seller Note, which has been reported as a Note receivable in the Condensed Combining Information (see Note 26).

The total acquisition price for the developments sold to LLC II was \$3,000,000, which was paid entirely at the closing using the proceeds from a \$3,000,000 mortgage.

The two mixed-finance transactions were structured and closed in a manner which allowed the Authority to utilize financing opportunities available under the provisions of the American Recovery and Reinvestment Act of 2009 (“ARRA”) in order to qualify for certain federal funding. At the time of the closing, NYCHA qualified to receive an annual allocation of HUD federal operating and capital funding for a portion of the dwelling units. Additional HUD federal operating subsidies for 2019 and 2018 were \$71,091,000 and \$67,022,000, respectively.

Financing Summary - As a result of the transactions, the LLCs have received more than \$400 million in permanent public and private funding from ARRA funds (the “ARRA loans”), State of New York modernization funds, and the sale of long-term bonds and tax credits. The majority of this funding has been invested in capital improvements at the 21 developments and for funding operating reserves.

23. RELATED PARTY TRANSACTIONS

Mixed-Finance Transactions (continued)

The LLC I transaction also included approximately \$360 million of short-term bridge financing to fund the acquisition price and rehabilitation costs, all of which was prepaid in July 2013.

LLC I was structured to provide its 99.99% investor member the benefit of the low-income housing tax credits. The investor members provided \$228 million in equity payments through December 31, 2019, in return for tax credit benefits.

NYCHA holds a substantial amount of indebtedness from the LLCs upon completion of the rehabilitation of the developments. Funds received from the ARRA loans were provided to the LLCs as permanent loans from NYCHA. At December 31, 2019, outstanding ARRA loans payable to NYCHA from LLC I and LLC II, respectively, are \$75,780,000 and \$27,384,000. The outstanding ARRA loan payable for LLC II was reduced by \$4,693,000 as a result of the Baychester/Murphy PACT transaction during 2018 (See Note 21).

In addition to the ARRA loans, the Authority provided additional loans (“Loan A”) and (“Loan C”) to the LLC’s, to enable them to carry out rehabilitation work at the developments and to provide a source of funding to redeem the Bridge Bonds at maturity. As of December 31, 2019, outstanding Loan A payable to NYCHA from LLC I was \$476,956,000 and from LLC II was \$2,376,000. Loan A interest from LLC I, charged at a rate of 2.69% per annum, was \$99,768,000. Outstanding Loan C payable to NYCHA as of December 31, 2019 was \$42,000,000. The outstanding Loan A payable for LLC II was reduced by \$305,000 as a result of the Baychester/Murphy PACT transaction during 2018 (see Note 21).

In September 2013, NYCHA converted the remaining construction-period financing for both LLC I and LLC II from construction loans to permanent loans due to HDC. The permanent loans for LLC I and LLC II are \$21,559,000 and \$21,914,000, respectively, as of December 31, 2019 (see Note 15).

Responsibilities and Obligations – NYCHA has certain responsibilities and obligations under separate agreements with the LLCs including (i) continuing to manage the operations of the developments; (ii) served as developer for the rehabilitation work at the developments; (iii) providing operating and capital subsidies to the LLCs; and (iv) providing operating deficit and completion guarantees. The operating deficit guarantee will terminate if specified operating income conditions are met.

As of December 31, 2019, in connection with the management of the developments by NYCHA, the balance due to NYCHA from LLC I and LLC 2 was \$2,216,000 and \$6,174,000, respectively. In 2019, NYCHA provided operating subsidies and capital contributions of \$24,018,000 to LLC I and \$21,192,000 to LLC II under the mixed -finance transaction agreements.

NYCHA has retained the right to reacquire the developments of LLC I in the future. The right of first refusal terminates fifteen (15) years after the first day following the expiration of the final year of the tax credit period with respect to each development.

23. RELATED PARTY TRANSACTIONS

Mixed-Finance Transactions (continued)

For LLC II, NYCHA was granted a call option (the “Call Option”) with respect to the membership interest of the other participating member on the following terms: (i) the Call Option is exercisable by notice from the managing member to the other participating member; (ii) the closing date shall be the date selected by the managing member, provided that such date must be on or after the date which is the five (5) year anniversary of the admission of the other participating member to the Company; (iii) the purchase price under the Call Option shall equal fifty percent (50%) of the distributions made to the other participating member during the calendar year preceding the closing under the Call Option; and (iv) such purchase price shall be paid in immediately available funds.

The Authority exercised the Call Option on December 28, 2018. On December 28, 2018, the Ground Lease between the Authority and LLC II relating to the Baychester and Murphy developments was terminated, thereby causing ownership of the properties to revert to the Authority. As a result, the capital assets and HDC loans were transferred to NYCHA and the outstanding NYCHA financing (ARRA Loan and NYCHA Loan A) for these developments was cancelled. These transfers and the cancellation of the financing is considered a special item by LLC II.

The City of New York

As described in Note 1A, the Authority is a component unit of The City of New York. As of December 31, 2019, and 2018, the Authority had receivables due from The City in the amount of \$178,918,000 and \$154,255,000, respectively. The 2019 amount includes \$42,000,000 included in subsidies receivable (see Note 4). During 2019 and 2018, The City provided operating subsidies and grants to the Authority of \$187,925,000 and \$165,912,000, respectively. In addition, during 2019 and 2018, The City provided \$156,851,000 and \$92,003,000, respectively, in capital contributions to NYCHA to fund modernization costs.

The City also provides certain services to the Authority. The total cost for these services, most of which is for the cost of water, was \$183,234,000 and \$184,274,000, respectively, for 2019 and 2018. At December 31, 2019 and 2018, the Authority had amounts due to The City for services of \$2,060,000 and \$1,071,000, respectively. Pursuant to a Cooperation Agreement dated July 1, 2015, The City has waived acceptance of payments in lieu of taxes from the Authority beginning January 1, 2015 through June 30, 2025.

24. NET POSITION

The Authority's Net Position represents the excess of assets over liabilities and consists of the following:

- a. *Net investment in capital assets*: net capital assets less the outstanding bonds payable used to finance these assets
- b. *Unrestricted Deficit*: net position with no statutory restrictions

Below is net position by type as of December 31, 2019 and 2018 (\$ in thousands):

<u>DESCRIPTION</u>	<u>2019</u>	<u>2018</u>
Net investment in capital assets	\$ 6,897,324	\$ 6,450,404
Unrestricted Deficit	<u>(5,790,331)</u>	<u>(3,019,622)</u>
Net position	<u>\$ 1,106,993</u>	<u>\$ 3,430,782</u>

25. COMMITMENTS AND CONTINGENCIES

Lease Commitments - The Authority rents office space under operating leases, which expire at various dates. Future minimum lease commitments under these leases as of December 31, 2019 are (\$ in thousands):

	<u>Year</u>	<u>Amount</u>
	2020	\$ 40,944
	2021	42,533
	2022	42,992
	2023	43,463
	2024	44,529
	2025-2029	233,488
	2030-2034	229,059
	2035-2039	255,226
	2040-2044	242,995
	2045-2049	168,803
	2050	<u>24,176</u>
Total lease commitments		<u>\$ 1,368,208</u>

Rental expense, which includes certain related operating costs, was \$42,958,000 and \$40,628,000 for the years ended December 31, 2019 and 2018, respectively.

Pending Litigation - The Authority is a defendant in a number of lawsuits arising from claims for personal injury, property damage, breach of contract, civil rights and personnel matters. Management believes that the ultimate resolution of these matters will not have a material adverse impact on the financial position of the Authority.

Obligations under Purchase Commitments – The Authority is involved in modernization and other contracted programs. At December 31, 2019, outstanding obligations under purchase commitments were approximately \$2,447,533,000 compared to \$1,852,881,000 at December 31, 2018.

26. CONDENSED COMBINING INFORMATION

The following are Condensed Combining Statements of Net Position as of December 31, 2019 and 2018, Condensed Combining Statements of Revenues, Expenses and Changes in Net Position for the Years Ended December 31, 2019 and 2018, and Condensed Combining Statements of Cash Flows for the Years Ended December 31, 2019 and 2018, for the Authority and its component units, the LLCs.

