



**Fiscal Year 2018**  
**GASB 74/75 Report**  
for  
**The City of New York**  
And  
**The New York City Health**  
**Benefits Program**

*PREPARED AS OF JUNE 30, 2017*

by the  
**New York City**  
**Office of the Actuary**

**2018**





## OFFICE OF THE ACTUARY

255 GREENWICH STREET • 9<sup>TH</sup> FLOOR  
NEW YORK, NY 10007  
(212) 442-5775 • FAX: (212) 442-5777

**SHERRY S. CHAN**  
CHIEF ACTUARY

September 14, 2018

Honorable Scott M. Stringer  
Comptroller  
The City of New York Municipal Building, Room 530  
One Centre Street  
New York, NY 10007

Re: Other Postemployment Benefits Valuation Report in Accordance with GASB 74 and 75  
(Report)

Dear Comptroller Stringer:

This Report presents the results of the Fiscal Year Ended June 30, 2018 Annual Valuation of the Other Postemployment Benefits (OPEB) provided under the New York City Health Benefits Program (Program). These results, with a valuation date of June 30, 2017 are projected forward to a measurement date of June 30, 2018 to form the basis for accounting and financial reporting under Governmental Accounting Standards Board (GASB) Statement No. 75 *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions* (GASB75), as amended by GASB Statement No. 85 (GASB85), for Fiscal Year 2018 (i.e. July 1, 2017 to June 30, 2018) for the City of New York (City) and certain non-City entities (Component Units).

These results also form the basis for financial reporting under GASB Statement No. 74 *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans* (GASB74), as amended by GASB85, for the New York City Other Postemployment Benefits Plan (OPEB Plan or Plan). Where these results are applicable under both GASB74 and GASB75, the term GASB74/75 is used.

This Report provides the fiduciary net position of the Programs for the City and Component Units, the accounting amounts of the costs to maintain the Programs, and the financial statement reporting and disclosure information for the Plan, the City, Component Units, governmental agencies, and other interested parties.

The results shown herein are based upon:

- The Office of the Actuary's (OA) interpretation of GASB74 and GASB75.
- The OA's understanding of the benefits provided to eligible retirees and beneficiaries.

- The OA’s understanding of Health Care Reform (HCR) (i.e. the Patient Protection and Affordable Care Act (PPACA) signed into law on March 23, 2010 and the Health Care and Education Reconciliation Act (HCERA) signed into law on March 30, 2010), as well as the Tax Cuts and Jobs Act, signed into law on December 22, 2017 and the Budget Continuing Resolution, signed into law on January 22, 2018.
- Census data used in the June 30, 2017 pension actuarial valuations of the New York City Retirement Systems (NYCRS)<sup>1</sup> to produce Preliminary Fiscal Year 2019 Employer Contributions, supplemental data provided by the New York City Office of Labor Relations (OLR), by the Educational Construction Fund (ECF), and by the City University of New York (CUNY) for participants in the Teachers Insurance Annuity Association (TIAA or CUNY TIAA).
- Health insurance premium rates and related financial information for Fiscal Year 2018 provided by OLR.
- Welfare Fund contribution rates as of June 30, 2017, and negotiated increases, lump-sum, and retroactive payments made on behalf of retirees to Welfare Funds for Fiscal Years 2015 to 2018, provided by OLR.
- Certain actuarial assumptions used in the pension actuarial valuations of the NYCRS that were adopted by the Boards of Trustees during Fiscal Year 2012 (i.e. the Silver Books) and new tables of post-retirement mortality proposed by the Actuary and adopted by the Boards of the NYCRS during Fiscal Year 2016. For details, see Section 4.
- Additional OPEB-specific actuarial assumptions, as described in Section 4.
- An Actuarial Cost Method (ACM), as described in Section 4.
- Financial information provided by the Office of Management and Budget (OMB) and by the administrative offices of the Component Units.
- Information on the Stabilization Fund provided by OLR and OMB.

This Report does not include results for the New York City Off-Track Betting Corporation (OTB). It is the understanding of the Actuary that, effective May 26, 2011, neither the City nor the Plan has any OPEB obligation for current or future OTB retirees.

The results contained in this Report are not meant for other purposes. In particular, the analysis in this Report is not to be relied upon by employers, retirees, or their representatives for any decisions regarding benefit design. Use of this Report for any other purpose or by anyone other than the City, the Component Units, or their auditors may not be appropriate and may result in

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<sup>1</sup> New York City Employees’ Retirement System (NYCERS)  
 New York City Teachers’ Retirement System (TRS)  
 New York City Board of Education Retirement System (BERS)  
 New York City Police Pension Fund (POLICE)  
 New York City Fire Pension Fund (FIRE)

mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the Report for that purpose. This Report should not be provided except in its entirety. No one other than the City, Component Units, or their auditors may make any representations or warranties based on any statements or conclusions contained in this Report without the written consent of the OA.

An Actuarial Certification is included in Section 5.

Best Regards,

  
Sherry S. Chan  
Chief Actuary

cc: New York City Office of the Actuary

Mr. Frankie Chen  
Ms. Marlene Markoe-Boyd  
Mr. Thomas O'Hara  
Mr. Sam Rumley  
Mr. Michael Samet  
Keith Snow, Esq.

Auditors

Ms. Hope Goldstein - Marks Paneth, LLP  
Ms. Marla Hummel - Grant Thornton, LLP  
Mr. Ben Kohnle - Grant Thornton, LLP  
Mr. Chris Mancusi - Grant Thornton, LLP  
Mr. Daniel McElwee - Marks Paneth, LLP  
Mr. Warren Ruppel - Marks Paneth, LLP  
Mr. Cosmo Saginario - Grant Thornton, LLP  
Ms. Jill Strohmeier - Deloitte & Touche, LLP

Buck

Ms. Melissa Chacko  
Mr. Stephen Oates  
Ms. Rebecca O'Loughlin

Component Units

Mr. Robert Balducci - WFA  
Mr. Dan Frydberg - New York City Housing Authority  
Mr. Kenneth Tirino - City University of New York  
Ms. Yi-Wen Wang - School Construction Authority  
Mr. Jay Weinman - New York City Health and Hospitals Corporation  
Ms. Cynthia Wong - ECF

New York City Office of the Comptroller

Ms. Rosa Charles  
Ms. Susan Cornwall  
Mr. Preston Niblack  
Ms. Jacqueline Thompson

New York City Office of the Labor Relations

Mr. Michael Babette  
Mr. Robert Linn

New York City Office of Management and Budget

Mr. Ken Godiner  
Mr. John Grathwol  
Mr. Omair Hassan  
Mr. Raymond Lee

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## SECTION 1 - GASB 74/75 INFORMATION

None of the Component Units (CU) which have obligations included in this Report have separately identified OPEB assets as of June 30, 2018 or June 30, 2017. Since GASB74 applies in cases where there are separate trust or trust equivalents, GASB74 does not apply to OPEB that are the obligations of the CU. Results in this section of the Report reflect only the obligations where the City is directly obligated.

Each of the Component Units are considered single employers for the purpose of recording their OPEB liabilities.

### Plan Description

The *New York City Other Postemployment Benefits Plan* is a fiduciary component unit of the City and is composed of: (1) the New York City Retiree Health Benefits Trust (NYCRHBT) which is used to receive, hold, and disburse assets accumulated to pay for some of the OPEB provided by the City to its retired employees, and (2) OPEB paid for directly by the City out of its general resources rather than through NYCRHBT. NYCRHBT was established for the exclusive benefit of the City's retired employees and their eligible spouses and dependents, to fund some of the OPEB provided in accordance with the City's various collective bargaining agreements and the Administrative Code of the City of New York (ACCNY).

Please note that the OPEB valuation results presented in this Report show the value of OPEB in effect during each fiscal year and do not represent an obligation of the City or the Component Units to continue, modify, or eliminate OPEB in the future.

**Plan Administration:** New York City Office of Labor Relations (OLR) administers the New York City Health Benefits Program which includes the New York City Postretirement Benefits Program (Program), a defined benefit postretirement benefits plan. ACCNY Section 12-126 defines OPEB payable to include Health Insurance and Medicare Part B Premium Reimbursement.

Welfare Fund benefits are provided through Welfare Fund arrangements agreed upon, in most cases, through collective bargaining.

**Plan Membership:** For the Fiscal Year 2018 OPEB valuation, membership consisted of the following. Comparative values for the Fiscal Year 2017 valuation are also shown.

Membership Status as of Beginning of Fiscal Year (excluding Component Units)	FY 2018	FY 2017
Active plan members	292,672	287,699
Active/Inactive plan members who may become eligible to receive benefits	22,588	21,232
Inactive plan members entitled to but not yet receiving benefits	15,871	15,372
Inactive plan members or beneficiaries currently receiving benefits	<u>232,770</u>	<u>229,725</u>
Total	563,901	554,028

**Eligibility and Benefits:** Please see Section 2 of this Report for a summary of plan provisions.

**Contributions:** The City contributions to fund the OPEB benefits are currently reimbursing the NYCRRHBT on a pay-as-you-go basis with the possibility of additional contributions that are intended to build the fund for purposes of paying future benefits. The City is not required to provide funding for the OPEB Plan beyond the pay-as-you-go amounts for benefits to currently eligible retirees and their dependents. During Fiscal Year 2018, the City contributed approximately \$2.7 billion to the OPEB Plan.

**Assets:** Assets are valued at fair value.

Section 6 includes two tables showing the detailed financial position of the Plan as of June 30, 2018 and June 30, 2017. The statement of Net Fiduciary Position represents assets of the Plan and not the NYCRRHBT.

- Table 1 sets forth the assets of the Plan.
- Table 2 sets forth the changes in net assets and includes non-trust activity for Fiscal Years 2018 and 2017.

Asset and other financial information reflected in this valuation for the City and the Plan were provided by OMB on August 17, 2018 and checked for reasonability by the OA.

## Investments

**Rate of Return:** The return was 0.86% for the fiscal year ended June 30, 2018. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## Receivables

See Section 6.

## Net OPEB Liability of the City

The components of the net OPEB liability at June 30, 2018, along with comparative values as of June 30, 2017 are as follows:

(\$'s in millions)	June 30, 2018	June 30, 2017
Total OPEB liability	\$103,234	\$93,053
Plan fiduciary net position	\$4,766	\$4,654
Net OPEB liability	\$98,468	\$88,399
Plan fiduciary net position as a percentage of the total OPEB liability	4.6%	5.0%

## Actuarial Assumptions

Please see Section 4 of this Report for a description of actuarial assumptions.

## Schedules of Required Supplementary Information

The Schedules of Required Supplementary Information can be found in Section 7.

### Notes to Schedules:

- **Benefit changes:** None
- **Methods and assumptions used:** See Section 4 of this Report for a detailed description of assumptions and methods.
- **Changes of assumptions:** The discount rate used to measure liabilities was updated to reflect the S&P Municipal Bond 20-Year High Grade Index yield as of 6/29/2018 as per GASB74/75 guidance. Certain per capita claims costs were updated based on recent experience. Please see Section 4 of this Report for a detailed description of actuarial assumption changes.

### Sensitivity of the Net OPEB Liability

The sensitivity of the Net OPEB Liability to changes in the discount rate and healthcare cost trend rate can be found in Section 7.

### Projection of Fiduciary Net Position

In projecting the fiduciary net position of the plan, the amount of projected cash flows for contributions from the City was assumed to equal the actual cost of benefits plus the average of contributions above the actual cost of benefits in the last five years. A portion of the future employer contributions was assumed to be associated with the service cost for future employees. A further portion was assumed to be associated with non-trust benefit payments. The projected benefit payout and fiduciary net position amounts were compared for each year in the projection period. The plan fiduciary net position is projected to be greater than the benefits to be made in all years until 2027, during which the crossover point occurs. During 2027, the plan fiduciary net position will not be sufficient to make all benefit payments for current participants, and will not be sufficient to make any benefit payments thereafter. The valuation includes the determination of the single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the present value of trust paid benefits before the crossover point using the long-term asset return assumption of 4.00%, and the present value of other benefits (e.g. non trust and after the crossover point) using the assumed municipal bond rate of 2.98%. This single equivalent rate of return is 3.01%.

## SECTION 2 – SUMMARY OF PLAN PROVISIONS

<b>Plan Sponsor</b>	New York City. The valuation includes results for the component units, HHC, NYCHA, SCA, and WFA that participate under the same plan terms. In addition, the valuation includes results for ECF, which participates in the New York State Health Insurance Program (NYSHIP), described later in this section.
<b>Plan Name</b>	New York City Health Benefits Program (Program)
<b>Eligibility (City)</b>	<p>Retirees can participate if they satisfy one of the following criteria:</p> <p><u>Retirees</u></p> <ul style="list-style-type: none"> <li>• At least 10 years of credited service as a member of the NYCERS (five years of credited service if employed on or before December 27, 2001; 15 years of service if a member of TRS or BERS, represented by the United Federation of Teachers and employed after April 27, 2010; no service requirement for accidental disability retirements) and be working at least 20 hours a week at termination of active service, plus</li> <li>• Receives a pension check from the NYCERS (or is eligible for certain Deferred Retirement benefits). Payability date varies by System and group.</li> </ul> <p><u>Terminated Vested Members</u></p> <ul style="list-style-type: none"> <li>• Eligible for OPEB the same as retirees once in receipt of a pension benefit if the other eligibility rules for retirees are satisfied.</li> </ul> <p><u>Members Eligible for Certain Deferred Retirement Benefits</u></p> <ul style="list-style-type: none"> <li>• Certain members of NYCERS, TRS and BERS who have at least 20 years of credited service are eligible for up to five years of OPEB coverage prior to commencement of pension benefits.</li> </ul> <p><u>Members Terminated for Other than Immediate Retirement</u></p> <ul style="list-style-type: none"> <li>• Members who do not have retiree medical coverage under the retiree medical provisions are eligible to continue coverage under COBRA provisions. COBRA continuation coverage is generally limited to certain maximum periods (generally to the end of 36 months under New York State insurance law).</li> </ul> <p><u>Spouses and Other Dependents</u></p> <ul style="list-style-type: none"> <li>• Spouses of retirees are covered. Children of retirees are covered to age 26, or longer if disabled. Dependent coverage is terminated when a retiree dies, except in the following situations:             <ol style="list-style-type: none"> <li>i. Lifetime coverage is provided to the surviving spouse or domestic partner and to children (up to age 26) of uniformed members of the Police or Fire Departments who die in the Line of Duty.</li> <li>ii. Effective November 13, 2001, other surviving spouses of retired uniformed members of the Police and Fire Departments may elect to continue coverage for life by paying 102% of the stated premium.</li> </ol> </li> </ul>

- iii. Effective August 31, 2010, surviving spouses of retired uniformed members of the Departments of Correction and Sanitation may elect to continue coverage for life by paying 102% of the stated premium.