New York City Housing Authority
Condensed Combining Statement of Net Position
December 31, 2019
(\$ in Thousands)

	NYCHA	LLC I	LLC II	Eliminations	Total
<u>ASSETS</u>					
Current assets	\$ 1,513,917	\$ 92,054	\$ 19,362	\$ (8,390)	\$ 1,616,943
Capital assets, net	7,069,353	383,933	103,707	(36,309)	7,520,684
Restricted assets	663,924	724	870	-	665,518
Notes receivable	894,929	-	-	(783,265)	111,664
Other assets	523,924	-	-	-	523,924
TOTAL ASSETS	<u>10,666,047</u>	<u>476,711</u>	<u>123,939</u>	<u>(827,964)</u>	<u>10,438,733</u>
DEFERRED OUTFLOWS OF RESOURCES	<u>560,184</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>560,184</u>
<u>LIABILITIES</u>					
Current liabilities	1,356,112	29,160	16,098	(8,390)	1,392,980
Long-term debt	717,125	21,154	21,349	-	759,628
Notes payable	-	753,505	29,760	(783,265)	-
Pension liability	822,109	-	-	-	822,109
OPEB liability	2,816,376	-	-	-	2,816,376
Pollution remediation obligations - LT	2,310,779	223,677	87,957	-	2,622,413
Other liabilities	857,132	-	-	-	857,132
TOTAL LIABILITIES	<u>8,879,633</u>	<u>1,027,496</u>	<u>155,164</u>	<u>(791,655)</u>	<u>9,270,638</u>
DEFERRED INFLOWS OF RESOURCES	<u>621,286</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>621,286</u>
Net investment in capital assets	6,677,686	(201,464)	58,119	362,983	6,897,324
Unrestricted deficit	(4,952,374)	(349,321)	(89,344)	(399,292)	(5,790,331)
TOTAL NET POSITION	<u>\$ 1,725,312</u>	<u>\$ (550,785)</u>	<u>\$ (31,225)</u>	<u>\$ (36,309)</u>	<u>\$ 1,106,993</u>

26. CONDENSED COMBINING INFORMATION (continued)

New York City Housing Authority
Condensed Combining Statement of Revenues, Expenses, and Changes in Net Position
For the Year Ended December 31, 2019
(\$ in Thousands)

	NYCHA	LLC I	LLC II	Eliminations	Total
Operating Revenues	\$ 1,017,130	\$ 87,602	\$ 29,518	\$ -	\$ 1,134,250
Operating Expenses	3,804,882	203,663	66,810	(103,589)	3,971,766
Operating Loss	(2,787,752)	(116,061)	(37,292)	103,589	(2,837,516)
Non-Operating Revenues, net	2,351,344	95,532	35,988	(96,747)	2,386,117
Loss Before Special Item and					
Capital Contributions	(436,408)	(20,529)	(1,304)	6,842	(451,399)
Special Item (a)	2,413,608	242,374	95,309	-	2,751,291
Loss Before Capital Contributions	(2,850,016)	(262,903)	(96,613)	6,842	(3,202,690)
Capital Contributions	864,063	18,445	1,109	(4,716)	878,901
Change in Net Position	(1,985,953)	(244,458)	(95,504)	2,126	(2,323,789)
Net Position - Beginning	3,711,265	(306,327)	64,279	(38,435)	3,430,782
Net Position - Ending	\$ 1,725,312	\$ (550,785)	\$ (31,225)	\$ (36,309)	\$ 1,106,993

(a) Pollution remediation costs - lead based paint

New York City Housing Authority
Condensed Combining Statement of Cash Flows
For the Year Ended December 31, 2019
(\$ in Thousands)

	NYCHA	LLC I	LLC II	Eliminations	Total
Net cash provided (used) by					
Operating activities	\$ (2,365,818)	\$ (101,329)	\$ (27,928)	\$ 103,589	\$ (2,391,486)
Non-capital financing activities	2,568,709	108,839	36,878	(96,747)	2,617,679
Capital and related financing activities	(310,293)	(17,361)	(3,535)	(6,842)	(338,031)
Investing activities	55,809	1,524	234	-	57,567
Net increase (decrease)	(51,593)	(8,327)	5,649	-	(54,271)
Beginning cash and cash equivalents	1,137,377	90,638	9,975	-	1,237,990
Ending cash and cash equivalents	\$ 1,085,784	\$ 82,311	\$ 15,624	\$ -	\$ 1,183,719

26. CONDENSED COMBINING INFORMATION (continued)

New York City Housing Authority
Condensed Combining Statement of Net Position
December 31, 2018
(\$ in Thousands)

	NYCHA	LLC I	LLC II	Eliminations	Total
<u>ASSETS</u>					
Current assets	\$ 1,657,192	\$ 100,759	\$ 13,326	\$ (7,953)	\$ 1,763,324
Capital assets, net	6,599,863	372,987	106,367	(38,435)	7,040,782
Restricted assets	737,612	688	826	-	739,126
Notes receivable	769,783	-	-	(769,783)	-
Other assets	399,572	-	-	-	399,572
TOTAL ASSETS	<u>10,164,022</u>	<u>474,434</u>	<u>120,519</u>	<u>(816,171)</u>	<u>9,942,804</u>
DEFERRED OUTFLOWS OF RESOURCES	<u>176,125</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>176,125</u>
<u>LIABILITIES</u>					
Current liabilities	1,172,184	19,179	4,566	(7,953)	1,187,976
Long-term debt	757,826	21,559	21,914	-	801,299
Notes payable	-	740,023	29,760	(769,783)	-
Pension liability	894,818	-	-	-	894,818
OPEB liability	2,562,230	-	-	-	2,562,230
Other liabilities	810,716	-	-	-	810,716
TOTAL LIABILITIES	<u>6,197,774</u>	<u>780,761</u>	<u>56,240</u>	<u>(777,736)</u>	<u>6,257,039</u>
DEFERRED INFLOWS OF RESOURCES	<u>431,108</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>431,108</u>
<u>NET POSITION</u>					
Net investment in capital assets	6,239,490	(212,791)	60,722	362,983	6,450,404
Unrestricted deficit	(2,528,225)	(93,536)	3,557	(401,418)	(3,019,622)
TOTAL NET POSITION	<u>\$ 3,711,265</u>	<u>\$ (306,327)</u>	<u>\$ 64,279</u>	<u>\$ (38,435)</u>	<u>\$ 3,430,782</u>

26. CONDENSED COMBINING INFORMATION (continued)

New York City Housing Authority
Condensed Combining Statement of Revenues, Expenses, and Changes in Net Position
For the Year Ended December 31, 2018
(\$ in Thousands)

	NYCHA	LLC I	LLC II	Eliminations	Total
Operating Revenues	\$ 986,238	\$ 87,114	\$ 33,421	\$ -	\$ 1,106,773
Operating Expenses	<u>3,722,005</u>	<u>204,298</u>	<u>78,830</u>	<u>(106,663)</u>	<u>3,898,470</u>
Operating Loss	(2,735,767)	(117,184)	(45,409)	106,663	(2,791,697)
Non-Operating Revenues, net	<u>2,478,641</u>	<u>89,167</u>	<u>42,766</u>	<u>(86,786)</u>	<u>2,523,788</u>
Gain (Loss) Before Capital Contributions	(257,126)	(28,017)	(2,643)	19,877	(267,909)
Capital Contributions	809,974	6,934	21,211	(17,751)	820,368
Transfers	<u>2,909</u>	<u>-</u>	<u>(2,909)</u>	<u>-</u>	<u>-</u>
Change in Net Position	555,757	(21,083)	15,659	2,126	552,459
Net Position - Beginning	<u>3,155,508</u>	<u>(285,244)</u>	<u>48,620</u>	<u>(40,561)</u>	<u>2,878,323</u>
Net Position - Ending	<u>\$ 3,711,265</u>	<u>\$ (306,327)</u>	<u>\$ 64,279</u>	<u>\$ (38,435)</u>	<u>\$ 3,430,782</u>

New York City Housing Authority
Condensed Combining Statement of Cash Flows
For the Year Ended December 31, 2018
(\$ in Thousands)

	NYCHA	LLC I	LLC II	Eliminations	Total
Net cash provided (used) by					
Operating activities	\$ (2,189,373)	\$ (90,300)	\$ (50,205)	\$ 106,663	\$ (2,223,215)
Non-capital financing activities	2,336,921	102,610	43,968	(86,786)	2,396,713
Capital and related financing activities	(73,094)	(25,100)	5,137	(19,877)	(112,934)
Investing activities	<u>80,161</u>	<u>1,441</u>	<u>127</u>	<u>-</u>	<u>81,729</u>
Net increase (decrease)	154,615	(11,349)	(973)	-	142,293
Beginning cash and cash equivalents	<u>982,762</u>	<u>101,987</u>	<u>10,948</u>	<u>-</u>	<u>1,095,697</u>
Ending cash and cash equivalents	<u>\$ 1,137,377</u>	<u>\$ 90,638</u>	<u>\$ 9,975</u>	<u>\$ -</u>	<u>\$ 1,237,990</u>

27. HUD AGREEMENT

The Secretary of the U.S. Department of Housing and Urban Development (“HUD”) found NYCHA in “substantial default” of the U.S. Housing Act on January 31, 2019 following a federal lawsuit. HUD found that NYCHA failed to follow laws and regulations concerning lead paint; failed to provide decent, safe and sanitary conditions; and engaged in deceptive practices to hide the condition of NYCHA properties.

NYCHA signed an agreement with HUD, the United States Attorney’s Office for the Southern District of New York (“SDNY”), and the City of New York effective January 31, 2019 (the “Agreement”) to remedy the physical deficiencies at NYCHA properties, ensure the Authority’s compliance with federal law, and reform NYCHA’s management structure. The obligations of this agreement apply to apartment units, common areas, residential buildings, and building sites consisting of public housing owned or operated by NYCHA and receiving funding through Section 9 of the Housing Act. The Agreement appointed a federal Monitor to oversee the Authority’s compliance. The Agreement also requires NYCHA to prepare Action Plans, to be approved by the Monitor, setting forth policies and practices to be adopted and specific actions to be taken by NYCHA to achieve all the requirements of the Agreement for the six pillar areas: lead, mold, heat, elevators, PHAS inspections, and pests. No federal fines were assessed on NYCHA as it relates to this agreement. As part of the agreement, the City of New York committed to provide \$2.2 billion in capital funds over ten years to assist NYCHA in meeting the obligations in the Agreement. NYCHA is not yet in full compliance with the requirements of the Agreement and lead-based paint regulations, but continues to work with the Monitor to improve its compliance.

28. SUBSEQUENT EVENTS

COVID-19 impact and related funding

The outbreak of a strain of the novel coronavirus (“COVID-19”), a respiratory disease caused by a new strain of coronavirus was first detected in China and has since spread globally including to the United States. The World Health Organization designated the COVID-19 outbreak as a public health emergency on January 30, 2020, and as a pandemic on March 11, 2020. On March 7, 2020, Governor Andrew M. Cuomo declared a state of emergency in New York State to assist local governments and individuals in coping with the virus through Executive Order No. 202. On March 20, 2020, President Donald Trump declared that a major disaster existed in New York State and ordered Federal assistance to supplement State, tribal, and local recovery efforts for COVID-19. In addition, by order of Governor Cuomo (“New York State on PAUSE”), as of Sunday, March 22nd, all non-essential businesses statewide were required to be closed, among other restrictive social distancing and related measures. Many, but not all, of such restrictions have been gradually lifted since as the State and the City of New have entered Phase 4 in a managed reopening process, The COVID 19 pandemic has had substantial impact on the US and local economy, causing significant volatility in capital markets, closures and/or slowdown of business activities and dramatic increases in unemployment.

28. SUBSEQUENT EVENTS

COVID-19 impact and related funding (continued)

NYCHA has committed to taking emergency protective measures to sanitize facilities and provide safety to its residents and employees during these challenging times. Estimated costs of these coronavirus response activities, within the Public Housing program, are \$101 million. COVID 19 related costs in the Section 8 Housing Choice Voucher Program cannot currently be estimated, but are expected to be less than the available \$37 million Section 8 supplemental funding from HUD addressed in below paragraph. In addition, NYCHA expects the high unemployment and reduction in wages effecting our tenants to negatively impact rent collection by \$64 million. Due to the uncertainty of the severity and timing of the pandemic, these estimates are subject to significant variability.

The Authority has access to supplemental federal funding from the Federal Emergency Management Agency (“FEMA”) and through the Coronavirus Aid, Relief and Economic Security Act (“CARES Act”). In general FEMA provides public assistance to cover the costs of emergency protective measures undertaken in response to declared disasters. FEMA provides reimbursement for 75% of eligible costs and the Authority will be required to provide a 25% cost share. Projects have been submitted to FEMA for review and funding approval; initial estimates of FEMA reimbursement are \$18 million. The FEMA reimbursement may increase based on changes in facts and circumstances. The CARES Act (Public Law 116-36) provides critical supplemental resources and waiver flexibilities for Public Housing Authorities to prevent, prepare for, and respond to COVID 19, including maintenance of normal operations. In May 2020, the Authority received access to \$150 million of Public Housing operating funds from the U.S. Department of Housing and Urban Development (HUD) and under current guidance such funds must be used by December 31,2020 or returned to HUD. In May 2020 and August 2020, the Authority received a total of \$37 million of Section 8 administrative fee supplemental funding from HUD to be spent by June 30, 2021 on eligible programmatic needs and COVID 19 response activities. The Authority intends to expend all CARES Act funds by the required deadlines.

Due to the shutdown and gradual reopening of the local economy, capital improvements have been delayed. In addition, there has been significant negative financial impact on the City of New York. In response to these financial strains, the Mayor’s Office of Management and Budget (“OMB”) has implemented a six-month moratorium on the City’s funding of capital projects. As a result, the Authority reviewed \$1.4 billion of projects expected to be funded by the City, decided which of these projects would continue despite the moratorium and reallocated \$86 million of federal funds to such projects. Further review of critical projects will continue, and additional reallocation of funds may occur for high priority capital projects, although the high majority of City funded projects are on hold as a result of the moratorium.

Due to the continuing changes resulting from the COVID 19 pandemic, and the uncertainty relating to duration and severity, no assurances can be provided relating to the full financial impact on the Authority.

28. SUBSEQUENT EVENTS (continued)

Real Estate transactions closed in 2020

On February 12, 2020, the Authority closed on a real estate transaction under the Permanent Affordability Commitment Together (PACT) for a cluster of Developments in the Borough of Brooklyn (Brooklyn Bundle II). The transaction included nine (9) developments with a total of 2,625 units. The properties were leased to a developer under a 99-year lease agreement where NYCHA maintains a minority interest. As part of the deal, extensive rehabilitation work will be performed at the developments with cost to be incurred by the developer.

At closing, the authority received \$49 million for initial rent and land lease payments which will be amortized over the shorter of the lease period or the tax compliance period. In addition, \$20 million of Developer fees were received which are expected to be recognized as revenue in 2020 and other ancillary amounts were received and will be recognized to reimburse NYCHA for costs in 2020. In addition, the Authority received \$11.6 million of cash at closing to repay existing NYCHA debt as well as \$ 3.6 million which was paid directly to HDC to pay off existing debt.

Per the lease agreement, starting May 2021 and continuing through the 99-year lease term, the Authority will receive an annual Capitalized Rent Payment. The Capitalized Rent Payment will be paid from available Net Cash Flow, any shortfall in the Capitalized Rent Payment will be deferred and accrue interest at a rate of one percent (1%) compounding annually. The Capitalized Rent Payments include an Annual Escalator of 1.5%. While the Capitalized Rent Payments are contractual, the timing and collectability of the amounts are uncertain.

NYCHA has evaluated subsequent events through September 17, 2020, which is the date the financial statements were available to be issued and there are no additional subsequent events requiring disclosure.

**REQUIRED
SUPPLEMENTARY
INFORMATION

(UNAUDITED)**

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Authority's Total OPEB Liability and Related Ratios as of December 31,

(UNAUDITED)

	2019	2018	2017	2016
Total OPEB Liability				
Service Cost	\$ 97,836	\$ 116,663	\$ 99,842	\$ 129,183
Interest	94,828	85,032	86,759	84,197
Differences between Expected and Actual Experience	417,892	48,400	(68,103)	-
Change in Assumptions	(221,694)	(176,030)	42,001	(186,804)
Contributions - Employer	(94,814)	(61,714)	(68,963)	(74,740)
Implicit Rate Subsidy	(16,000)	(13,000)	(13,000)	(13,000)
Other Changes*	(23,902)	-	-	-
Net Changes in total OPEB Liability	254,146	(649)	78,536	(61,164)
Total OPEB Liability - beginning	2,562,230	2,562,879	2,484,343	2,545,507
Total OPEB Liability at the End of the Year	<u>\$ 2,816,376</u>	<u>\$ 2,562,230</u>	<u>\$ 2,562,879</u>	<u>\$ 2,484,343</u>
Covered Payroll	\$ 815,689	\$ 767,872	\$ 751,506	\$ 762,086
Total OPEB Liability as a percentage of covered payroll	345.3%	333.7%	341.0%	326.0%
Discount Rate used to measure Total OPEB Liability	3.26%	3.64%	3.16%	3.71%

* Repeal of Cadillac tax

This schedule is intended to show information for ten years. The additional years' information will be displayed as it becomes available.