**Eligibility (ECF)**

Eligible for retirement and OPEB at age 55 with 10 years of service. Termination after 10 years of service entitles employees to deferred pension benefits and OPEB. Disability retirement with OPEB is available after 10 years of service. Unlike the New York City Health Benefits Program, ECF is assumed to offer retiree health coverage that continues for dependents after the death of the retiree. ECF employees who retire after 1995 are also eligible for dental insurance.

**Eligibility (TIAA)**Retirees

- Hired before July 1, 1976: Age 55 with 10 years of service.
- Hired on or after July 1, 1976: Age 62 with 15 years of service.

Exception for Executive Compensation Plan (ECP) employees: Age 55 with 10 years of service.

Terminated Vested Members

- Hired before July 1, 1976: Terminate with 15 years of service, benefit commences at age 55.
- Hired between July 1, 1976 and August 31, 1985: Terminate with 10 years of service, benefit commences at age 62 with no subsequent full-time employment at another college, university, or institution of post-secondary education.
- Hired on or after September 1, 1985: Terminate with 15 years of service, benefit commences at age 62 with no subsequent full-time employment at another college, university, or institution of post-secondary education.

Exception for ECP Employees: Terminate with 10 years of service, benefit commences at age 55 with no subsequent full-time employment at another institution of post-secondary education.

Disability Retirement

- A member who is disabled with at least 10 years of service and receiving a benefit from the Optional Retirement Program (TIAA) is entitled to retiree health benefits.

**Covered Benefits**

The City and certain Component Units provide OPEB through the Program. In addition, the City provides certain Program benefits through the Stabilization Fund. The City and certain Component Units contribute to various Welfare Funds, generally negotiated with and administered by various labor organizations. The City and certain Component Units also reimburse Medicare Part B Premiums paid by eligible retirees and other eligible beneficiaries.

**OPEB Coverage Groupings**

The City subsidizes only some of the OPEB described herein for various groups of NYCERS retirees.

The table below presents, by payroll agency, those benefits assumed to be provided by the City for purposes of the Fiscal Year 2018 OPEB valuation. There is no change in coverage from the prior OPEB valuation.

For the Component Units included in the OPEB valuation, the benefit categories not paid by the City are reflected in the results of the individual Component Units (i.e. Payroll Agencies in bold below).

**New York City Retirement Systems  
Components of Post-Retirement Medical Benefits  
Paid By New York City**

<b>Payroll Agency</b>	<b>Health Insurance</b>	<b>Welfare Fund <sup>2</sup></b>	<b>Medicare Part B</b>
Charter Schools	Yes	Yes	Yes
Custodial Engineer	Yes	Yes	Yes
CUNY - Senior Colleges	No <sup>1</sup>	Yes <sup>3</sup>	Yes
CUNY - Community Colleges	Yes	Yes	Yes
Correction Department	Yes	Yes	Yes
CP Engineers	No <sup>1</sup>	No	No
Courts (State)	Yes	Yes	Yes
DA Investigators	Yes	Yes	Yes
Department of Education	Yes	Yes	Yes
HSG Develop Corp	No	No	No
<b>Health and Hospital Corp</b>	No <sup>1</sup>	No	Yes
<b>Housing Authority</b>	No <sup>1</sup>	No	No <sup>1</sup>
Housing Police (Retirees Only)	Yes	Yes	No <sup>1</sup>
Regular	Yes	Yes	Yes
REMIC	NA	NA	NA
Sanitation	Yes	Yes	Yes
<b>School Construction Authority</b>	Yes	No	Yes
State Housing	No	No	No
Transit Authority	No <sup>1</sup>	No	No
Transit Police (Retirees Only)	Yes	Yes	Yes
Triboro Bridge	No	No	No
<b>Water Finance Authority</b>	No <sup>1</sup>	No	Yes
POLICE	Yes	Yes	Yes
FIRE	Yes	Yes	Yes
TIAA - Senior Colleges	No <sup>1</sup>	No	Yes
TIAA - Community Colleges	Yes	Yes	Yes
<b>ECF</b>	No	No	No
LOD Survivors	Yes	No	Yes

<sup>1</sup> The City pays these benefits upfront, not out of the NYCERHBT, and then is reimbursed.

<sup>2</sup> Welfare Fund coverage not available to pre-1/1/1971 retirees. LOD death beneficiary coverage provided through Stabilization Fund.

<sup>3</sup> The City pays the Welfare Fund for non-pedagogical CUNY Senior Colleges retirees.

**Basic Coverage**

The City and certain Component Units currently provide Basic Medical Coverage (Basic Coverage) at no cost if a non-Medicare-eligible retiree participates in HIP HMO or GHI/EBCBS indemnity arrangement, or a Medicare-eligible retiree participates in HIP HMO or GHI/EBCBS Senior Care.

Basic Coverage includes hospital and physician coverage and excludes coverage for prescription drugs. GHI/EBCBS Senior Care coordinates with Medicare Part A and Medicare Part B on a supplemental basis. Under the HIP HMO, Medicare-eligible retirees generally participate in a Medicare Advantage Plan under Medicare Part C. Cost sharing provisions (e.g. deductibles, co-payments) are assumed to change over time to contain the overall cost of coverage. Basic Coverage under other plans may require additional retiree contributions.

Other plans available to non-Medicare-eligible retirees include Aetna EPO, CIGNA, Empire HMO, Empire EPO, GHI HMO, MetroPlus, and Vytra Health Plans.

Other plans available to Medicare-eligible retirees include Medicare supplemental plans, such as Empire Medicare-Related Coverage and various Medicare Advantage arrangements (e.g. MediBlue).

Retirees of the Component Units included in this valuation, other than ECF, have the same coverage as City retirees. It is the understanding of the OA that ECF retirees are covered by NYSHIP.

Retirees may waive Basic Coverage. The City and the Component Units do not provide both subscriber and dependent coverage for the same individual.

**Medicare Part B  
Premium  
Reimbursement**

Upon application, the City and certain Component Units reimburse the Medicare Part B Premium for all Medicare-eligible retirees and eligible covered dependents. The reimbursement includes the base Part B premium and any additional premium charged to high-income retirees via the Income Related Monthly Adjustment Amounts (IRMAA).

**Welfare Funds**

The City and certain Component Units pay annual per capita contributions directly to the various Welfare Funds that cover retirees for certain health care benefits not provided through the Basic Coverage. Welfare Fund benefits may include, but are not limited to, prescription drug, vision, and dental coverage, sometimes with dollar limits. In addition, the Welfare Funds provide non-health related benefits such as life insurance, accidental death or disability benefits, legal services, or short or long-term disability benefits. The Welfare Funds are generally separate legal entities, often administered by various labor organizations. Information on the Welfare Funds is available in a Special Report issued by the Office of the Comptroller (Comptroller Report)<sup>2</sup>.

Contributions are sometimes made for active employees to Welfare Funds that are combined with retirees. Alternatively, contributions are made to separate retiree only funds. The Welfare Funds' per capita contributions apply only to retirees and not to covered dependents even though a particular Fund may choose to extend its coverage to dependents. The contributions for retirees are generally made only on behalf of individuals who retired in or after 1971. In recent years, a portion of the Welfare Fund contributions has been reimbursed by the Stabilization Fund. The valuation includes Welfare Fund contributions whether they come from the Stabilization Fund or directly from the City or CUs.

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<sup>2</sup> Analysis of the Financial and Operating Practices of Union-Administered Benefit Funds with Fiscal Years Ending in Calendar Year 2014, issued June 29, 2017, [https://comptroller.nyc.gov/wp-content/uploads/documents/SR17\\_071S.pdf](https://comptroller.nyc.gov/wp-content/uploads/documents/SR17_071S.pdf).

The per capita contribution amounts change periodically based on negotiated contract provisions. In addition to prospective increases, the collective bargaining agreements have provided for ad hoc lump-sum payment amounts to the Welfare Funds. The 2014 Municipal Labor Committee (MLC) Health Savings Agreement reflected in this valuation includes scheduled increases through Fiscal Year 2018. Thereafter, starting in Fiscal Year 2019, the valuation assumes that the contribution amount to the Welfare Funds will increase at the Welfare Plan trend rates.

### **Stabilization Fund**

The City maintains and has historically contributed to the Health Insurance Stabilization Reserve Fund (Stabilization Fund). Certain Component Units are understood to have contributed to the Stabilization Fund in situations where the GHI/EBCBS premiums paid would be lower than the HIP benchmark premium. In addition, the Stabilization Fund receives dividends from participating insurance carriers including the GHI/EBCBS arrangement.

The Stabilization Fund has been used to provide the following health related benefits:

- A GHI Home Care benefit for certain non-Medicare participants.
- Welfare Fund contributions for the Line-of-Duty Survivors. In addition, the Stabilization Fund has reimbursed the City, various Component Units, and other entities participating in the Program for a portion of Welfare Fund contributions.
- Injectables and Chemotherapy Drug plan for certain non-Medicare participants (formerly referred to as PICA, but psychotropic and asthma drugs are not currently covered).
- New York County Health Services Review Organization for utilization review for the GHI/EBCBS arrangement.
- Healthline (Intracorp) providing pre-certification of hospitalization for GHI/EBCBS participants.

In addition, under the 2014 Municipal Labor Committee (MLC) Health Savings Agreement, the Stabilization Fund has agreed to provide up to \$150 million over four years and \$60 million each year thereafter to the Welfare Funds. In addition, the Stabilization Fund has made a contribution to fill the gap between savings realized from the savings program initiatives and the required savings target for the fiscal year.

The OA is not aware of any valuation performed by the Stabilization Fund for measurements under GASB74 or other purposes. Thus, the OA has not considered the impact of any such calculations on the analyses herein.

### **ECF Coverage**

NYSHIP health benefits consist of a hospital program, medical program covering amounts after copayment at participating providers, managed mental health and substance abuse program, and card-based prescription drug program. NYSHIP requires retirees to enroll in Medicare Part A and Medicare Part B, and mandates that participants be reimbursed for Medicare Part B Premiums. NYSHIP provides drug coverage to Medicare eligible participants through a Medicare Part D Employer Group Waiver Plan (EGWP).

### SECTION 3 – DEMOGRAPHIC INFORMATION

The OA performed tests for reasonability on the census data selected for this valuation. On the basis of these tests, the Actuary believes the data is sufficiently complete and appropriate for determining the OPEB obligations in total for the City, for the Plan, and for the Component Units presented in this valuation.

In general, the census data used in the Fiscal Year 2018 OPEB valuation is based upon the census data used in the June 30, 2017 (Lag) pension actuarial valuations of the NYCERS to determine the Preliminary Fiscal Year 2019 employer contributions.

This census data was supplemented by information provided by the OLR related to eligible retirees and other eligible beneficiaries covered by the Program. The census data does not generally include employees who are not yet participants in the NYCERS.

In addition, census data was provided for the following groups not part of the NYCERS:

- Active employees of CUNY who participate in TIAA or CIRS.
- Retired employees of CUNY who participate in TIAA and have been participating in the New York City Health Benefits Program.
- Line-of-Duty Survivors who are currently receiving continued lifetime medical coverage and Medicare Part B Premium reimbursements.

The census data is broken into the following major classifications as used in the NYCERS pension actuarial valuations:

- Actives (in payroll status as of the valuation date).
- Active/Inactives (generally, still a NYCERS member but no longer on payroll as of the valuation date).
- Deferred Vesteds and Deferred Retirees (separated from service, eligible for a pension benefit but not yet in receipt).
- Retirees and other Eligible Beneficiaries (in receipt of pension benefit).

Certain individuals who were classified as retired in the NYCERS pension actuarial valuation were not included in the census of retired medical participants provided by OLR because the participants had not filed for coverage with the OLR. In previous valuations, it had been assumed that most non-filers would soon elect their coverage. The non-filers were assumed to have single coverage electing the GHI option, and were assumed to be on Medicare if over age 65. Approximately 8,900 individuals were valued using this assumption. Based on multiple years' repetition of the non-filer status for many of these individuals, this valuation includes an assumption that a portion of future retirees from NYCERS will also be non-filers. This assumption was used for the first time in the Fiscal Year 2017 valuation.

Census data was not available for individuals on COBRA continuation, including those surviving spouses of POLICE, FIRE, Corrections, or Sanitation members who are entitled to similar lifetime COBRA continuation coverage, as this benefit is administered directly by the insurance carriers. These participants' obligation was estimated based on current census of POLICE, FIRE, Corrections, and Sanitation retirees.

The following tables set forth details of the census data used in this Report:

## Plan Participation

**Table 3a**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

### PLAN PARTICIPATION - NYCERS

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City*	14,807	4,038	720	762	20,327
Component Units:					
HHC	2,633	578	110	107	3,428
NYCHA	1,227	547	57	61	1,892
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City*	36,705	9,409	2,677	2,745	51,536
Component Units:					
HHC	13,472	3,240	654	901	18,267
NYCHA	4,462	1,178	230	332	6,202
WFA	2	1	0	0	3

\*The City headcounts include SCA retirees since the City is responsible for SCA's health insurance coverage.