REQUIRED SUPPLEMENTARY INFORMATION

**SCHEDULE OF THE AUTHORITY'S CONTRIBUTIONS
TO THE NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

(\$ in thousands)

(UNAUDITED)

	For the Years Ended December 31,					
	2019	2018	2017	2016	2015	2014
Contractually Required Contribution	\$163,186	\$164,165	\$165,240	\$174,207	\$159,206	\$155,894
Contributions in relation to the contractually required contribution	\$163,186	\$164,165	\$165,240	\$174,207	\$159,206	\$155,894
Contribution Deficiency	-	-	-	-	-	-
Authority covered payroll	\$815,689	\$767,872	\$751,506	\$762,086	\$789,540	\$757,566
Contributions as percentage of covered payroll	20.01%	21.38%	21.99%	22.86%	20.17%	20.58%

This Schedule is intended to show information for ten years. The additional years' information will be displayed as it become available.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE AUTHORITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY OF NYCERS (\$ in thousands) (UNAUDITED)

	For the Years Ended June 30,					
	2019	2018	2017	2016	2015	2014
NYCHA's proportion of the net pension liability	4.44%	4.89%	4.97%	5.00%	5.07%	5.02%
NYCHA's proportionate share of the net pension liability	\$822,109	\$894,818	\$1,032,725	\$1,214,112	\$1,026,612	\$904,747
NYCHA's covered payroll (Note A)	\$641,779	\$626,947	\$624,372	\$616,479	\$624,615	\$611,709
NYCHA's proportionate share of the net pension liability as a percentage of it's covered payroll	128.10%	142.73%	165.40%	196.94%	164.36%	147.90%
Plan fiduciary net position as a percentage of the total pension liability	78.84%	78.80%	74.80%	69.57%	73.13%	71.41%

Note A: NYCHA's covered payroll represents the total covered payroll of NYCERS multiplied by NYCHA's share of the Net Pension Liability.

This schedule is intended to show information for ten years. The additional years' information will be displayed as it becomes available.

STATISTICAL SECTION

(UNAUDITED)



Redfern Houses, Queens



LaGuardia Houses, Manhattan

New York City Housing Authority

STATISTICAL SECTION (UNAUDITED)

This part of the Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Authority's overall financial health. The following are the categories of the schedules that are included in this Section:

Financial Trends

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time.

Revenue Capacity

This schedule contains information to help the reader assess the Authority's most significant revenue source.

Debt Capacity

This schedule presents information to help the reader assess the affordability of the Authority's current levels of outstanding debt and the Authority's ability to issue additional debt in the future.

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Authority's financial activities take place.

Operating Information

These schedules contain service and infrastructure data to help the reader understand how the information in the Authority's financial report relates to the services the Authority provides and the activities it performs.

SCHEDULES OF FINANCIAL TRENDS

NEW YORK CITY HOUSING AUTHORITY
COMPARATIVE OPERATING AND NON-OPERATING REVENUES AND EXPENSES
(\$ in thousands)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
OPERATING REVENUE:										
Tenant revenue, net	\$ 1,058,488	\$ 1,070,022	\$ 1,051,628	\$ 1,041,574	\$ 990,524	\$ 956,815	\$ 919,973	\$ 905,457	\$ 895,864	\$ 870,977
Other income	75,762	36,751	56,766	45,744	45,749	48,964	48,917	42,084	42,977	27,893
Total operating revenue	\$ 1,134,250	\$ 1,106,773	\$ 1,108,394	\$ 1,087,318	\$ 1,036,273	\$ 1,005,779	\$ 968,890	\$ 947,541	\$ 938,841	\$ 898,870
OPERATING EXPENSES:										
Rent for leased dwellings	\$ 1,061,638	\$ 1,006,991	\$ 987,017	\$ 940,722	\$ 946,968	\$ 966,100	\$ 964,451	\$ 952,269	\$ 944,704	\$ 989,506
General and administrative	949,768	890,679	838,400	847,573	810,374	837,617	848,730	837,610	774,525	720,397
Maintenance and operations	875,510	875,431	673,678	707,929	619,594	650,957	565,197	513,273	518,297	532,088
Utilities	541,747	582,405	554,542	534,797	575,017	594,579	590,007	542,933	566,173	572,549
Depreciation	371,713	366,632	370,938	357,611	344,377	367,176	345,481	351,388	342,378	319,615
OPEB Expense	127,536	129,110	136,767	168,061	(97,357)	18,508	161,308	144,030	394,263	327,575
Protective services	24,635	29,833	22,353	24,640	22,904	20,161	71,162	87,094	86,679	87,467
Tenant services	19,219	17,389	18,164	19,307	22,618	25,966	33,133	29,913	29,597	29,200
Expenses relating to Superstorm Sandy	-	-	-	-	-	-	-	224,104	-	-
Total operating expenses	\$ 3,971,766	\$ 3,898,470	\$ 3,601,859	\$ 3,600,640	\$ 3,244,495	\$ 3,481,064	\$ 3,579,469	\$ 3,682,614	\$ 3,656,616	\$ 3,578,397
OPERATING LOSS	(2,837,516)	(2,791,697)	(2,493,465)	(2,513,322)	(2,208,222)	(2,475,285)	(2,610,579)	(2,735,073)	(2,717,775)	(2,679,527)
NON-OPERATING REVENUES (EXPENSES):										
Subsidies and Grants	\$ 2,517,894	\$ 2,387,205	\$ 2,154,174	\$ 2,124,415	\$ 2,213,763	\$ 2,135,245	\$ 2,010,903	\$ 1,987,986	\$ 2,069,796	\$ 2,163,495
Insurance recoveries	-	131,972	809	6,701	45,027	45,361	122,319	-	-	-
Investment income	36,165	25,811	16,080	25,231	10,249	7,668	4,517	4,406	6,360	8,256
(Loss) Gain on real estate transactions	(146,483)	14,898	22,397	28,730	12,579	384	13,258	1,717	3,163	13,969
Interest expense	(34,777)	(32,794)	(30,184)	(29,354)	(30,264)	(30,754)	(26,271)	(25,361)	(27,047)	(17,349)
Change in fair value of investments	13,318	(3,304)	(745)	(3,131)	(3,700)	(553)	(167)	(2)	60	13
Total non-operating revenues, net	\$ 2,386,117	\$ 2,523,788	\$ 2,162,531	\$ 2,152,592	\$ 2,247,654	\$ 2,115,351	\$ 2,124,559	\$ 1,968,746	\$ 2,052,332	\$ 2,168,384
SPECIAL ITEM - Pollution Remediation costs - lead based paint	\$ 2,751,291	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CAPITAL CONTRIBUTIONS	\$ 878,901	\$ 820,368	\$ 686,619	\$ 640,887	\$ 433,505	\$ 330,548	\$ 504,226	\$ 336,814	\$ 470,895	\$ 561,992
CHANGE IN NET POSITION	\$ (2,323,789)	\$ 552,459	\$ 355,685	\$ 280,157	\$ 472,937	\$ 12,614	\$ 18,206	\$ (429,513)	\$ (194,548)	\$ 50,849

Source: Annual Financial Statements

NEW YORK CITY HOUSING AUTHORITY
NET POSITION BY CATEGORY
(\$ In thousands)

<u>CATEGORY</u>	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Net investment in capital assets	\$ 6,897,324	\$ 6,450,404	\$ 5,995,349	\$ 5,692,787	\$ 5,407,064	\$ 5,308,896	\$ 5,371,385	\$ 5,336,914	\$ 5,349,279	\$ 5,236,899
Restricted	-	-	-	-	-	-	-	16,340	51,740	14,130
Unrestricted (Deficit)	(5,790,331)	(3,019,622)	(3,117,026)	(3,117,424)	(3,255,974)	(3,630,743)	(3,705,846)	(2,525,793)	(2,144,045)	(1,810,964)
TOTAL NET POSITION	\$ 1,106,993	\$ 3,430,782	\$ 2,878,323	\$ 2,575,363	\$ 2,151,090	\$ 1,678,153	\$ 1,665,539	\$ 2,827,461	\$ 3,256,974	\$ 3,440,065

SOURCE: Annual Financial Statements

NEW YORK CITY HOUSING AUTHORITY
CAPITAL ASSETS BY CATEGORY
(\$ in thousands)