**Table 3b**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

**PLAN PARTICIPATION - TRS**

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	9,287	1,093	165	899	11,444
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	57,711	4,195	1,484	3,049	66,439
Component Units:					
HHC	8	0	0	0	8
NYCHA	3	1	0	0	4
WFA	0	0	0	0	0

**Table 3c**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

**PLAN PARTICIPATION - BERS**

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City*	1,522	353	26	194	2,095
Component Units:					
HHC	1	0	0	0	1
NYCHA	4	0	0	0	4
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City*	10,816	2,231	223	844	14,114
Component Units:					
HHC	3	0	0	0	3
NYCHA	13	1	1	1	16
WFA	0	0	0	1	1

\*The City headcounts include SCA retirees since the City is responsible for SCA's health insurance coverage.

**Table 3d**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

**PLAN PARTICIPATION - POLICE**

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	24,677	2,383	1,372	1,267	29,699
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	15,692	1,837	1,274	477	19,280
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

**Table 3e**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

**PLAN PARTICIPATION - FIRE**

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	5,830	609	513	112	7,064
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	7,271	1,060	632	185	9,148
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

**Table 3f**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

**PLAN PARTICIPATION - TIAA**

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	29	1	1	0	31
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	735	44	42	0	821
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

**Table 3g**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**

**PLAN PARTICIPATION - LODW**

<b>Pre-Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	39	7	4	0	50
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0
<b>Medicare Headcounts</b>	<b>GHI Indemnity</b>	<b>HIP HMO</b>	<b>Other HMO</b>	<b>Waived</b>	<b>Total</b>
City	605	98	19	0	722
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

## Annual Welfare Fund Contributions

**Table 3h**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS**

UWF	Description	Count <sup>1</sup>	6/30/15 Rate <sup>2</sup>	6/30/16 Rate <sup>2</sup>	6/30/17 Rate <sup>2</sup>
001	NYC MANAGEMENT WELFARE FUND	7,845	\$1,665	\$1,690	\$1,715
005	ALLIED BUILDNG INSPECTORS	352	1,665	1,690	1,715
010	ASST DEP WARDENS ASSC SBF	418	1,515	1,540	1,715
030	CORRECTION CAPTAINS ASSOC	1,841	1,515	1,540	1,565
035	CORRECT OFFICRS BEN ASSOC	8,799	1,665	1,690	1,715
040	NYS COURT OFFICERS ASSOC	1	830	830	830
045	CWA LOCAL 1182 RETIREE SBF	411	1,665	1,690	1,715
046	CWA L1181 SEC BEN FND RET	300	1,665	1,690	1,715
048	DETECT END ASSN RET FUND	6	1,498	1,523	1,548
049	DET END ASSN RET FUND (T)	154	1,498	1,523	1,548
050	DET END ASSN RET FUND (H)	109	1,498	1,523	1,548
055	DEA RET FND(PBA OF THE DA)	124	1,548	1,573	1,548
060	DISTRICT COUNCIL 37	35,731	1,665	1,690	1,915
061	DC 37 - (TAPD CIVILIANS)	6	1,665	1,690	1,715
066	DC 37 MEBA - FERRYBOATS	96	1,665	1,690	1,715
070	DOCTORS CNCL RET WELF FND	479	1,540	1,540	1,540
075	LCL 3 IBEW ELECTR INSPECT	29	1,665	1,690	1,715
080	FIRE ALARM DSP BEN ASSOC	161	1,665	1,690	1,715
081	UNKNOWN	1	1,665	1,690	1,715
100	LPN RETIREE WELFARE FUND	610	1,665	1,690	1,715
105	OSA SUPV.EMG.MED.SVC.SPEC	30	1,665	1,690	1,715
106	OSA WELF FND-SCHOOL SEC/T	38	1,665	1,690	1,715
107	OSA WELF FUND -SAN CHIEFS	70	1,565	1,590	1,615
108	ORG OF STAFF ANALYSTS	2,269	1,665	1,690	1,715
109	LCL 14 MUN W F-CRANE OPER	34	1,640	1,690	1,715
110	L144 DIV OF L1199 NHHSEU	533	1,615	1,640	1,665
115	LOCAL 306 RETIR HLTH WELF	9	1,665	1,690	1,715
120	LOCAL 333 DOCKHANDS	190	1,665	1,690	1,715
130	LOCAL 832 RETIREES	44	1,865	2,170	2,195
131	UNKNOWN	54	1,665	1,690	1,915
135	RET CWA L1183 DOE H&W FND	123	1,778	1,803	1,828
140	1199 NHHSEU	372	1,665	1,690	1,715
155	LCL 1180 CWA RET BENE FND	5,862	1,700	1,725	1,750
156	L1180 RET BEN FD-TAPD CIV	1	1,700	1,725	1,750
160	NYC DEPY SHER ASS RET SBF	72	1,390	1,415	1,440
162	UFT WELFARE FUND	37	1,745	1,770	1,795
163	UFT WELFARE FUND	36	1,745	1,770	1,795
164	COUNCIL OF SUPERVISORS AND ADMINISTRATORS	8	1,745	1,770	1,795

**Table 3h (continued)**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS**

<b>UWF</b>	<b>Description</b>	<b>Count<sup>1</sup></b>	<b>6/30/15 Rate<sup>2</sup></b>	<b>6/30/16 Rate<sup>2</sup></b>	<b>6/30/17 Rate<sup>2</sup></b>
165	RET WELF FND AUTO SVC WKR	39	1,665	1,690	1,715
170	PBA (NYPD)	9	1,579	1,579	1,609
171	PBA (NYPD) (TA)	1,457	1,579	1,579	1,609
172	PBA (NYPD) (HA)	487	1,579	1,579	1,609
185	NYS NURSES ASSOCIATION	3,556	1,665	1,690	1,715
187	PAVERS & RDBULDERS INSPCT	37	1,665	1,690	1,715
188	LEEBA RETIREES WELF FUND	3	1,665	1,690	1,715
190	UNITED PROBATION OFFICERS	407	1,748	1,773	1,798
200	SANITATION OFF RET WEL FN	2,411	1,415	1,440	1,465
225	SOC NYPD LT BENEV ASSOCIA	2	1,590	1,615	1,640
226	SOC NYPD CAPT ENDOW ASSOC	8	1,590	1,615	1,640
228	SOC NYPD LT BENEV ASS0(T)	97	1,590	1,615	1,640
229	SOC NYPD CAPT END ASS (T)	30	1,590	1,615	1,640
230	SBA HLTH&WELF FUND/RET(T)	208	1,740	1,740	1,740
231	SOC NYPD LT BENEV ASSO(H)	68	1,590	1,615	1,640
232	SOC NYPD CAPT END ASSN(H)	36	1,590	1,615	1,640
233	SBA HLTH&WELF FUND/RET(H)	114	1,740	1,740	1,740
235	L237 RETIREE BENE FND-CW	6,934	1,865	2,170	2,195
250	USA RETIREES' WELFARE FND	7,034	1,934	1,959	1,984
251	UNKNOWN	208	1,665	1,690	1,915
260	LCL 300 RETIREE WELF FUND	394	1,665	1,690	1,715
261	LEEBA RETIRED EES WELF FD	9	1,665	1,690	1,715
275	PROFESSIONAL STAFF CONGRESS	207	1,890	1,915	1,940
276	PROFESSIONAL STAFF CONGRESS	2	1,890	1,915	1,940
555	CIVILIAN, TRANSIT POLICE DEPT. NYC TRANSIT	22	1,665	1,690	1,715
556	UNKNOWN	7	1,665	1,690	1,915
605	NYSCCA SEC BEN FND RETIRE	1	930	930	930
700	LCL 237 RWF(L621 SUP MEC)	243	1,665	1,690	1,715
701	LCL 237 RWF(L621 SUP I W)	10	1,665	1,690	1,715
702	LOCAL 237 RWF(L621 DDMEM)	5	1,665	1,690	1,715
703	L237 BRCKLYR RETIREES	98	1,865	2,170	2,195
704	L1969(L806 BRDG PAINTERS)	30	1,665	1,690	1,715
705	L.40 361&417 JT UN SEC FD	44	1,540	1,540	1,615
706	LCL 3 IBEW COMMUN ELEC ET	56	1,565	1,590	1,615
709	L237RWF (L621 ADFM)	3	1,665	1,690	1,715
712	LCL 3 IBEW ELCTRCN SUP HL	526	1,665	1,690	1,715
714	LCL 237 ELEV MECH RETIREE	280	1,865	1,890	1,915
715	LCL237MASON'S HLPS RETIRE	22	1,865	2,170	2,195
717	LOCAL 1969, GLAZIERS	36	1,665	1,690	2,115
720	DC37 LOCKSMITH SUPV LKSMT	44	1,565	1,590	1,615
724	RET H&W FD L3 IBEW-SUP.ME	69	1,565	1,590	1,615

**Table 3h (continued)**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS**

<b>UWF</b>	<b>Description</b>	<b>Count<sup>1</sup></b>	<b>6/30/15 Rate<sup>2</sup></b>	<b>6/30/16 Rate<sup>2</sup></b>	<b>6/30/17 Rate<sup>2</sup></b>
725	UNKNOWN	47	1,665	1,690	1,715
727	LCL 2 CIVIL SVC PLUMBERS	438	1,665	1,690	1,715
728	LCL 1969 NYC PAINTERS	308	1,665	1,690	2,115
730	PAVERS RDBLDR DC PAVERS	2	1,365	1,390	1,415
731	LCL 237 ROOF RETIREES	26	1,865	2,170	2,195
732	LCL237PLASTERERS RETIREES	193	1,865	2,170	2,195
736	RET.WF AUTO MECH-UPSTATE	26	1,665	1,690	1,715
738	RET WELF FND AUTO MECHNYC	870	1,665	1,690	1,715
739	RET WELF FUND-TRACT OPERS	7	1,665	1,690	1,715
741	RET WELFARE FUND MOTOR GRA OPERATOR	17	1,665	1,690	1,715
742	LCL 14 PILE DRIVING ENGNR	3	1,640	1,690	1,690
743	DC 37 HIGHWAY REPAIRERS	330	1,665	1,690	1,915
744	DC 37 FURNIT MAINTAINER	1	1,665	1,690	1,715
745	DC37 CYLD PRESS OPERATOR	18	1,665	1,690	1,715
746	LCL 300 HIGHWAY REPAIRERS	17	1,665	1,690	1,715
747	PAVERS RDBLDRS HW SP HW R	15	1,665	1,690	1,715
748	LCL 14-RETIR. GAS RLR ENG	13	1,640	1,690	1,715
749	DC37SUPERVISOR HIGHWAY RE	91	1,565	1,590	1,615
750	LCL300 SUPV.HWY REPAIRER	8	1,565	1,590	1,615
751	PAVERS & RDBULDERS - SUPERVISOR HIGHWAY RE	5	1,565	1,590	1,615
753	DC37 COMPOSITOR (JOB)	10	1,665	1,690	1,715
754	RET WEL FUND CARRGE UPHOL	2	1,665	1,690	1,715
756	LCL 237 CEMENT MAS RETIRE	49	1,865	2,170	2,195
777	PATROLMEN'S BENEVOLENT ASSOCIATION (LINE-OF-DUTY SURVIVORS)	4	0	0	0
782	LCL 237 HORSE/HARN RETIRE	3	1,865	2,170	2,195
786	DC37 CITY LABORERS	472	1,665	1,690	1,715
787	DC37 CONSTRUCTION LABORER	295	1,665	1,690	1,915
804	LCL 237 MAINT WKR RETIREE	1,011	1,865	2,170	2,195
808	LCL 30, OILER	205	1,665	1,690	1,715
812	DC37 RADIO REPAIR MECHANI	49	1,665	1,690	1,715
814	LCL 246 RWF RUBR TIRE REP	16	1,665	1,690	1,915
816	DC37 SEWAGE TRTMT WKRS	440	1,665	1,690	1,715
818	RET WEL FND SGN PTRS/LTRS	4	1,665	1,690	1,715
820	LCL 30 STAT ENG SR ST ENG	482	1,665	1,690	1,715
823	NYC DIST.COUNCIL OF CARPS	423	1,665	1,690	1,715
825	NYC DIST COUNCIL OF CARPS	4	1,665	1,690	1,715
826	LCL 3 IBEW SR STAT ENGR E	98	1,665	1,690	1,715
827	RET WEL FND SHEET MTL WKR	48	1,665	1,690	1,715

**Table 3h (continued)**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS**

UWF	Description	Count <sup>1</sup>	6/30/15 Rate <sup>2</sup>	6/30/16 Rate <sup>2</sup>	6/30/17 Rate <sup>2</sup>
828	LCL 3 IBEW STATN ENGR ELE	214	1,665	1,690	1,715
832	DC 37 HI-PRESS PLANT TEND	111	1,665	1,690	1,715
837	LCL LDG 5 BLKSMTH HLP SUP	44	2,583	2,583	2,583
838	NYC DIST. COUNCIL OF CARP	30	1,665	1,690	1,715
839	LCL LDG 5 BOLRMKR HLP SUP	19	860	860	860
842	LCL 638 STMFTRS HLPR SUPR	79	1,665	1,690	1,715
843	LOCAL 15-GASOLINE RLR ENG	22	1,665	1,690	1,715
845	LCL 15 WELDERS FD	63	1,665	1,690	1,715
847	LCL 15 HIPRESS OPER.	2	990	1,015	1,040
848	LCL 15 TRACTOR OPER(SANI)	102	1,665	1,690	1,715
888		185	0	0	0
948		1	0	0	0
950	Either not entitled to Welfare Fund Benefits or UWF contribution is not funded by the City. Medicare Part B reimbursement.	10	0	0	0
960		10	0	0	0
999		60	0	0	0
Blank		6,617	0	0	0
<b>Total Count:</b>		<b>106,127</b>			

<sup>1</sup> Data includes entire population provided by OLR and supplemented by the OA, including Component Units and other groups not attributable to the City for GASB75 purposes.

<sup>2</sup> Rates used as of June 30, 2015, June 30, 2016, and June 30, 2017 include any known one-time Welfare Fund payments paid during the Fiscal Year following the date of the rate. Also reflected are any known retroactive increases as of their effective date. Effective rates and information on one-time payments are based on information supplied by OLR. The rate for DC37 was used for UWFs without a reported rate. Rates for Professional Staff Congress came from its website. An additional \$100 was added to each amount as of 7/1/2017, assuming that any welfare funds who have not yet negotiated the increase will do so in the future.

**Table 3i**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - TRS**

<b>UWF</b>	<b>Description</b>	<b>Count<sup>1</sup></b>	<b>6/30/15 Rate<sup>2</sup></b>	<b>6/30/16 Rate<sup>2</sup></b>	<b>6/30/17 Rate<sup>2</sup></b>
001	NYC MANAGEMENT WELFARE FUND	180	\$1,665	\$1,690	\$1,715
035	CORRECT OFFICRS BEN ASSOC	1	1,665	1,690	1,715
045	CWA LOCAL 1182 SEC BEN FUND	1	1,665	1,690	1,715
055	DEA RET FUND (PBA OF THE DA)	1	1,548	1,573	1,548
060	DISTRICT COUNCIL 37	682	1,665	1,690	1,915
108	ORG OF STAFF ANALYSTS	4	1,665	1,690	1,715
155	LCL 1180 CWA RET BENE FND	25	1,700	1,725	1,750
163	UFT	67,154	1,745	1,770	1,795
164	COUNCIL OF SUPERVISORS AND ADMINISTRATORS	7,284	1,745	1,770	1,795
185	NYS NURSES ASSOCIATION	1	1,665	1,690	1,715
200	SANITATION OFF RET WEL FN	1	1,415	1,440	1,465
235	L237 RETIREE BENE FND-CW	12	1,865	2,170	2,195
275	PROFESSIONAL STAFF CONGRESS	2,226	1,890	1,915	1,940
276	PROFESSIONAL STAFF CONGRESS	22	1,890	1,915	1,940
277	SBA HLTH & WELF FND/RETIR	4	1,890	1,915	1,940
724	RET H&W Fd, L3, IBEW-SUP, ME	1	1,565	1,590	1,615
888		19	0	0	0
940	Either not entitled to Welfare Fund Benefits or	1	0	0	0
999	UWF contribution is not funded by the City.	31	0	0	0
Blank	Medicare Part B reimbursement.	1,961	0	0	0
<b>Total Count:</b>		<b>79,611</b>			

<sup>1</sup> Data includes entire population provided by OLR and supplemented by the OA, including Component Units and other groups not attributable to the City for GASB75 purposes.

<sup>2</sup> Rates used as of June 30, 2015, June 30, 2016, and June 30, 2017 include any known one-time Welfare Fund payments paid during the Fiscal Year following the date of the rate. Also reflected are any known retroactive increases as of their effective date. Effective rates and information on one-time payments are based on information supplied by OLR. The rate for DC37 was used for UWFs without a reported rate. Rates for Professional Staff Congress came from its website. An additional \$100 was added to each amount as of 7/1/2017, assuming that any welfare funds who have not yet negotiated the increase will do so in the future.

**Table 3j**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - BERS**

<b>UWF</b>	<b>Description</b>	<b>Count<sup>1</sup></b>	<b>6/30/15 Rate<sup>2</sup></b>	<b>6/30/16 Rate<sup>2</sup></b>	<b>6/30/17 Rate<sup>2</sup></b>
001	NYC MANAGEMENT WELFARE FUND	593	\$1,665	\$1,690	\$1,715
035	CORRECT OFFICRS BEN ASSOC	1	1,665	1,690	1,715
045	CWA LOCAL 1182 SEC BEN FUND	1	1,665	1,690	1,715
060	DISTRICT COUNCIL 37	12,106	1,665	1,690	1,915
106	OSA WELF FND-SCHOOL SEC/T	8	1,665	1,690	1,715
108	ORG OF STAFF ANALYSTS	21	1,665	1,690	1,715
115	LOCAL 306 RETIR HLTH WELF	11	1,665	1,690	1,715
130	LOCAL 832 RETIREES	324	1,865	2,170	2,195
131	DISTRICT COUNCIL 37	553	1,665	1,690	1,915
135	RET CWA L1183 DOE H&W FND	1	1,778	1,803	1,828
155	LCL 1180 CWA RET BENE FND	446	1,700	1,725	1,750
162	UFT WELFARE FUND	22	1,745	1,770	1,795
163	UFT WELFARE FUND	777	1,745	1,770	1,795
164	COUNCIL OF SUPERVISORS AND ADMINISTRATION	6	1,745	1,770	1,795
165	RET WELF FND AUTO SVC WKR	3	1,665	1,690	1,715
185	NYC RET HLTH&WEL FD-NYSNA	6	1,665	1,690	1,715
235	L237 RETIREE BENE FND-CW	416	1,865	2,170	2,195
250	USA RETIREES' WELFARE FUND	1	1,934	1,959	1,984
260	LCL 300 RETIREE WELF FUND	60	1,665	1,690	1,715
275	PROFESSIONAL STAFF CONGRESS	9	1,890	1,915	1,940
555	CIVILIAN, TRANSIT POLICE DEPT. NYC TRANSIT	1	1,665	1,690	1,715
700	LCL 237 RWF(L621 SUP MEC)	7	1,665	1,690	1,715
708	LOCAL 246, DEPT OF EDUCATION	3	1,665	1,690	1,915
712	LCL 3 IBEW ELCTRCN SUP HL	41	1,665	1,690	1,715
714	LCL 237 ELEV MECH RETIREE	3	1,865	1,890	1,915
717	LOCAL1969 GLAZIERS	11	1,665	1,690	2,115
720	DC37 LOCKSMITH SUPV LKSMT	4	1,565	1,590	1,615
724	RET H&W FD L3 IBEW-SUP.ME	24	1,565	1,590	1,615
725	UNKNOWN	1	1,665	1,690	1,715
727	LCL 2 CIVIL SVC PLUMBERS	44	1,665	1,690	1,715
728	LCL 1969 NYC PAINTERS	25	1,665	1,690	2,115
731	LCL 237 ROOF RETIREES	7	1,865	2,170	2,195
732	LCL237PLASTERERS RETIREES	9	1,865	2,170	2,195
738	RET WELF FND AUTO MECHNYC	29	1,665	1,690	1,715
740	RET WELF FND GEN MECHANIC	1	1,215	1,240	1,265
744	DC 37 FURNIT MAINTAINER	5	1,665	1,690	1,715
745	DC37 CYLD PRESS OPERATOR	1	1,665	1,690	1,715
756	LCL 237 CEMENT MAS RETIRE	1	1,865	2,170	2,195
760	LOCAL 246, DEPT OF EDUCATION	7	1,665	1,690	1,715
786	DC37 CONSTRUCT LABORER	17	1,665	1,690	1,715

**Table 3j (continued)**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - BERS**

<b>UWF</b>	<b>Description</b>	<b>Count<sup>1</sup></b>	<b>6/30/15 Rate<sup>2</sup></b>	<b>6/30/16 Rate<sup>2</sup></b>	<b>6/30/17 Rate<sup>2</sup></b>
787	DC37 CONSTRUCTION LABORER	3	1,665	1,690	1,915
804	LCL 237 MAINT WKR RETIREE	17	1,865	2,170	2,195
812	DC37 RADIO REPAIR MECHANI	6	1,665	1,690	1,715
820	LCL 30 STAT ENG SR ST ENG	6	1,665	1,690	1,715
823	NYC DIST.COUNCIL OF CARPS	99	1,665	1,690	1,715
826	LCL 3 IBEW SR SSTAT ENGR E	1	1,665	1,690	1,715
827	RET WEL FND SHEET MTL WKR	7	1,665	1,690	1,715
832	DC 37 HI-PRESS PLANT TEND	1	1,665	1,690	1,715
838	NYC DIST. COUNCIL OF CARP	17	1,665	1,690	1,715
839	LOCAL LODGE 5	1	860	860	860
842	LCL 638 STMFTRS HLPR SUPR	29	1,665	1,690	1,715
845	LCL 15 WELDERS FD	2	1,665	1,690	1,715
888	Either not entitled to Welfare Fund Benefits or UWF contribution is not funded by the City. Medicare Part B reimbursement.	10	0	0	0
999		26	0	0	0
Blank		435	0	0	0

**Total Count: 16,266**

<sup>1</sup> Data includes entire population provided by OLR and supplemented by the OA, including Component Units and other groups not attributable to the City for GASB75 purposes.

<sup>2</sup> Rates used as of June 30, 2015, June 30, 2016, and June 30, 2017 include any known one-time Welfare Fund payments paid during the Fiscal Year following the date of the rate. Also reflected are any known retroactive increases as of their effective date. Effective rates and information on one-time payments are based on information supplied by OLR. The rate for DC37 was used for UWFs without a reported rate. Rates for Professional Staff Congress came from its website. An additional \$100 was added to each amount as of 7/1/2017, assuming that any welfare funds who have not yet negotiated the increase will do so in the future.

**Table 3k**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - POLICE**

<b>UWF</b>	<b>Description</b>	<b>Count</b>	<b>6/30/15 Rate<sup>1</sup></b>	<b>6/30/16 Rate<sup>1</sup></b>	<b>6/30/17 Rate<sup>1</sup></b>
001	NYC MANAGEMENT WELFARE FUND	113	\$1,665	\$1,690	\$1,715
035	CORRECT OFFICRS BEN ASSOC	1	1,665	1,690	1,715
048	DETECT END ASSN RET FUND	12,191	1,498	1,523	1,548
055	DEA RET FUND (PBA OF THE DA)	1	1,548	1,573	1,548
163	UFT WELFARE FUND	2	1,745	1,770	1,795
164	COUNCIL OF SUPERVISORS AND ADMINISTRATION	1	1,745	1,770	1,795
170	PBA (NYPD)	23,050	1,579	1,579	1,609
225	SOC NYPD LT BENEV ASSOCIATION	3,814	1,590	1,615	1,640
226	SOC NYPD CAPT ENDOW ASSOCIATION	1,398	1,590	1,615	1,640
227	SBA HLTH & WELF FND/RETIR	7,515	1,740	1,740	1,740
777	PATROLEMEN'S BENEVOLENT ASSOCIATION (LINE-OF-DUTY SURVIVORS)	223	0	0	0
888		265	0	0	0
901		2	0	0	0
926		12	0	0	0
927		52	0	0	0
930	Either not entitled to Welfare Fund benefits or	25	0	0	0
931	UWF contribution is not funded by the City.	6	0	0	0
948	Medicare Part B reimbursement.	100	0	0	0
949		2	0	0	0
999		1	0	0	0
Blank		205	0	0	0
<b>Total Count:</b>		<b>48,979</b>			

<sup>1</sup> Rates used as of June 30, 2015, June 30, 2016, and June 30, 2017 include any known one-time Welfare Fund payments paid during the Fiscal Year following the date of the rate. Also reflected are any known retroactive increases as of their effective date. Effective rates and information on one-time payments are based on information supplied by OLR. The rate for DC37 was used for UWFs without a reported rate. Rates for Professional Staff Congress came from its website. An additional \$100 was added to each amount as of 7/1/2017, assuming that any welfare funds who have not yet negotiated the increase will do so in the future.

**Table 3I**  
**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**ANNUAL WELFARE FUND CONTRIBUTIONS - FIRE**

<b>UWF</b>	<b>Description</b>	<b>Count</b>	<b>6/30/15 Rate<sup>1</sup></b>	<b>6/30/16 Rate<sup>1</sup></b>	<b>6/30/17 Rate<sup>1</sup></b>
001	NYC MANAGEMENT WELFARE FUND	78	\$1,665	\$1,690	\$1,715
060	DISTRICT COUNCIL 37	7	1,665	1,690	1,915
065	DC 37 UNIF MARINE ENGR	108	1,685	1,710	1,735
163	UFT WELFARE FUND	5	1,745	1,770	1,795
170	PBA (NYPD)	3	1,579	1,579	1,609
205	RETIRED FIREFIGHTERS SBF	10,443	1,745	1,770	1,795
206	RET FIREFIGHTRS SBF-WIPER	10	1,595	1,620	1,645
240	UFOA LOCAL 854 RETIREES	4,783	1,620	1,645	1,670
888		195	0	0	0
901		1	0	0	0
905	Either not entitled to Welfare Fund Benefits	341	0	0	0
940	or UWF contribution is not funded by the	191	0	0	0
941	City. Medicare Part B reimbursement.	1	0	0	0
999		1	0	0	0
Blank		45	0	0	0
<b>Total Count:</b>		<b>16,212</b>			

<sup>1</sup> Rates used as of June 30, 2015, June 30, 2016, and June 30, 2017 include any known one-time Welfare Fund payments paid during the Fiscal Year following the date of the rate. Also reflected are any known retroactive increases as of their effective date. Effective rates and information on one-time payments are based on information supplied by OLR. The rate for DC37 was used for UWFs without a reported rate. Rates for Professional Staff Congress came from its website. An additional \$100 was added to each amount as of 7/1/2017, assuming that any welfare funds who have not yet negotiated the increase will do so in the future.

## SECTION 4 – ACTUARIAL ASSUMPTIONS AND METHODS

### General

<b>Basis for Assumptions</b>	<p>The actuarial assumptions used in the Fiscal Year 2018 OPEB valuation are a combination of those used in the NYCERS pension actuarial valuations and those specific to the OPEB valuations.</p> <p>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 (<a href="http://www.nyc.gov/actuary">www.nyc.gov/actuary</a>).</p> <p>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.</p> <p>For the Fiscal Year 2016 OPEB and pension valuations, new tables of post-retirement 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.</p>
<b>Actuarial Cost Method</b>	Entry Age Normal cost method, level percent of pay calculated on an individual basis.
<b>Valuation Date</b>	June 30, 2017
<b>Measurement Date</b>	June 30, 2018
<b>Asset Valuation</b>	Market value of assets.