CATEGORY	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Land	\$ 687,958	\$ 687,507	\$ 689,847	\$ 689,847	\$ 689,847	\$ 689,847	\$ 689,847	\$ 689,847	\$ 689,847	\$ 689,873
Buildings	3,144,991	3,146,646	3,173,419	3,178,668	3,181,654	3,181,655	3,196,901	3,201,594	3,201,356	3,208,298
Building improvements	11,803,789	11,035,969	10,288,303	9,694,139	9,056,789	8,436,033	8,127,997	7,876,321	7,653,405	7,153,298
Facilities and other improvements	534,203	515,617	501,133	494,724	488,892	479,726	475,253	463,823	458,894	453,881
Furniture and equipment	1,008,675	965,607	936,064	893,387	861,623	834,716	795,199	759,766	804,901	844,126
Leasehold improvements	116,638	114,081	113,153	113,153	113,153	113,153	113,069	112,992	113,002	112,897
Total Capital Assets	\$ 17,296,254	\$ 16,465,427	\$ 15,701,919	\$ 15,063,918	\$ 14,391,958	\$ 13,735,130	\$ 13,398,266	\$ 13,104,343	\$ 12,921,405	\$ 12,462,373
Less Accumulated Depreciation:										
Buildings	\$ 2,946,966	\$ 2,926,183	\$ 2,930,106	\$ 2,911,809	\$ 2,890,698	\$ 2,865,379	\$ 2,852,796	\$ 2,825,036	\$ 2,790,789	\$ 2,758,603
Facilities and other improvements	5,478,199	5,184,028	4,914,618	4,625,164	4,367,515	4,104,980	3,835,281	3,589,624	3,351,413	3,104,580
Furniture and equipment	462,861	455,043	448,081	441,235	434,416	426,647	417,144	405,541	391,506	374,536
Furniture and equipment	782,754	756,904	728,275	703,388	673,779	630,443	590,810	547,179	558,611	598,868
Leasehold improvements	104,790	102,487	99,094	95,748	92,299	87,692	81,538	74,682	67,734	60,808
Total Accumulated Depreciation	\$ 9,775,570	\$ 9,424,645	\$ 9,120,174	\$ 8,777,344	\$ 8,458,707	\$ 8,115,141	\$ 7,777,569	\$ 7,442,062	\$ 7,160,053	\$ 6,897,395
Net Capital Assets	\$ 7,520,684	\$ 7,040,782	\$ 6,581,745	\$ 6,286,574	\$ 5,933,251	\$ 5,619,989	\$ 5,620,697	\$ 5,662,281	\$ 5,761,352	\$ 5,564,978
Related Debt	623,360	590,378	586,396	593,787	526,187	311,093	249,312	325,367	412,073	328,079
Net Investment in Capital Assets	\$ 6,897,324	\$ 6,450,404	\$ 5,995,349	\$ 5,692,787	\$ 5,407,064	\$ 5,308,896	\$ 5,371,385	\$ 5,336,914	\$ 5,349,279	\$ 5,236,899

Capital assets are not classified as *being depreciated* and *not being depreciated* since construction in progress is not shown as a separate category, but rather classified over the categories to which it belongs.

Source: Annual Financial Statements

**SCHEDULE
OF REVENUE
CAPACITY**

NEW YORK CITY HOUSING AUTHORITY
REVENUES ON A GROSS BASIS
(\$ in thousands)

DESCRIPTION	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Revenues (Gross):										
Subsidies and Grants	\$ 2,517,894	\$ 2,387,205	\$ 2,154,174	\$ 2,124,415	\$ 2,213,763	\$ 2,135,245	\$ 2,010,903	\$ 1,987,986	\$ 2,069,796	\$ 2,163,495
Operating Revenues	1,134,250	1,106,773	1,108,394	1,087,318	1,036,273	1,005,779	968,890	947,541	938,841	898,870
Insurance recoveries	-	131,972	809	6,701	45,027	45,361	122,319	-	-	-
Investment Income	36,165	25,811	16,080	25,231	10,249	7,668	4,517	4,406	6,360	8,256
Gain on sales of capital assets and real estate transactions	-	14,898	22,397	28,730	12,579	384	13,258	1,717	3,163	13,969
Change in fair value of investments	13,318	-	-	-	-	-	-	-	60	13
Total Revenues	\$ 3,701,627	\$ 3,666,659	\$ 3,301,854	\$ 3,272,395	\$ 3,317,891	\$ 3,194,437	\$ 3,119,887	\$ 2,941,650	\$ 3,018,220	\$ 3,084,603

Source: Annual Financial Statements

**SCHEDULE
OF DEBT
CAPACITY**

NEW YORK CITY HOUSING AUTHORITY
LONG TERM DEBT
(\$ in thousands, except per capita)

Description of Long Term Debt	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<u>Bonds:</u>										
State Guaranteed Certificates of Indebtedness Outstanding (State Program) three issues remaining bearing interest from 3.5% to 3.75%, per annum maturing annually through July 2024.	\$ 5,640	\$ 7,102	\$ 8,564	\$ 10,789	\$ 13,014	\$ 15,927	\$ 18,840	\$ 22,059	\$ 26,385	\$ 31,129
State Guaranteed Certificates of Indebtedness Outstanding (incorporated into the Federal Housing Program), three issues remaining bearing interest from 3.5% to 4.75% per annum, maturing annually through July 2024.	911	1,155	1,399	1,642	1,886	2,218	2,550	3,345	4,177	5,464
<u>Loans Funded by:</u>										
HDC Capital Fund Program Revenue Bonds, Series 2005 A (\$281,610,000); Loan Agreement with an interest rate of 3.0% to 5.0% per annum, defeased September 2013.	-	-	-	-	-	-	-	213,990	225,410	236,275
HDC Capital Fund Program Revenue Bonds, Series 2013 A (\$185,785,000); Loan Agreement with an interest rate of 3.0% to 5.0% per annum, maturing annually through July 2025.	107,305	122,400	136,815	150,555	163,790	176,630	185,785	-	-	-
HDC Capital Fund Program Revenue Bonds, Series 2013 B-1 (\$348,130,000); Loan Agreement with an interest rate of 5.0% to 5.25% per annum, maturing annually through July 2033.	257,725	276,070	293,535	310,160	325,985	341,190	348,130	-	-	-
HDC Capital Fund Program Revenue Bonds, Series 2013 B-2 (\$122,170,000); Loan Agreement with an interest rate of 5.0% to 5.25% per annum, maturing annually through July 2032.	122,170	122,170	122,170	122,170	122,170	122,170	122,170	-	-	-
Loan Payable - 2013 Equipment Lease/Purchase Agreement; with BAPCC for Energy Performance Contract (\$18,045,580) at an interest rate of 1.98% per annum, maturing January 19, 2026.	9,542	12,420	13,812	15,140	16,408	17,265	17,736	-	-	-
Loan Payable - 2016 Equipment Lease/Purchase Agreement; (Ameresco A) with BAPCC for Energy Performance Contract (\$51,548,356) at an interest rate of 3.27% per annum, maturing June 28, 2036.	51,779	53,389	53,247	51,548	-	-	-	-	-	-
Loan Payable - 2016 Multi-draw term loan facility; with NY Green Bank (\$11,000,000) at rate of 3.5% per annum on the used portion and at 0.50% per annum on the unused portion, paid off on December 18, 2017.	-	-	-	94	-	-	-	-	-	-
Loan Payable - 2017 Equipment Lease/Purchase Agreement; (BQDM); with BAPCC for Energy Performance Contract (\$60,132,977.75) at an interest rate of 3.6178% per annum, maturing December 15, 2037.	64,603	62,328	60,133	-	-	-	-	-	-	-
Loan Payable - 2017 Equipment Lease/Purchase Agreement; (SANDY A); with BAPCC for Energy Performance Contract (\$43,000,000) at an interest rate of 3.6178% per annum, maturing December 22, 2037.	46,197	44,570	43,000	-	-	-	-	-	-	-

NEW YORK CITY HOUSING AUTHORITY
LONG TERM DEBT
(\$ in thousands, except per capita)

Description of Long Term Debt	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Loans Funded by: (continued)										
Loan Payable - 2018 Equipment Lease/Purchase Agreement: (Ameresco B); with BAPCC for Energy Performance Contract (\$79,461,775.81) at an interest rate of 4.75% per annum, maturing July 1, 2038.	82,647	79,462	-	-	-	-	-	-	-	-
HDC 2009 Series L-1 Bonds (\$23,590,000); Permanent Mortgage Loan at an interest rate of 6.3% per annum, maturing November 2043; secured by mortgage.	21,559	21,940	22,298	22,634	22,949	23,245	23,523	23,590	23,590	23,590
HDC 2009 Series L-2 Bonds (\$68,000,000); Subordinate Loan at interest rate of 2.25% per annum, matured in September 2013; secured by mortgage.	-	-	-	-	-	-	-	68,000	68,000	68,000
HDC 2010 Series B Bonds (\$150,000,000); Mortgage Loan at interest rate of 2.125% per annum, prepaid in July 2013; secured by mortgage.	-	-	-	-	-	-	-	19,825	110,050	150,000
HDC 2011 Series A Bonds (\$140,000,000); Mortgage Loan at an interest rate of 3.25% per annum, prepaid in July 2013; secured by mortgage.	-	-	-	-	-	-	-	47,955	140,000	-
HDC 2012 Series A Bonds (\$67,540,000); Mortgage Loan at an interest rate of SIFMA +1.1% per annum, prepaid in July 2013; secured by mortgage.	-	-	-	-	-	-	-	16,821	-	-
HDC 2010 Series A-1 Bonds (\$25,325,000); Permanent Mortgage Loan at an interest rate of 5.1% per annum, maturing November 2041; secured by mortgage.	19,606	20,086	23,389	23,883	24,352	24,798	25,222	25,325	25,325	25,325
HDC 2010 Series A-2 Bonds (\$3,000,000); Permanent Mortgage Loan at an interest rate of 5.1% per annum, maturing May 2041; secured by mortgage.	2,308	2,365	2,770	2,829	2,885	2,938	2,988	3,000	3,000	3,000
Long Term Debt (before Premium)	\$ 791,992	\$ 825,457	\$ 781,132	\$ 711,444	\$ 693,439	\$ 726,381	\$ 746,944	\$ 443,910	\$ 625,937	\$ 542,783
Add Premium on HDC Revenue Bond Loan Agreements	11,611	14,972	19,035	23,898	29,603	35,974	42,637	6,919	8,075	9,348
TOTAL LONG TERM DEBT	\$ 803,603	\$ 840,429	\$ 800,167	\$ 735,342	\$ 723,042	\$ 762,355	\$ 789,581	\$ 450,829	\$ 634,012	\$ 552,131
Less current portion	43,975	39,130	36,647	35,145	33,637	32,942	20,563	84,020	16,578	16,896
LONG TERM DEBT, NET	\$ 759,628	\$ 801,299	\$ 763,520	\$ 700,197	\$ 689,405	\$ 729,413	\$ 769,018	\$ 366,809	\$ 617,434	\$ 535,235
Percentage of Personal Income	18.86%	19.68%	18.83%	17.34%	17.49%	18.74%	19.42%	11.13%	15.75%	13.56%
Per Capita	\$ 2,197	\$ 2,205	\$ 2,040	\$ 1,854	\$ 1,805	\$ 1,901	\$ 1,959	\$ 1,117	\$ 1,572	\$ 1,367

Note A
See Note 15 on Long Term Debt for more details

Note B
Percentage of Personal Income and Per Capita calculations are based on total long term debt using demographic information for NYCHA's residents (see NYCHA's Demographic and Economic Statistics-Ten Year Trend).

Source: Annual Financial Statements

NEW YORK CITY HOUSING AUTHORITY
PLEDGED REVENUE COVERAGE
(\$ in thousands)

**Description of Loan Payable: Equipment Purchase/Lease Agreement
with Bank of America for Energy Performance Contract**

<u>Year</u>	<u>Source of Revenue</u>	<u>Net Available Revenues</u>	<u>Principal and Interest Requirements</u>	<u>Coverage Ratio</u>
2013	HUD Operating Subsidy	\$ 407	\$ 407	1.0
2014	HUD Operating Subsidy	\$ 819	\$ 819	1.0
2015	HUD Operating Subsidy	\$ 1,197	\$ 1,197	1.0
2016	HUD Operating Subsidy	\$ 1,586	\$ 1,586	1.0
2017	HUD Operating Subsidy	\$ 1,622	\$ 1,622	1.0
2018	HUD Operating Subsidy	\$ 1,659	\$ 1,659	1.0
2019	HUD Operating Subsidy	\$ 3,117	\$ 3,117	1.0

Notes:

1. Net Available Revenues represent the annual debt service for the current year. The Authority has committed to appropriate HUD Operating revenue in amounts sufficient to cover the scheduled principal and interest requirements of the debt.
2. Details regarding the Authority's outstanding debt can be found in the notes to the financial statements.

**NEW YORK CITY HOUSING AUTHORITY
PLEDGED REVENUE COVERAGE
(\$ in thousands)**

**Description of Bond: NYC Housing Development (HDC)
Capital Fund Program Revenue Bonds, Series 2013 A and 2013 B**

<u>Year</u>	<u>Source of Revenue</u>	<u>Net Available Revenues</u>	<u>Principal and Interest Requirements</u>	<u>Coverage Ratio</u>
2014	Capital Fund 2014	\$ 98,746	\$ 41,655	2.4
2015	Capital Fund 2015	\$ 102,119	\$ 59,343	1.7
2016	Capital Fund 2016	\$ 106,244	\$ 59,517	1.8
2017	Capital Fund 2017	\$ 115,442	\$ 59,529	1.9
2018	Capital Fund 2017	\$ 176,082	\$ 59,544	3.0
2019	Capital Fund 2017	\$ 183,917	\$ 59,559	3.1

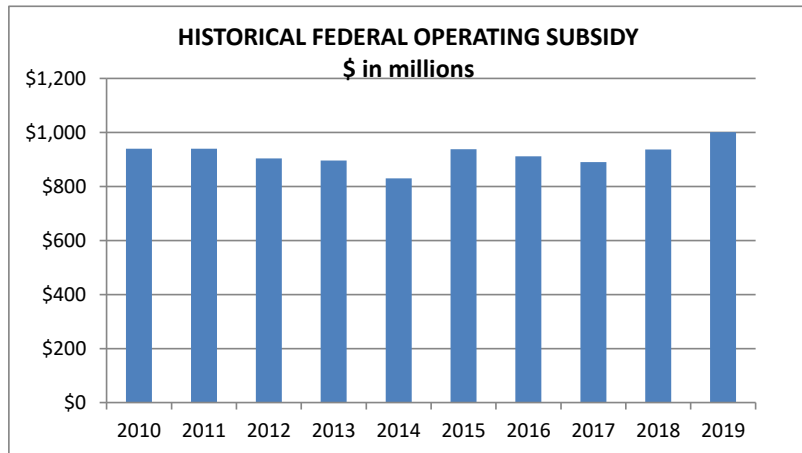
Notes:

1. Net Available Revenues represent 33 1/3 percent of the Capital Fund grant, which is the maximum amount available for principal and interest requirements.
2. Details regarding the Authority's outstanding debt can be found in the notes to the financial statements.
3. The 2013 Series A bond proceeds were used in part to defease the remaining debt on the 2005 A bonds in September of 2013.

**NEW YORK CITY HOUSING AUTHORITY
HISTORICAL FEDERAL OPERATING SUBSIDY**

(\$ in millions)

<u>Year</u>	<u>Congressional Appropriation</u>	<u>NYCHA Funding</u>
2010	\$ 4,775	\$ 940
2011	\$ 4,617	\$ 940
2012	\$ 3,962	\$ 903
2013	\$ 4,054	\$ 896
2014	\$ 4,400	\$ 830
2015	\$ 4,440	\$ 938
2016	\$ 4,500	\$ 912
2017	\$ 4,400	\$ 890
2018	\$ 4,550	\$ 937
2019	\$ 4,653	\$ 1,001

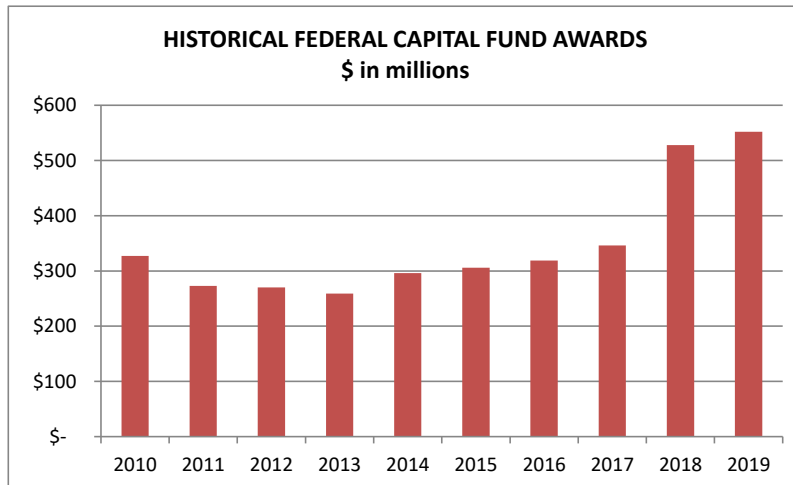


Source: New York City Housing Authority, Finance Department

**NEW YORK CITY HOUSING AUTHORITY
HISTORICAL FEDERAL CAPITAL FUND AWARDS**

(\$ in millions)

Capital Fund Grant Year	Congressional Appropriation	NYCHA Funding
2010	\$ 2,500	\$ 327
2011	\$ 2,500	\$ 273
2012	\$ 2,405	\$ 270
2013	\$ 2,070	\$ 259
2014	\$ 1,875	\$ 296
2015	\$ 1,925	\$ 306
2016	\$ 1,900	\$ 319
2017	\$ 1,942	\$ 346
2018	\$ 2,750	\$ 528
2019	\$ 2,775	\$ 552



Source: New York City Housing Authority, Finance Department

**SCHEDULES OF
DEMOGRAPHIC
AND
ECONOMIC
INFORMATION**

**NEW YORK CITY HOUSING AUTHORITY
RESIDENT DEMOGRAPHICS - OPERATING PROGRAMS**

ALL PROGRAMS	DECEMBER 31, 2019 TOTAL	
NUMBER OF FAMILIES	166,389	
POPULATION*	365,806	
AVERAGE FAMILY SIZE	2.2	
AVERAGE TENURE IN PUBLIC HOUSING	23.5 YEARS	
<hr/>		
AVERAGE FAMILY ANNUAL INCOME	\$ 25,602	
AVERAGE MONTHLY RENT	\$ 548	
<hr/>		
		Percentage of Population
NUMBER OF SENIOR RESIDENTS (AGE 62 OR MORE):	79,746	21.8%
NUMBER OF SINGLE SENIOR RESIDENTS (AGE 62 OR MORE):	39,286	10.7%
NUMBER OF MINORS UNDER 18:	95,144	26.0%
<hr/>		
		Percentage of Households
NUMBER OF WORKING FAMILIES:	75,842	45.6%
NUMBER OF FAMILIES RECEIVING PUBLIC ASSISTANCE:	20,856	12.5%
NUMBER OF SINGLE PARENT FAMILIES WITH MINORS UNDER 18:	14,427	8.7%
NUMBER OF SENIOR (AGE 62 OR MORE) HEAD OF HOUSEHOLDS:	67,053	40.3%
HOUSEHOLDS BELOW POVERTY LEVEL	79,101	47.5%

* Included population of section 8 transaction of 9,300 in Public Housing Preservation I and II developments.