**Discount Rate** 3.01% for benefits provided by the City, 2.98% for benefits provided by Component Units. Results as of the June 30, 2017 Measurement Date are presented at 3.17% for benefits provided by the City, and 3.13% for Component Units.

The projection of cash flows used to determine the discount rate assumed that the City will contribute at a rate equal to the pay-as-you-go amounts plus the average of contributions made over the most recent five-year period in excess of the pay-as-you-go amounts which was approximately \$700 million as of Fiscal Year 2018. The contributions apply first to service cost of future plan members based on projection of overall payroll at 3.0% and normal cost rate for Tier 6 members of each of the NYCRS. Remaining contributions are applied to the current and past service costs for current plan members.

Based on those assumptions, the City's OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees until 2026. After that time, benefit payments will be funded on a pay-as-you go basis. The discount rate is the single equivalent rate which results in the same present value as discounting future benefit payments made from assets at the long-term expected rate of return and discounting future benefit payments funded on a pay-as-you-go basis at the Municipal Bond 20-year Index Rate.

Results for the OPEB plans for Component Units are presented using a discount rate of the Municipal Bond 20-year Index Rate, since there is no pre-funding assumed for these plans.

**Long-Term Expected Rate of Return** 4.00% net of investment expenses, which includes an inflation rate of 2.50%.

The long-term rate of return is based on the Fund's investment policy and was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed separately from assumed inflation.

<u>Asset Class</u>	<u>Target Allocation as of June 30, 2018</u>	<u>Long-Term Expected Real Rate of Return</u>
Cash and cash equivalents	100%	1.50%

Nominal long-term expected rates of return for these assets are equal to the sum of the above expected long-term real rate and the expected long-term inflation rate of 2.50%.

**Municipal Bond 20-year Index Rate** S&P Municipal Bond 20-Year High Grade Rate Index, which was 2.98% as of June 29, 2018. Results as of the June 30, 2017 Measurement Date are presented using the same index, which was 3.13% as of June 30, 2017.

**Consumer Price Index** 2.50%.

**General Wage Increases** 3.00% per annum which includes an inflation rate of 2.50% and a general wage increase rate of 0.50%. For more information see the Silver Books.

**Assumed Healthcare Cost Trend Rate (HCCTR)**

<b>Year Ending<sup>1</sup></b>	<b>Pre-Medicare Plans</b>	<b>Medicare Plans</b>	<b>Medicare Part B Premiums</b>	<b>Welfare Fund Contributions</b>
2018 <sup>2</sup>	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%

<sup>1</sup> Fiscal Year for Pre-Medicare and Medicare Plans, and Welfare Fund Contributions; Calendar Year for Medicare Part B Premiums.

<sup>2</sup> 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 Fiscal Year 2018).

The near-term rate for the Pre-Medicare Plans has been based on historical average trend rates under the Program. Over the last 15 years, the benchmark HIP HMO rate has averaged 7.78%. In addition, recent industry surveys for large group plans have been averaging between 8.0% and 8.5%. The ultimate of 5.0% consists of 2.5% CPI, 1.5% real assumed GDP and 1.0% excess growth differential.

For the Medicare Plans, historical cost increases for the GHI plan have been lower than the assumed 5.0% trend due to legislative changes that have suppressed the cost of the Medicare program.

The Medicare Part B Premium trend has historically averaged slightly higher than the overall Medicare Plan trend rate since much of the cost shifting has been more concentrated in the hospital (Part A) portion of the Medicare Plan arrangements. The trend assumption does not assume that this cost shifting will continue at current levels.

Historical negotiated increase rates for the larger Welfare funds have averaged 2.4% over the past 20 years, significantly lower than the anticipated trend on the underlying costs of benefits provided by these funds. For periods after the current contract negotiated rate, the Welfare Fund contribution trend was assumed to be 3.5%.

**Dependent Coverage** Non-contributory Basic Medical Coverage and Part B premium reimbursement for dependents is assumed to terminate when an employee or retiree dies, except for Line of Duty survivors. The valuation also includes an estimate of costs in excess of premium contributions made by other survivors of POLICE, FIRE, and uniformed members of the Departments of Correction and Sanitation that are eligible for a lifetime continuation benefit. The valuation assumes that 30% of eligible spouses will elect the lifetime continuation benefit.

**Dependents** Male retirees were assumed to be four years older than their wives, and female retirees were assumed to be two years younger than their husbands; for POLICE and FIRE employees, husbands are assumed to be two years older than their wives.

Child dependents of current retirees are assumed to receive coverage until age 26.

Children are assumed to be covered for eight years after retirement plus an additional five years for service retirements of POLICE, FIRE, and NYCERS retirees who were eligible to retire based only on service and no minimum age.

Dependent allocation assumptions are shown below. The assumptions were updated as part of the Fiscal Year 2017 valuation. The OA reviewed recent experience to confirm these assumptions were still reasonable for the Fiscal Year 2018 valuation.

DEPENDENT COVERAGE ASSUMPTIONS								
Group	NYCERS HHC	NYCERS NYCHA	NYCERS Other	TRS	BERS	POLICE	FIRE	TIAA
Male								
- Single Coverage	40%	35%	35%	50%	45.0%	15%	10%	55.0%
- Spouse	40%	35%	35%	30%	45.0%	10%	20%	40.0%
- Child/No Spouse	5%	10%	5%	5%	2.0%	10%	5%	2.5%
- Spouse and Child	15%	20%	25%	15%	8.0%	65%	65%	2.5%
Female								
- Single Coverage	70%	75%	70%	60%	60.0%	45%	10%	55.0%
- Spouse	20%	15%	20%	30%	35.0%	10%	20%	40.0%
- Child/No Spouse	5%	8%	5%	5%	2.5%	25%	5%	2.5%
- Spouse and Child	5%	2%	5%	5%	2.5%	20%	65%	2.5%

Note: For accidental death, 70% of POLICE and 80% of FIRE members are assumed to have family coverage.

**Active/Inactive Liabilities**

40% of the measured liability of the Active/Inactive population, which is roughly equivalent to assuming 60% of the Active/Inactive members, will terminate membership prior to vesting and not receive OPEB.

**Participation Rates**

Participation assumptions were updated as part of the Fiscal Year 2017 valuation to reflect recent experience. The OA reviewed recent experience to confirm these assumptions were still reasonable for the Fiscal Year 2018 valuation.

Actual elections 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 not to file for future benefits, and therefore is valued similarly, are as follows. This assumption was used for the first time in the Fiscal Year 2017 valuation.

NYCERS HHC	13%
NYCERS NYCHA	13%
NYCERS Others	10%
TRS	6%
BERS	12%
POLICE	1%
FIRE	2%
TIAA	0%

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								
Benefits	NYCERS HHC	NYCERS NYCHA	NYCERS Other	TRS	BERS	POLICE	FIRE	TIAA
Pre-Medicare								
- GHI/EBCBS	72%	65%	72%	80%	70%	85%	80%	90%
- HIP HMO	20%	26%	20%	8%	16%	9%	12%	6%
- Other HMO	4%	4%	4%	2%	2%	4%	6%	4%
- Waiver	4%	5%	4%	10%	12%	2%	2%	0%
Medicare								
- GHI	72%	72%	72%	90%	78%	85%	80%	90%
- HIP HMO	20%	20%	20%	6%	16%	9%	12%	6%
- Other HMO	4%	4%	4%	2%	2%	4%	6%	4%
- Waiver	4%	4%	4%	2%	4%	2%	2%	0%
Post-Medicare Migration								
- Other HMO to GHI	0%	0%	0%	0%	0%	0%	0%	0%
- HIP HMO to GHI	0%	23%	0%	25%	0%	0%	0%	0%
- Pre-Med. Waiver								
- To GHI @ 65	0%	10%	0%	40%	67%	0%	0%	0%
- To HIP @ 65	0%	10%	0%	40%	0%	0%	0%	0%

**Per Capita  
Claim Costs**

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. HIP HMO and GHI/EBCBS non-Medicare premiums have been adjusted for the 2014 Health Savings Agreement changes.

Initial monthly premium rates used in valuations are shown below:

Plan	MONTHLY RATES
	FY18
HIP HMO	
Non-Medicare Single	\$ 652.44 <sup>1</sup>
Non-Medicare Family	\$ 1,598.47 <sup>1</sup>
Medicare	\$ 164.98
GHI/EBCBS	
Non-Medicare Single	\$ 620.08 <sup>1</sup>
Non-Medicare Family	\$ 1,625.27 <sup>1</sup>
Medicare	\$ 172.42
Other HMOs <sup>2</sup>	
Non-Medicare Single	\$ 1,018.56
Non-Medicare Family	\$ 2,223.80
Medicare Single	\$ 311.79
Medicare Family	\$ 621.50
<sup>1</sup> For the Fiscal Year 2018 valuation, status quo Fiscal Year 2018 HIP HMO premiums are decreased by 4.13% and status quo Fiscal Year 2018 GHI/EBCBS Pre-Medicare premiums are decreased by 0.51% to reflect Fiscal Year 2018 Health Savings agreement changes announced during Fiscal Year 2017.	
<sup>2</sup> Other HMO premiums represent the total premium for medical (not prescription) coverage including retiree contributions.	

Claims data were generally not provided to the OA for the HIP coverage or for Other HMOs. OLR provided a copy of the claims component of the Fiscal Year 2018 GHI and Fiscal Year 2018 EBCBS renewals. For the non-Medicare participants, retiree claims were not segregated from active claims. The claims information provided was compared to the premium rates provided.

Based on information provided by OLR, estimates of margins that had been included in the premiums but expected to be refunded were removed from both the GHI and EBCBS non-Medicare premiums before age adjustment.

A retiree who elects basic medical coverage other than the benchmark HIP and GHI/EBCBS plans is required to contribute the full difference in cost. The OA confirmed, based on data provided by OLR, that net employer premiums were consistent with the benchmark rates and stated policy regarding other coverage.

The various monthly premium rates for Other HMOs were blended by proportion of enrollment for use in valuing future retirees.

**Administrative Expenses**

Assumed to be included in reported premium amounts.

**Medicare Part D**

Drug coverage is offered to Program retirees via riders or through the Welfare Funds. It is the understanding of the OA that the City has filed for and is receiving the Medicare Part D Retiree Drug Subsidy (RDS) for a small number of retirees. It is also understood that some of the Welfare Funds participate in the RDS program, and that other Welfare Funds participate in Part D by providing EGWP drug benefits. The value of the RDS is not knowingly reflected herein, in accordance with GASB Statement 75 and Technical Bulletin No. 2006-1.

**Medicare Part B Premiums**

<u>Calendar Year</u>	<u>Monthly Premium</u>
2013 – 2015	\$104.90
2016	\$109.97
2017	\$113.63
2018	\$125.85

Medicare Part B Premium reimbursement amounts have been updated to reflect actual premium rates announced for calendar years through 2018. Due to limited cost-of-living adjustments in Social Security benefits for Calendar Years 2017 and 2018, 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 Fiscal Year 2018 OPEB valuation the annual premium used was \$1,436.89, which is equal to an average of the Calendar Year 2017 and 2018 monthly premiums shown.

For Calendar Year 2018, the monthly premium was determined as follows:

- 28% 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
- 72% of the announced premium of \$134.00 for Calendar Year 2018, representing the proportion of the Medicare population that will pay the announced amount.

The Calendar Year 2017 premium was determined similarly, using 70% of the \$104.90 hold-harmless and 30% of the \$134.00 rate that was first in effect for Calendar Year 2017.

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.

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

**Medicare Part B Premium Reimbursement**

90% of Medicare participants are assumed to claim reimbursement; based on historical data.

**Welfare Funds**

The City and certain Component Units sponsor a Welfare Fund for management employees, which, for purposes of this Report, is being treated the same as other Welfare Funds.

It is the understanding of the OA that the benefits provided from the Welfare Funds are adjusted from time to time so that costs to the Welfare Funds do not exceed available assets and income. Benefit type and levels provided to retirees also differ from benefits provided to active employees even within the same fund. For purposes of this Report, this understanding was not verified at source but was confirmed in conversations with OLR and OMB.

The OPEB valuation reflects the Welfare Fund contribution, which in turn is used to pay various premiums or claims for coverage provided by each of the funds. Such coverage could potentially vary by age and could involve various cross subsidies within the pool of each fund between active employees, non-Medicare retirees, and Medicare retirees. Under the Actuarial Standard of Practice that applies to OPEB valuations,<sup>3</sup> the valuation should reflect age-adjusted costs for pooled plans except in very limited cases. Factors to be considered include the purpose of the measurement, the existence and materiality of age-specific costs, and the sustainability of the premium structure should certain active or retiree groups cease to participate.

The OA has considered these factors and concluded that the cost of the Welfare Funds should be measured on a pooled basis. In particular, the Actuary has concluded that there is no significant cross subsidy between retiree and active benefits because the two groups are not generally pooled together.

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<sup>3</sup> Actuarial Standard of Practice, Number 6, *Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Cost or Actuarially Determined Contributions*.

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

Projected contributions reflect \$25 increases at July 1, 2017.

Reported annual contribution amounts for the last two years are shown in Section 3, Tables 3h to 3l. Welfare Fund rates are based on actual reported Union Welfare Fund code for current retirees.

Weighted average annual contribution rates used for future retirees, based on Welfare Fund enrollment of recent retirees, are shown in the following table.

NYCERS	\$ 1,850
TRS	1,798
BERS	1,903
POLICE	1,617
FIRE	1,755

**Health Care Cost Savings Initiative**

The Municipal Labor Committee (MLC) agreed to generate cumulative healthcare savings of \$3.4 billion during Fiscal Years 2015 through 2018 and an additional \$1.3 billion of recurring savings every year thereafter. This valuation reflects those initiatives defined as of Fiscal Year 2018<sup>4</sup>.

**Age and Gender Related Morbidity**

The premiums are age and gender adjusted for GHI/EBCBS, HIP, and Other HMOs. The assumed relative costs of coverage are consistent with information presented in the 2013 study *Health Care Costs - From Birth to Death*, sponsored by the Society of Actuaries.

For non-Medicare costs, a sample of factors used are:

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.170	0.225	45	0.355	0.495
25	0.146	0.301	50	0.463	0.576
30	0.181	0.428	55	0.608	0.671
35	0.227	0.466	60	0.783	0.783
40	0.286	0.467	64	0.957	0.917

Children costs assume a factor of 0.229.

Medicare costs prior to age 65 assume an additional disability-related morbidity factor. A sample of factors used are:

<u>Age</u>	<u>Males</u>	<u>Females</u>	<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.323	0.422	60	1.493	1.470
25	0.278	0.565	65	0.919	0.867
30	0.346	0.804	70	0.946	0.885
35	0.432	0.876	75	1.032	0.953
40	0.545	0.878	80	1.122	1.029
45	0.676	0.929	85	1.217	1.116
50	0.883	1.082	90	1.287	1.169
55	1.159	1.260	95	1.304	1.113
			99 +	1.281	0.978

The age adjustment for the non-Medicare GHI/EBCBS premium reflects a 5% reduction in the GHI portion of the monthly premium (with the GHI portion representing \$292.12 out of \$623.28 for single coverage, and \$772.65 out of \$1,633.66 for family coverage for Fiscal Year 2018 rates) and a 3% reduction in the EBCBS portion of the premium (with the EBCBS portion representing the remainder of the premiums) for the estimated margin anticipated to be returned.

**COBRA**

There is no cost to the City for COBRA beneficiaries who enroll in community-rated HMO's, including HIP, since these individuals pay their full community rate. However, there is a cost under the experience-rated GHI/EBCBS coverage.

The valuation assumes 15% of employees not eligible for OPEB elect COBRA coverage for 15 months based on experience of other large employers. A lump-sum COBRA cost of \$1,100 was assumed for terminations during Fiscal Year 2018. This amount is increased by the Pre-

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<sup>4</sup> <http://www1.nyc.gov/assets/olr/downloads/pdf/collectivebargaining/savings-report-q2-q3-fy2017.pdf>

Medicare HCCTR for future years but is not adjusted for age-related morbidity.

Census data was not available for surviving spouses of POLICE, FIRE, Corrections, or Sanitation members who are entitled to lifetime COBRA continuation coverage, as this benefit is administered directly by the insurance carriers. The number and obligation for the surviving spouses with lifetime coverage were estimated based on current census of POLICE and FIRE retirees and the projected number of deaths that would have occurred since the inception of this benefit on November 13, 2001 (and on August 31, 2010 for the Departments of Correction and Sanitation).

### **Cadillac Tax**

The valuation includes an explicit calculation of the high-cost plan excise tax (Cadillac Tax) that will be imposed beginning in 2022 under HCR. The tax is 40% of the excess of (a) over (b) where (a) is the cost of medical coverage, and (b) is the statutory limits (\$10,200 for single coverage and \$27,500 for family coverage), adjusted for the following:

- For Pre-Medicare retirees above the age of 55, the limit will be increased by \$1,650 for single coverage; \$3,450 for family coverage.
- The dollar limits are increased by Chained CPI+1% (e.g. 3.25%) for 2019 and by Chained CPI (e.g. 2.25%) for subsequent years. Indexing of limits starts in 2018; tax first applies in 2022.

The impact of the Cadillac Tax for the Program benefits is calculated based on the following assumptions about the cost of medical coverage:

- The cost for each benefit option without age adjustment (GHI, HIP, or other HMO, combined with the average cost of Medicare Part B premium reimbursement, if applicable) was separately compared to the applicable limit.
- The Cadillac Tax attributed to the riders or optional benefit arrangements is assumed to be reflected in the contribution required for the rider or optional benefit.
- The Cadillac Tax attributed to amounts provided by Welfare Fund benefits is assumed to be absorbed by the Welfare Fund or by lower net Welfare Fund contribution amounts.
- Pre-Medicare retirees under age 55 are not assumed to have the higher limits that apply to employees engaged in high-risk professions because the majority of employees included in this valuation are not in such professions.

In cases where the City provides only a portion of the OPEB benefits which give rise to the Cadillac Tax, the calculated Cadillac Tax is allocated in proportion to the OPEB liabilities for relevant OPEB benefits.

### **Stabilization Fund**

A 0.4% load is applied on all City GASB75 obligations to reflect certain benefits paid for retirees directly from the Stabilization Fund which was increased from 0.3% in the Fiscal Year 2017 OPEB valuation based on recent data. The load is not applicable to Component Units.

This amount is based on the allocation between active and retired participants of Fiscal Year 2018 Stabilization Fund benefits provided by OLR. The allocation takes into consideration retirees on average are older and have more costly medical benefits than actives, and separates out Welfare Fund contribution reimbursements from other Stabilization Fund benefits.

Welfare Fund contributions reimbursed by the Stabilization Fund are considered a part of Welfare Fund benefits and are not included in the determination of this load.

**Implicit Rate Subsidy** These results reflect employer contributions for the City, HHC, and NYCHA that include certain expenditures that were initially nominally allocated to active costs rather than retiree costs.

The Implicit Rate Subsidy is the difference between the age-adjusted premiums approximating retiree claims costs and the actual cash premiums paid on behalf of retirees. The Implicit Rate Subsidy is assumed to be the additional cost for coverage of retirees that, in this case, had initially been allocated to active costs because the cash premiums do not vary by age of the covered individual.

The Implicit Rate Subsidy was estimated by the OA directly from the assumptions and data used in the OPEB valuations, reflecting the amounts paid for Basic Benefits and amounts paid to the Stabilization Fund directly as cash premium costs in lieu of the benchmark HIP premium.

**Other OPEB Coverage**

The valuation reflects an estimate for the cost of the implicit subsidy provided to terminated employees who elect COBRA.

The OA understands that medical benefits not provided under the Basic Coverage, such as prescription drug coverage, may be provided through optional riders. These optional riders may provide separately rated coverage with stand-alone premiums. Alternatively, prescription drug coverage may be available on an integrated basis with medical for the other HMOs, but in those situations, medical only coverage is offered if the Welfare Plan offers drug coverage.

The cost of riders is either fully paid by the employees or retirees who enroll in that benefit, or is provided through various Welfare Funds. Thus, the City does not directly pay for any of the premiums of these separately rated riders. As such, any implicit subsidy in the price of these separately rated riders is paid by the actives that are assumed to pay more than the cost of their own rider coverage.<sup>5</sup> Thus, this valuation does not include any implicit subsidy on these separately rated riders in this valuation.

It is the understanding of the OA that no other OPEB, such as life insurance or long-term care benefits, are directly subsidized by the City through its

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<sup>5</sup> See discussion in questions 4.117 and 4.118 of Implementation Guide No. 2017-2, Financial Reporting for Postemployment Benefit Plans other than Pension Plans of GASB Statements 74 and 75 on Other Postemployment Benefits, published by GASB. In particular, question 4.118 says “Only if the amounts expected to be paid by active employees exceed the expected claim costs, or the age-adjusted premiums approximating claim costs, on an ongoing basis can it be concluded that the active employees are subsidizing the inactive-plan member healthcare benefit. ...”

general account.<sup>6</sup> The City and the Component Units (except CUNY for certain retirees and ECF) generally provide most death and disability benefits through the NYCERS. Those benefits are measured as part of the obligations of the NYCERS and are not subject to GASB74 or GASB75.

Certain former New York State Court employees, who are covered by City payment to NYSHIP, are not included in the OPEB valuation. The cash cost for these benefits paid from the Plan during Fiscal Year 2018 was negligible.

**HCR Repeal**

The Republican leadership in Washington has announced their intention to repeal and replace as much of HCR as they could, either legislatively or by regulatory action or inaction. More information about what will be altered can be expected, and other changes may be adopted. As of the writing of this Report, there has not been any action that has already been finalized that would be expected to have significant impact on the measured obligation.

**Subsequent Events**

In a letter to the Municipal Labor Committee (MLC) dated June 28, 2018 the Office of Labor Relations (OLR) confirmed a new health care agreement for Fiscal Years 2019 to 2021. The agreement stated that the MLC would generate cumulative healthcare savings of \$1.1 billion over these three years. The letter did not clarify how these savings would be achieved or how they would be spread across active and retiree groups. Given the changes are for Fiscal Year 2019 and beyond and details have not been communicated as of the close of Fiscal Year 2018, these changes are not reflected in this valuation.

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<sup>6</sup> Such benefits may be funded through the Welfare Benefit Funds.

## Educational Construction Fund

<b>Basis for Assumptions</b>	The demographic assumptions and salary scale used for ECF in the Fiscal Year 2018 OPEB valuation are based on the report “Development of Recommended Actuarial Assumptions for Other Post Employment Benefit Plans Actuarial Valuations Participating Agency Version,” dated December 2017, prepared by Aon Hewitt (2017 State Report) <sup>7</sup> . Since ECF employees and retirees participate in the New York State and Local Employees’ Retirement System (NYSLERS) and the New York State Health Insurance Program (NYSHIP), the Actuary adopted assumptions based on the recommendations of the 2017 State Report for this valuation. These assumptions reflect the revisions to the demographic assumptions (mortality, withdrawal, retirement, and disability rates) and salary scale from those used in the prior OPEB valuation.																
<b>Participation</b>	Future retirees are assumed to continue in the health and dental insurance programs.																
<b>Dependents</b>	<p>Based on the 2017 State Report, 60% of males and 50% of females are assumed to cover a spouse at retirement.</p> <p>Female dependent spouses are assumed to be three years younger than their husbands. Male dependent spouses are assumed to be two years older than their wives.</p>																
<b>Per Capita Claim Costs</b>	<p>Based on the 2017 State Report, the costs were projected with trend to the fiscal year starting at the valuation date. This valuation relies on the costs developed for the State valuation, which were assumed to be suitable for this purpose. The age 65 rates are:</p> <table border="0" style="margin-left: 40px;"> <tr> <td>Non-Medicare:</td> <td style="text-align: right;">\$19,570</td> </tr> <tr> <td>Medicare (Reflecting EGWP):</td> <td style="text-align: right;">\$3,917</td> </tr> </table> <p>The premiums for health coverage are:</p> <table border="0" style="margin-left: 40px;"> <tr> <td colspan="2"><u>Empire Plan (Pre-Medicare)</u></td> </tr> <tr> <td>Individual:</td> <td style="text-align: right;">\$1,014.98 monthly</td> </tr> <tr> <td>Family:</td> <td style="text-align: right;">\$2,348.15 monthly</td> </tr> <tr> <td colspan="2"><u>Empire Plan (Medicare)</u></td> </tr> <tr> <td>Individual:</td> <td style="text-align: right;">\$444.39 monthly</td> </tr> <tr> <td>Family (two Medicares):</td> <td style="text-align: right;">\$1,206.95 monthly</td> </tr> </table> <p>65% of the Empire Plan (Medicare) premium is assumed to reflect the cost for prescription drug benefits in developing the trend applied to the Medicare premium.</p> <p>Monthly dental premiums are \$33.50 for single coverage, \$65.00 for two-person coverage, and \$87.50 for family coverage.</p>	Non-Medicare:	\$19,570	Medicare (Reflecting EGWP):	\$3,917	<u>Empire Plan (Pre-Medicare)</u>		Individual:	\$1,014.98 monthly	Family:	\$2,348.15 monthly	<u>Empire Plan (Medicare)</u>		Individual:	\$444.39 monthly	Family (two Medicares):	\$1,206.95 monthly
Non-Medicare:	\$19,570																
Medicare (Reflecting EGWP):	\$3,917																
<u>Empire Plan (Pre-Medicare)</u>																	
Individual:	\$1,014.98 monthly																
Family:	\$2,348.15 monthly																
<u>Empire Plan (Medicare)</u>																	
Individual:	\$444.39 monthly																
Family (two Medicares):	\$1,206.95 monthly																

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<sup>7</sup> <https://www.cs.ny.gov/GASB/2017-PE-Assumption-Report-Aon.pdf>.

**Age Related  
Morbidity**

The per capita costs are adjusted for relative cost by age. These factors are a blend of the medical and prescription drug age-related morbidity factors set out in the 2017 State Report. A sample of factors used are:

<b>Age</b>	<b>Factor</b>	<b>Age</b>	<b>Factor</b>
40	0.379	70	1.185
45	0.446	75	1.326
50	0.540	80	1.411
55	0.666	85	1.484
60	0.827	90+	1.522
65	1.000		

**Medicare Part B  
Premium  
Reimbursement**

100% of Medicare participants are assumed to receive reimbursement since retirees do not have to request reimbursement.

**Medicare Part D**

NYSHIP is providing drug coverage for ECF Medicare retirees through an EGWP. For valuation purposes, only the net contribution amount is valued for the Welfare Arrangements. The Federal Subsidies and Pharmaceutical Manufacturers' brand discounts under the EGWP are reflected in the per capita costs for ECF.

## CUNY

### Basis for Assumptions

The assumptions used for CUNY TIAA for mortality, disability and salary increases are the same as those used for TRS.

The OPEB valuation also assumes:

- Terminated employees with the required number of years of service have no subsequent full-time employment at another college, university, or institution of post-secondary education.
- CUNY TIAA participants maintain any required TIAA account balances and annuity benefits.

### Termination and Retirement Rates

Based on TIAA experience.