Source: The Performance Tracking and Analytics Department

RESIDENT DEMOGRAPHICS - HOUSING CHOICE VOUCHER PROGRAM

AS OF DECEMBER 31, 2019

BOROUGH

	Bronx	Brooklyn	Manhattan	Queens	Staten Island	Outside the 5 Boroughs Portables	Total
NUMBER OF HOUSEHOLDS*	38,561	27,292	9,002	8,199	1,819	11	84,884
NUMBER OF HOUSEHOLDS PERCENTAGE	45.43%	32.15%	10.61%	9.66%	2.14%	0.01%	100.00%

RACE and ETHNICITY

	American Indian/ Native Alaskan	Asian/ Native Hawaiian/ Other Pacific Islander	Black	Hispanic	White	Total
NUMBER OF HOUSEHOLDS	248	2,188	24,338	43,970	13,857	84,884
NUMBER OF HOUSEHOLDS PERCENTAGE	0.29%	2.58%	28.67%	51.80%	16.32%	100.00%

APARTMENT SIZE (NUMBER OF BEDROOMS)

	0	1	2	3	4	5 or more	Total
NUMBER OF HOUSEHOLDS	0	4,908	25,816	31,397	18,747	3,247	84,884
NUMBER OF HOUSEHOLDS PERCENTAGE	0.00%	5.78%	30.41%	36.99%	22.09%	3.83%	100.00%

* The number of households excluded families who lived in Public Housing Preservation I and II developments.

Demographic and Economic Statistics - Ten Year Trend

POPULATION - TEN YEAR TREND

2009 - 2018*

<u>Year</u>	<u>United States</u>	<u>Percentage Change from Prior Period</u>	<u>City of New York</u>	<u>Percentage Change from Prior Period</u>
2009	306,771,529	0.88 %	8,131,574	0.79 %
2010	309,326,085	0.83	8,190,355	0.72
2011	311,580,009	0.73	8,272,963	1.01
2012	313,874,218	0.74	8,348,032	0.91
2013	316,057,727	0.70	8,398,739	0.61
2014	318,386,421	0.74	8,437,387	0.46
2015	320,742,673	0.74	8,468,181	0.36
2016	323,071,342	0.73	8,475,976	0.09
2017	325,147,121	0.64	8,438,271	(0.44)
2018	327,167,434	0.62	8,398,748	(0.47)

POPULATION OF NEW YORK CITY BY BOROUGH

	<u>2018</u>	<u>2010</u>	<u>2000</u>	<u>1990</u>	<u>1980</u>	<u>1970</u>
Bronx	1,432,132	1,387,353	1,333,854	1,203,789	1,168,972	1,471,701
Brooklyn	2,582,830	2,509,877	2,465,812	2,300,664	2,230,936	2,602,012
Manhattan	1,628,701	1,588,759	1,540,373	1,487,536	1,428,285	1,539,233
Queens	2,278,906	2,234,745	2,229,895	1,951,598	1,891,325	1,987,174
Staten Island	476,179	469,621	445,414	378,977	352,121	295,443
Total	<u>8,398,748</u>	<u>8,190,355</u>	<u>8,015,348</u>	<u>7,322,564</u>	<u>7,071,639</u>	<u>7,895,563</u>
Percentage Increase (Decrease) from Prior Decade	2.5%	2.2%	9.5%	3.5%	(10.4%)	1.5%

Demographic and Economic Statistics - Ten Year Trend

2009 - 2018*

<u>Year</u>	<u>Personal Income (in thousands)</u>			<u>Per Capita Personal Income (in thousands)</u>		
	<u>United States</u>	<u>City of New York</u>	<u>New York City as a Percentage of United States</u>	<u>United States</u>	<u>City of New York</u>	<u>New York City as a Percentage of United States</u>
2009	\$ 12,051,307,000	\$ 406,934,260	3 %	\$ 39,284	\$ 50,041	127 %
2010	12,541,995,000	428,309,561	3	40,546	52,297	129
2011	13,315,478,000	459,982,378	3	42,735	55,600	130
2012	13,998,383,000	484,021,137	3	44,599	57,980	130
2013	14,175,503,000	498,772,851	4	44,851	59,385	132
2014	14,983,140,000	524,030,263	3	47,060	62,111	132
2015	15,711,634,000	547,690,330	3	48,985	64,678	132
2016	16,115,630,000	571,059,615	4	49,883	67,374	135
2017	16,820,250,000	611,169,836	4	51,731	72,431	140
2018	17,572,929,000	NA	NA	53,712	NA	NA

Source: U.S. Department of Commerce, Bureau of Economic Analysis

* Amounts as of March 2019 and May 2019

N/A = data not available

New York City Housing Authority

Demographic and Economic Statistics - Ten Year Trend

POPULATION - TEN YEAR TREND 2010 - 2019

<u>Year</u>	<u>NYCHA</u>	<u>Change from Prior Period</u>
2010	403,995	0.08 %
2011	403,357	(0.16) %
2012	403,736	0.09 %
2013	403,120	(0.15) %
2014	401,093	(0.50) %
2015.....	400,474	(0.15) %
2016.....	396,581	(0.97) %
2017.....	392,259	(1.09) %
2018	381,159	(2.83) %
2019	365,806	(4.03) %

New York City Housing Authority

Demographic and Economic Statistics - Ten Year Trend

2010 - 2019

Personal Income (in thousands)

<u>Year</u>	<u>NYCHA</u>
2010	4,070,320
2011	4,024,487
2012	4,052,026
2013	4,064,839
2014	4,068,376
2015	4,133,013
2016	4,241,327
2017	4,248,457
2018	4,269,695
2019	4,259,891

Source: New York City Housing Authority, Resident Demographics - Operating Programs

City of New York - Persons Receiving Public Assistance - Ten Year Trend

2010- 2019

<u>Year</u>	<u>Public Assistance</u>	<u>SSI (a)</u>
	(in thousands)	
2010	346	420,878
2011	356	423,707
2012	353	425,991
2013	357	425,034
2014	337	402,529
2015	360	398,856
2016	370	394,680
2017	364	388,629
2018	356	381,373
2019	332	NA

(a) The SSI data is for December of each year.
N/A: Not Available

Sources: The City of New York, Human Resources Administration and the U.S. Social Security Administration.

New York City Housing Authority

Persons Receiving Public Assistance - Ten Year Trend

2010- 2019

<u>Year</u>	<u>Public Assistance</u>
2010	20,094
2011	20,028
2012	19,561
2013	20,055
2014	20,379
2015	21,214
2016	22,710
2017	23,077
2018	22,146
2019	20,856

Source: New York City Housing Authority, Performance Tracking and Analytics Department

Nonagricultural Wage and Salary Employment - Ten Year Trend

2010-2019

(average annual employment in thousands)

	<u>2019 (b)</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Private Employment:										
Services (a).....	2,685	2,628	2,554	2,478	2,402	2,312	2,216	2,138	2,066	1,996
Wholesale Trade.....	139	140	142	143	144	143	141	140	139	137
Retail Trade.....	352	350	351	350	352	350	340	328	315	303
Manufacturing.....	69	71	73	76	78	77	76	76	76	76
Financial Activities.....	471	475	468	465	458	448	436	438	438	427
Transportation, Warehousing and Utilities.....	143	141	139	135	132	126	123	122	122	120
Construction.....	158	158	153	147	139	129	122	116	112	113
Total Private Employment.....	4,017	3,963	3,880	3,794	3,705	3,585	3,454	3,358	3,268	3,172
Government.....	590	588	585	583	580	573	571	571	573	579
Total.....	<u>4,607</u>	<u>4,551</u>	<u>4,465</u>	<u>4,377</u>	<u>4,285</u>	<u>4,158</u>	<u>4,025</u>	<u>3,929</u>	<u>3,841</u>	<u>3,751</u>
Percentage Increase (Decrease) from Prior Year	1.2%(b)	1.9%	2.0%	2.2%	3.1%	3.3%	2.4%	2.3%	2.4%	5.6%

- (a) Includes rounding adjustment.
- (b) Six months average.