Withdrawal Prior to Retirement Eligibility		Retirement	
Years of Service	Probability	Age	Probability
0	15.0%	55	2.0%
1	12.0%	56	2.0%
2	11.0%	57	2.0%
3	10.0%	58	2.0%
4	9.0%	59	2.0%
5	7.0%	60	3.0%
6	6.0%	61	3.0%
7	6.0%	62	4.0%
8	6.0%	63	5.0%
9	4.0%	64	6.0%
10	4.0%	65	10.0%
11	3.0%	66	5.0%
12	3.0%	67	5.0%
13	2.0%	68	5.0%
14-19	2.0%	69	10.0%
20+	1.0%	70	100.0%

## SECTION 5 – CERTIFICATION

In the opinion of the undersigned actuaries, the actuarial assumptions used are reasonable and appropriate for purposes of measurement of the obligations under GASB 74 and 75 contained herein. The cost results and actuarial exhibits presented in this Report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures. To the best of the knowledge of the undersigned, the information fairly presents the actuarial position of the postretirement benefits under the City's Health Benefits Program in accordance with the requirements of GASB Statements No. 74 and 75 as of June 30, 2018.

Future actuarial measurements may differ significantly from current measurements due to, but not limited to, the following factors: retiree group benefits program experience differing from that anticipated by the assumptions, changes in assumptions, changes expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period), and changes in plan provisions, applicable law or regulations. Small variations in approximations and estimates may lead to significant changes in actuarial measurements. An analysis of the potential range of such future differences other than the required disclosures related to the sensitivity to discount rate and healthcare cost trend rate assumptions is beyond the scope of this Report.

The actuaries whose signatures appear below are Members of the American Academy of Actuaries (AAA) and, together, meet the Qualification Standards of the AAA to render this Statement of Actuarial Opinion.



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Sherry S. Chan, FSA, EA, FCA, MAAA  
Chief Actuary

New York City Office of the Actuary



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Thomas O'Hara, ASA, MAAA  
Administrative Actuary

New York City Office of the Actuary

## SECTION 6 – ASSETS

Table 6a

**New York City Health Benefits Program**  
**June 30, 2017 OPEB Actuarial Valuation**  
**Statement of Net Position**  
**As of June 30, 2018 and June 30, 2017**

	June 30, 2018 <sup>1</sup>	June 30, 2017 <sup>2</sup>
<b>ASSETS</b>		
Cash		
Settled Cash	\$ 433,392,003	\$ 1,050,735,390
Receivables		
Trust	3,878,700	5,976,385
Medicare Part D	45,057	2,023,355
Payables		
Investment Securities Purchased	<u>0</u>	<u>0</u>
<b>Total Cash</b>	<b>\$ 437,315,760</b>	<b>\$ 1,058,735,130</b>
Cash Equivalents		
US Treasury Bills	\$ 146,694,000	\$ 444,899,539
Commercial Paper	3,143,758,202	1,737,195,742
Short Term Funds	<u>77,899,805</u>	<u>112,937,453</u>
<b>Total Cash Equivalents</b>	<b>\$ 3,368,352,007</b>	<b>\$ 2,295,032,734</b>
Fixed Income		
Corporate Bonds and Notes	\$ 0	\$ 0
Government and Agencies	<u>1,308,113,053</u>	<u>1,633,387,795</u>
<b>Total Fixed Income</b>	<b>\$ 1,308,113,053</b>	<b>\$ 1,633,387,795</b>
Prepaid Benefits / Expenses	\$ <u>0</u>	\$ <u>41,586</u>
<b>Total Prepaid</b>	<b>\$ 0</b>	<b>\$ 41,586</b>
<b>Total Assets</b>	<b>\$ 5,113,780,820</b>	<b>\$ 4,987,197,245</b>
<b>LIABILITIES</b>		
Medicare Part B	\$ 181,298,340	\$ 177,831,838
Benefits Payable	166,596,891	155,400,926
Trustee Fees Payable	43,269	20,115
Audit Fees Payable	<u>43,105</u>	<u>41,100</u>
<b>Total Liabilities</b>	<b>\$ 347,981,605</b>	<b>\$ 333,293,979</b>
<b>NET POSITION</b>		
<b>Held in Trust for Benefit Payments</b>	<b>\$ 4,765,799,215</b>	<b>\$ 4,653,903,266</b>

<sup>1</sup> Based on Information Provided by OMB on August 17, 2018.

<sup>2</sup> Based on Information Provided by OMB on August 23, 2017.

Table 6b

**New York City Health Benefits Program  
June 30, 2017 OPEB Actuarial Valuation**

**Statement of Changes in Net Position  
As of June 30, 2018 and June 30, 2017**

	June 30, 2018 <sup>1</sup>	June 30, 2017 <sup>2</sup>
<b>ADDITIONS</b>		
Employer Contributions		
Pay-As-You-Go		
Trust	\$ 2,394,674,888 <sup>3</sup>	\$ 2,758,597,721 <sup>4</sup>
Non-Trust	<u>286,345,179</u>	<u>262,344,833</u>
<b>Total Contributions</b>	<b>\$ 2,681,020,067</b>	<b>\$ 3,020,942,554</b>
Earned Income		
Interest Income	\$ 46,988,607	\$ 27,209,322
Net Accrued Income	0	2,788,673
Net Realized Gain / (Loss)	<u>(2,370,038)</u>	<u>1,975,989</u>
<b>Total Investment Income</b>	<b>\$ 44,618,569</b>	<b>\$ 31,973,984</b>
Net Unrealized Gain / (Loss)	<u>3,475,044</u>	<u>(10,458,396)</u>
<b>TOTAL ADDITIONS</b>	<b>\$ 2,729,113,680</b>	<b>\$ 3,042,458,142</b>
<b>DEDUCTIONS</b>		
Benefit Payments		
Trust	\$ 2,330,699,124 <sup>3</sup>	\$ 2,162,421,631 <sup>4</sup>
Non-Trust	<u>286,345,179</u>	<u>262,344,833</u>
Sub-Total	\$ 2,617,044,303	\$ 2,424,766,464
Expenses		
Administrative Expenses	\$ 43,105	\$ 41,100
Legal Fees	27,045	0
Trustee Fees	<u>103,278</u>	<u>78,516</u>
Sub-Total	\$ 173,428	\$ 119,616
<b>TOTAL DEDUCTIONS</b>	<b>\$ 2,617,217,731</b>	<b>\$ 2,424,886,080</b>
<b>CHANGE IN NET POSITION</b>	<b>\$ 111,895,949</b>	<b>\$ 617,572,062</b>
<b>NET POSITION HELD IN TRUST FOR BENEFIT PAYMENTS</b>		
Beginning of Year	\$ 4,653,903,266	\$ 4,036,331,204
End of Year	\$ 4,765,799,215	\$ 4,653,903,266

<sup>1</sup> Based on Information Provided by OMB on August 17, 2018.

<sup>2</sup> Based on Information Provided by OMB on August 23, 2017.

<sup>3</sup> Net of the Interfund Transfer of \$496,964,244 in Fiscal Year 2018.

<sup>4</sup> Net of the Interfund Transfer of \$611,235,164 in Fiscal Year 2017.

## **SECTION 7 - DETAILED RESULTS**

### **New York City Educational Construction Fund (ECF)**

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City Educational Construction Fund (ECF)

#### Summary of June 30, 2017 Data

##### 1. Actives

a. Number	3
b. Salary	\$370,652
c. Average Age	51.71
d. Average Service	4.83
e. Average Salary	\$123,551

##### 2. Inactives

a. Number	0
b. Average Age	NA
c. Average Service	NA

##### 3. Deferreds (Includes Deferred Retirees, if any)

a. Number	1
b. Average Age	45.34

##### 4. Retirees

a. Total <sup>1</sup>	
i. Number	5
ii. Average Age	74.34
b. By Benefit	<u>Participant / Spouse</u>
i. Pre-Medicare <sup>2</sup>	1 / 0
ii. Medicare Eligible <sup>2</sup>	3 / 2
iii. Welfare Fund <sup>2</sup>	NR / NR
iv. Medicare Part B <sup>3</sup>	5 / 3

<sup>1</sup> Retirees eligible for at least one benefit from ECF.

<sup>2</sup> Retirees currently eligible for benefit from ECF.

<sup>3</sup> Retirees eligible for benefit from ECF currently or in the future.

NR Benefit not the responsibility of ECF

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

**June 30, 2016 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$124,656	\$722,212	\$0	\$164,175	\$211,534	\$1,222,577
b. Deferred <sup>2</sup>	\$881,378	\$668,815	\$0	\$152,774	\$339,939	\$2,042,906
c. Retired	<u>\$145,425</u>	<u>\$741,833</u>	<u>\$0</u>	<u>\$190,101</u>	<u>\$17,961</u>	<u>\$1,095,320</u>
d. TOTAL	<b>\$1,151,459</b>	<b>\$2,132,860</b>	<b>\$0</b>	<b>\$507,050</b>	<b>\$569,434</b>	<b>\$4,360,803</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$16,627	\$178,545	\$0	\$40,398	\$40,666	\$276,236
b. Deferred <sup>2</sup>	\$881,378	\$668,815	\$0	\$152,774	\$339,939	\$2,042,906
c. Retired	<u>\$145,425</u>	<u>\$741,833</u>	<u>\$0</u>	<u>\$190,101</u>	<u>\$17,961</u>	<u>\$1,095,320</u>
d. TOTAL	<b>\$1,043,430</b>	<b>\$1,589,193</b>	<b>\$0</b>	<b>\$383,273</b>	<b>\$398,566</b>	<b>\$3,414,462</b>
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$3,414,462
5. Entry Age Normal Cost						\$76,223
6. Salary of Active Participants						\$359,856
7. Normal Cost Percentage [5. / 6.]						21.182%

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

### New York City Educational Construction Fund (ECF)

**June 30, 2017 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$130,808	\$764,214	\$0	\$184,763	\$234,120	<b>\$1,313,905</b>
b. Deferred <sup>2</sup>	\$851,257	\$661,948	\$0	\$160,790	\$486,412	<b>\$2,160,407</b>
c. Retired	<u>\$127,304</u>	<u>\$683,368</u>	<u>\$0</u>	<u>\$186,673</u>	<u>\$33,935</u>	<b><u>\$1,031,280</u></b>
d. TOTAL	<b>\$1,109,369</b>	<b>\$2,109,530</b>	<b>\$0</b>	<b>\$532,226</b>	<b>\$754,467</b>	<b>\$4,505,592</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$25,264	\$233,532	\$0	\$56,246	\$69,831	<b>\$384,873</b>
b. Deferred <sup>2</sup>	\$851,257	\$661,948	\$0	\$160,790	\$486,412	<b>\$2,160,407</b>
c. Retired	<u>\$127,304</u>	<u>\$683,368</u>	<u>\$0</u>	<u>\$186,673</u>	<u>\$33,935</u>	<b><u>\$1,031,280</u></b>
d. TOTAL	<b>\$1,003,825</b>	<b>\$1,578,848</b>	<b>\$0</b>	<b>\$403,709</b>	<b>\$590,178</b>	<b>\$3,576,560</b>
3. Actuarial Value of Assets						<b>\$0</b>
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$3,576,560</b>
5. Entry Age Normal Cost						<b>\$78,627</b>
6. Salary of Active Participants						<b>\$370,652</b>
7. Normal Cost Percentage [5. / 6.]						<b>21.213%</b>

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

### Market Values of Assets

		<b>Total</b>
<b>1. Plan Net Position @ 6/30/2016</b>	\$	0
<b>2. Changes for the year:</b>		
a. ER Contributions		59,650
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(59,650)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>3. Plan Net Position @ 6/30/2017</b>	\$	0
<b>4. Changes for the year:</b>		
a. ER Contributions		58,457
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(58,457)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>5. Plan Net Position @ 6/30/2018</b>	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

Development of Asset (Gain) / Loss

June 30, 2017

		<b>Total</b>
<b>1. Market Value 6/30/2016</b>	\$	0
<b>2. Market Value 6/30/2017</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

Development of Asset (Gain) / Loss

June 30, 2018

		<b>Total</b>
<b>1. Market Value 6/30/2017</b>	\$	0
<b>2. Market Value 6/30/2018</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2017

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2016 <sup>1</sup>	\$	3,414,462
2. Entry Age Normal Cost at 6/30/2016 <sup>1</sup>		76,223
3. Estimated Benefit Payments-FY17		(57,240)
4. Interest <sup>1</sup>		108,370
5. Roll-Forward EAAL at 6/30/2017 <sup>1</sup>	\$	3,541,815

<sup>1</sup>Assumes a 3.13% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2018

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2017 <sup>1</sup>	\$	3,576,560
2. Entry Age Normal Cost at 6/30/2017 <sup>1</sup>		78,627
3. Actual Benefit Payments-FY18		(58,457)
4. Interest <sup>1</sup>		113,500
5. (Gain)/Loss due to Discount Rate Change		168,800
6. Roll-Forward EAAL at 6/30/2018 <sup>2</sup>	\$	3,879,030

<sup>1</sup>Assumes a 3.13% interest rate

<sup>2</sup>Assumes a 2.98% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

Changes in Net OPEB Liability (NOL) by Source  
Balances at June 30, 2017

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2016</b>	\$ 2,059,081	\$ 0	\$ 2,059,081
<b>2. Changes for the Year:</b>			
a. Service Cost	76,223	0	76,223
b. Interest	108,370	0	108,370
c. Differences b/t Expected and Actual Experience	2,178,629	0	2,178,629
d. Changes in Assumptions	(820,838)	0	(820,838)
e. Contributions - Employer	0	59,650	(59,650)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	0	0
h. Actual Benefit Payments	(59,650)	(59,650)	0
i. Administrative Expenses	0	0	0
j. Other Changes	0	0	0
<b>k. Net Changes</b>	<b>1,482,734</b>	<b>\$ 0</b>	<b>\$ 1,482,734</b>
<b>3. Balances at June 30, 2017</b>	<b>\$ 3,541,815</b>	<b>\$ 0</b>	<b>\$ 3,541,815</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			\$ 4,865,812
m. 1% Increase			\$ 2,688,327
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			\$ 2,496,872
o. 1% Increase			\$ 5,129,604