Notes: This schedule is provided in lieu of a schedule of principal employees because it provides more meaningful information. Other than the City of New York, no single employer employs more than 2 percent of total nonagricultural employees.

Data are not seasonally adjusted.

Source: New York State Department of Labor, Division of Research and Statistics.

Employment Status of the Resident Population - Ten Year Trend

2009–2018

	Civilian Labor Force (in thousands)		Unemployment Rate	
	<u>New York City Employed</u>	<u>New York City Unemployed(a)</u>	<u>New York City</u>	<u>United States</u>
2009	3,592	369	9.3	9.3 %
2010	3,574	377	9.5	9.6
2011	3,603	360	9.1	8.9
2012	3,647	376	9.3	8.1
2013	3,724	361	8.8	7.4
2014	3,794	297	7.3	6.2
2015	3,873	234	5.7	5.3
2016	3,912	214	5.2	4.9
2017	3,941	190	4.6	4.4
2018	3,949	170	4.1	3.9

(a) Unemployed persons are all civilians who had no employment during the survey week, were available for work, except for temporarily illness, and had made efforts to find employment some time during the prior four weeks. This includes persons who were waiting to be recalled to a job from which they were laid off or were waiting to report to a new job within 30 days.

Note: Employment and unemployment information is not seasonally adjusted.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, and Office of the Comptroller, Fiscal and Budget Studies.

**SCHEDULES OF
OPERATING
INFORMATION**

**NEW YORK CITY HOUSING AUTHORITY
PUBLIC HOUSING ASSESSMENT SYSTEM (PHAS) - INTERIM RULE**

The table below shows the New York City Housing Authority's actual calculations for the three components that constitute the Financial Condition Indicator:

SCORING COMPONENTS (FINANCIAL CONDITION INDICATORS)	MEASUREMENT	CALCULATION METHODOLOGY	YEAR						
			2019	2018	2017	2016	2015	2014	2013
Quick Ratio	Liquidity	Current Assets*	2.87	3.12	4.12	3.56	2.99	2.37	1.94
		Current Liabilities							
Months Expendable Net Assets Ratio	Adequacy of Reserves	*Excluding restricted assets and inventory							
		Unrestricted Resources	5.83	5.91	8.08	7.24	6.49	5.07	5.04
Debt Service Coverage Ratio	Capacity to Cover Debt	Average Monthly Operating & Other Expenses							
		Adjusted Operating Income Annual Debt Service Excluding CFFP Debt *Includes projects with Debt Service only	7.15	3.92	1.47	2.38	23.20	19.23	7.37

The table below shows the New York City Housing Authority's actual calculations for the three components that constitute the Management Operations Indicator (MASS):

SCORING COMPONENTS (MANAGEMENT OPERATIONS INDICATORS)	MEASUREMENT	CALCULATION METHODOLOGY	YEAR						
			2019	2018	2017	2016	2015	2014	2013
Occupancy Rate	Project Performance in Keeping Available Units Occupied	Units Months Leased	98.91%	99.27%	99.39%	99.40%	99.41%	99.32%	98.94%
		Units Months Available							
Tenant Accounts Receivable	Amount of Tenant Accounts Receivable Against Tenant Revenue	Accounts Receivable- Tenants Total Tenant Revenue*	9.62%	9.02%	7.67%	5.9%	5.84%	5.89%	5.99%
		* includes rents and other charges to the tenants							
Accounts Payable	Total Vendor Accounts Payable, Both Current and Past due Against Total Monthly Operating Expenses	Total Accounts Payable Total Operating Expenses / 12	0.50	0.37	0.32	0.55	0.69	0.46	.28

Note 1: On February 23, 2011, HUD published the Interim PHAS Rule in the Federal Register. The Interim Rule makes changes to the Public Housing Assessment Scoring (PHAS) methodology beginning with the year 2011 and classifies the financial indicators under separate scoring components (Financial Condition and Management Operations)

Note 2: REAC's assessment and analysis is based upon the Financial Data Schedule (FDS) submitted electronically by the PHA using the Financial Assessment Subsystem (FASS). This financial data is required to be reported in accordance with generally accepted accounting principles (GAAP), as mandated by the Uniform Financial Reporting Standards Rule.

Source: HUD Financial Data Schedule

SUMMARY OF PUBLIC HOUSING DEVELOPMENTS

DEVELOPMENT DATA	DEVELOPMENTS IN FULL OPERATION			
	PROGRAM			
	FEDERAL**	LLC I	LLC II	TOTAL***
NUMBER OF DEVELOPMENTS	292	13	6	311
NUMBER OF CURRENT APARTMENTS	153,066	14,476	4,972	172,514
NUMBER OF SECTION 8 TRANSITION APARTMENTS	-	2,685	1,152	3,837
TOTAL NUMBER OF APARTMENTS	153,066	17,161	6,124	176,351
RESIDENTIAL BUILDING****	2,057	155	40	2,252
NON-RESIDENTIAL BUILDING	94	8	3	105
POPULATION* PUBLIC HOUSING	326,192	25,698	4,616	356,506
POPULATION* SECTION 8 TRANSITION	-	6,680	2,620	9,300
TOTAL POPULATION*	326,192	32,378	7,236	365,806

* Population as of January 1, 2020

** Figures listed above are for FHA Homes owned by NYCHA as of 02/13/2020. Does not include FHA Homes that have been sold.

*** Does not include Lavanburg Houses and PSS Grandparent Family Apartments

**** Includes impact of the February 12, 2020 Brooklyn Bundle RAD transaction.

Source: Development Data Book - 2020

New York City Housing Authority, Performance Tracking and Analytics Department

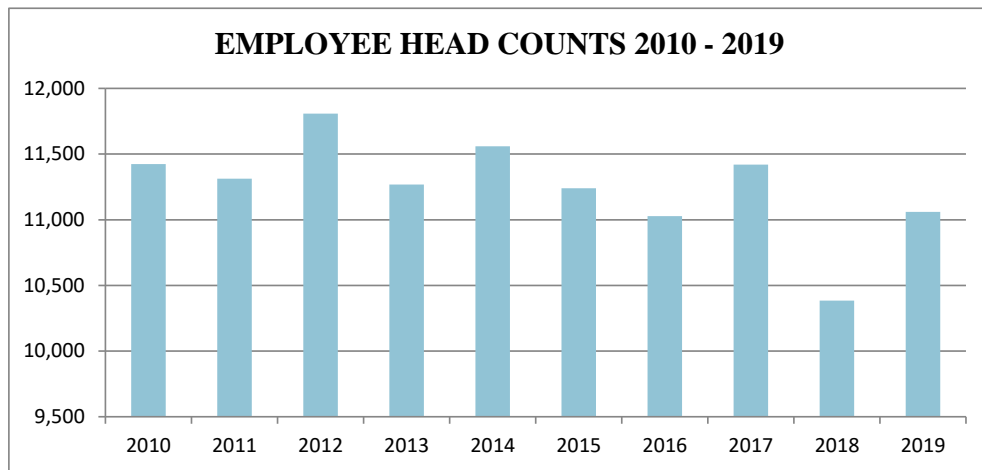
**NEW YORK CITY HOUSING AUTHORITY
LEASE COMMITMENTS**
(\$ in thousands)

<u>LESSOR</u>	<u>YEAR OF EXPIRATION</u>	<u>ANNUAL RENTAL 2019</u>	<u>FUTURE MINIMUM ANNUAL RENTS</u>	<u>FACILITY</u>
250 Broadway Owner LLC	2039	\$ 15,155	\$ 138,535	Office Building
90 Church Street Limited Partnership	2044	13,026	397,680	Office Building
One Fordham Plaza, LLC	2030	3,558	29,493	Office Building
Vanderbilt Associates Owner LP	2030	2,163	12,202	Office Building
IPG LIC 49th Ave Lower Floor Units Property Owner LLC	2050	5,899	764,128	Office Building
Hutch Metro Center I LLC	2026	2,566	26,170	Office Building
Other		591	-	Office Building
TOTAL		\$ 42,958	\$ 1,368,208	

Source: New York City Housing Authority
Financial Accounting and Reporting Services Department

**NEW YORK CITY HOUSING AUTHORITY
EMPLOYEE HEAD COUNTS 2010 - 2019**

<u>Year</u>	<u>Full Time</u>	<u>Part Time</u>	<u>Total</u>
2010	11,222	201	11,423
2011	11,115	197	11,312
2012	11,591	217	11,808
2013	11,107	162	11,269
2014	11,401	158	11,559
2015	11,079	160	11,239
2016	10,624	403	11,027
2017	10,976	444	11,420
2018	10,287	97	10,384
2019	10,973	86	11,059



Note: Includes only employees who are active and receiving bi-weekly pay.

Source: New York City Housing Authority
Department of Human Resources