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

Changes in Net OPEB Liability (NOL) by Source  
Balances at June 30, 2018

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2017</b>	\$ 3,541,815	\$ 0	\$ 3,541,815
<b>2. Changes for the Year:</b>			
a. Service Cost	78,627	0	78,627
b. Interest	113,500	0	113,500
c. Differences b/t Expected and Actual Experience	37,345	0	37,345
d. Changes in Assumptions	166,200	0	166,200
e. Contributions - Employer	0	58,457	(58,457)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	0	0
h. Actual Benefit Payments	(58,457)	(58,457)	0
i. Administrative Expenses	0	0	0
j. Other Changes	0	0	0
<b>k. Net Changes</b>	<b>337,215</b>	<b>\$ 0</b>	<b>\$ 337,215</b>
<b>3. Balances at June 30, 2018</b>	<b>\$ 3,879,030</b>	<b>\$ 0</b>	<b>\$ 3,879,030</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			\$ 5,348,840
m. 1% Increase			\$ 2,931,784
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			\$ 2,721,122
o. 1% Increase			\$ 5,637,725

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

### Schedule of Changes in Net OPEB Liability and Related Ratios

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>1. Total OPEB Liability</b>			
a. Service Cost	\$ 78,627	\$ 76,223	\$ 92,498
b. Interest	113,500	108,370	54,890
c. Changes of Benefit Terms	0	0	0
d. Differences b/t Expected and Actual Experience	37,345	2,178,629	20,054
e. Changes of Assumptions	166,200	(820,838)	0
f. Benefit Payments	(58,457)	(59,650)	(62,303)
<b>g. Net Changes in Total OPEB Liability</b>	<b>\$ 337,215</b>	<b>\$ 1,482,734</b>	<b>\$ 105,139</b>
<b>2. Total OPEB Liability - Beginning</b>	<b>\$ 3,541,815</b>	<b>\$ 2,059,081</b>	<b>\$ 1,953,942</b>
<b>3. Total OPEB Liability - Ending</b>	<b>\$ 3,879,030</b>	<b>\$ 3,541,815</b>	<b>\$ 2,059,081</b>
<b>4. Plan Fiduciary Net Position</b>			
a. Contributions - Employer	\$ 58,457	\$ 59,650	\$ 62,303
b. Contributions - Employee	0	0	0
c. Net Investment Income	0	0	0
d. Benefit Payments	(58,457)	(59,650)	(62,303)
e. Administrative Expenses	0	0	0
f. Other Changes	0	0	0
<b>g. Net Changes in Plan Fiduciary Net Position</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>7. Net OPEB Liability</b>	<b>\$ 3,879,030</b>	<b>\$ 3,541,815</b>	<b>\$ 2,059,081</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>9. Covered Employee Payroll</b>	<b>\$370,652</b>	<b>\$359,856</b>	<b>\$483,451</b>
<b>10. Net OPEB Liability as a Percentage of Covered Employee Payroll</b>	<b>1046.5%</b>	<b>984.2%</b>	<b>425.9%</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

### Average Expected Remaining Service Lives

<u>Group</u>	<u># Count</u>	<u>Total Future WorkLife @ 6/30/2017</u>	<u>Average Expected Remaining Service Life @ 6/30/2017</u>
Active	3	10.38	3.46
Active/Inactive	0	0	0
Term Vested	1	0	0
Retired	<u>5</u>	<u>0</u>	<u>0</u>
Total	9	10.38	1.15

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Expected and Actual Experience**

Year	Differences between Expected and Actual Experience		Recognition Period (Years)	2016	2017	2018	2019	2020	2021						
2016 <sup>1</sup>	\$	20,054	1.00	20,054	0	0	0	0	0						
2017	\$	2,178,629	1.00	0	2,178,629	0	0	0	0						
2018	\$	37,345	1.15	0	0	32,474	4,871	0	0						
2019															
2020															
2021															
Net increase (decrease) in OPEB Expense				\$	20,054	\$	2,178,629	\$	32,474	\$	4,871	\$	0	\$	0

<sup>1</sup>Represents the Future Working Lifetime as of 6/30/2016

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

### Increase (Decrease) in OPEB Expense Arising from the Recognition of Changes in Assumptions

Year	Differences due to Changes in Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021
2017	\$ (820,838)	1.00	(820,838)	0	0	0	0
2018	\$ 166,200	1.15	0	144,522	21,678	0	0
2019							
2020							
2021							
Net increase (decrease) in OPEB Expense			\$ (820,838)	\$ 144,522	\$ 21,678	\$ 0	\$ 0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Projected and Actual Earnings on OPEB Plan Investments**

<b>Year</b>	<b>Differences between Projected and Actual Earnings on OPEB Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
2017	\$ 0	5	0	0	0	0	0
2018	\$ 0	5	0	0	0	0	0
2019							
2020							
2021							
2022							
Net increase (decrease) in OPEB Expense			\$ 0	\$ 0	\$ 0	\$ 0	0

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Educational Construction Fund (ECF)**

**Components of OPEB Expense for the Fiscal Year Ended June 30, 2017**

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 76,223
b. Interest on the Total OPEB Liability	108,370
c. Differences between Expected and Actual Experience	2,178,629
d. Changes of Assumptions	(820,838)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	<hr/>
<b>Total OPEB Expense</b>	<b>\$ 1,542,384</b>

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Educational Construction Fund (ECF)**

**Components of OPEB Expense for the Fiscal Year Ended June 30, 2018**

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 78,627
b. Interest on the Total OPEB Liability	113,500
c. Differences between Expected and Actual Experience	32,474
d. Changes of Assumptions	144,522
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	<hr/>
<b>Total OPEB Expense</b>	<b>\$ 369,123</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Educational Construction Fund (ECF)

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$369,123.

At June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 4,871	\$ 0
Changes of Assumptions	21,678	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 26,549	\$ 0

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>		<u>Amount</u>
2018	\$	176,996
2019		26,549
2020		0
2021		0
2022		0
Thereafter		0

**New York City Health and Hospitals Corporation (HHC)**

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City Health and Hospitals Corporation (HHC)

#### Summary of June 30, 2017 OPEB Data

	NYCERS	TRS	BERS	TOTAL
<b>1. Actives</b>				
a. Number	30,942	0	2	30,944
b. Salary	\$2,210,881,617	\$0	\$132,593	\$2,211,014,210
c. Average Age	50.15	NA	61.50	50.16
d. Average Service	11.57	NA	7.00	11.57
e. Average Salary	\$71,452	NA	\$66,297	\$71,452
<b>2. Inactives</b>				
a. Number	4,350	0	0	4,350
b. Average Age	43.32	NA	NA	43.32
c. Average Service	5.59	NA	NA	5.59
<b>3. Deferreds</b> (Includes Deferred Retirees, if any)				
a. Number	1,536	0	0	1,536
b. Average Age	54.75	NA	NA	54.75
<b>4. Retirees</b>				
a. Total <sup>1</sup>				
i. Number	21,695	8	4	21,707
ii. Average Age	73.38	74.10	74.82	73.38
b. By Benefit				<u>Participant / Spouse</u>
i. Pre-Medicare <sup>2</sup>				3,429 / 1,820
ii. Medicare Eligible <sup>2</sup>				18,278 / 4,451
iii. Welfare Fund <sup>2</sup>				20,026 / NA
iv. Medicare Part B <sup>3</sup>				NR / NR

<sup>1</sup> Retirees eligible for at least one benefit from HHC.

<sup>2</sup> Retirees currently eligible for benefit from HHC.

<sup>3</sup> Retirees eligible for benefit from HHC currently or in the future.

NR Benefit not the responsibility of HHC.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

**June 30, 2016 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$2,107,703,045	\$2,578,056,913	\$1,331,071,557	\$0	\$70,046,400	<b>\$6,086,877,915</b>
b. Deferred <sup>2</sup>	\$128,266,460	\$123,005,495	\$66,252,185	\$0	\$480,872	<b>\$318,005,012</b>
c. Retired	<u>\$320,049,060</u>	<u>\$917,963,342</u>	<u>\$540,718,605</u>	<u>\$0</u>	<u>\$379,514</u>	<b><u>\$1,779,110,521</u></b>
d. TOTAL	<b>\$2,556,018,565</b>	<b>\$3,619,025,750</b>	<b>\$1,938,042,347</b>	<b>\$0</b>	<b>\$70,906,786</b>	<b>\$8,183,993,448</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$746,499,094	\$1,107,016,110	\$549,445,363	\$0	\$16,622,109	<b>\$2,419,582,676</b>
b. Deferred <sup>2</sup>	\$128,266,460	\$123,005,495	\$66,252,185	\$0	\$480,872	<b>\$318,005,012</b>
c. Retired	<u>\$320,049,060</u>	<u>\$917,963,342</u>	<u>\$540,718,605</u>	<u>\$0</u>	<u>\$379,514</u>	<b><u>\$1,779,110,521</u></b>
d. TOTAL	<b>\$1,194,814,614</b>	<b>\$2,147,984,947</b>	<b>\$1,156,416,153</b>	<b>\$0</b>	<b>\$17,482,495</b>	<b>\$4,516,698,209</b>
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$4,516,698,209</b>
5. Entry Age Normal Cost						<b>\$274,749,014</b>
6. Salary of Active Participants						<b>\$2,283,056,125</b>
7. Normal Cost Percentage [5. / 6.]						<b>12.034%</b>

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

**June 30, 2017 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$2,124,610,974	\$2,626,114,780	\$1,429,281,732	\$0	\$121,269,558	<b>\$6,301,277,044</b>
b. Deferred <sup>2</sup>	\$131,291,914	\$121,463,723	\$67,938,382	\$0	\$1,190,734	<b>\$321,884,753</b>
c. Retired	<u>\$345,025,318</u>	<u>\$995,631,026</u>	<u>\$597,024,990</u>	<u>\$0</u>	<u>\$1,208,464</u>	<b><u>\$1,938,889,798</u></b>
d. TOTAL	<b>\$2,600,928,206</b>	<b>\$3,743,209,529</b>	<b>\$2,094,245,104</b>	<b>\$0</b>	<b>\$123,668,756</b>	<b>\$8,562,051,595</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$798,870,023	\$1,182,016,722	\$615,923,780	\$0	\$32,169,817	<b>\$2,628,980,342</b>
b. Deferred <sup>2</sup>	\$131,291,914	\$121,463,723	\$67,938,382	\$0	\$1,190,734	<b>\$321,884,753</b>
c. Retired	<u>\$345,025,318</u>	<u>\$995,631,026</u>	<u>\$597,024,990</u>	<u>\$0</u>	<u>\$1,208,464</u>	<b><u>\$1,938,889,798</u></b>
d. TOTAL	<b>\$1,275,187,255</b>	<b>\$2,299,111,471</b>	<b>\$1,280,887,152</b>	<b>\$0</b>	<b>\$34,569,015</b>	<b>\$4,889,754,893</b>
3. Actuarial Value of Assets						<b>\$0</b>
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$4,889,754,893</b>
5. Entry Age Normal Cost						<b>\$279,873,620</b>
6. Salary of Active Participants						<b>\$2,211,014,210</b>
7. Normal Cost Percentage [5. / 6.]						<b>12.658%</b>

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

### Market Values of Assets

		<b>Total</b>
<b>1. Plan Net Position @ 6/30/2016</b>	\$	0
<b>2. Changes for the year:</b>		
a. ER Contributions		56,086,853
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments <sup>1</sup>		(56,086,853)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>3. Plan Net Position @ 6/30/2017</b>	\$	0
<b>4. Changes for the year:</b>		
a. ER Contributions		235,395,190
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(235,395,190)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>5. Plan Net Position @ 6/30/2018</b>	\$	0

<sup>1</sup>The OA is not holding a reserve for any due and unpaid premiums or contributions

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

### Development of Asset (Gain) / Loss June 30, 2017

		<b>Total</b>
<b>1. Market Value 6/30/2016</b>	\$	0
<b>2. Market Value 6/30/2017</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

**Development of Asset (Gain) / Loss**  
**June 30, 2018**

		<b>Total</b>
<b>1. Market Value 6/30/2017</b>	\$	0
<b>2. Market Value 6/30/2018</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2017

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2016 <sup>1</sup>	\$	4,516,698,209
2. Entry Age Normal Cost at 6/30/2016 <sup>1</sup>		274,749,014
3. Estimated Benefit Payments-FY17		(148,470,257)
4. Interest <sup>1</sup>		147,666,641
5. Roll-Forward EAAL at 6/30/2017 <sup>1</sup>	\$	4,790,643,607

<sup>1</sup>Assumes a 3.13% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2018

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2017 <sup>1</sup>	\$	4,889,754,893
2. Entry Age Normal Cost at 6/30/2017 <sup>1</sup>		279,873,620
3. Actual Benefit Payments-FY18		(235,395,190)
4. Interest <sup>1</sup>		158,153,822
5. (Gain)/Loss due to Discount Rate Change		116,529,156
5. Roll-Forward EAAL at 6/30/2018 <sup>2</sup>	\$	5,208,916,301

<sup>1</sup>Assumes a 3.13% interest rate

<sup>2</sup>Assumes a 2.98% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

### Changes in Net OPEB Liability (NOL) by Source Balances at June 30, 2017

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2016</b>	<b>\$ 5,207,804,888</b>	<b>\$ 0</b>	<b>\$ 5,207,804,888</b>
<b>2. Changes for the Year:</b>			
a. Service Cost	274,749,014	0	274,749,014
b. Interest	147,666,641	0	147,666,641
c. Differences b/t Expected and Actual Experience	(122,396,196)	0	(122,396,196)
d. Change in Assumptions	(661,093,887)	0	(661,093,887)
e. Contributions - Employer	0	56,086,853	(56,086,853)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	0	0
h. Actual Benefit Payments	(56,086,853)	(56,086,853)	0
i. Administrative Expenses	0	0	0
j. Other Changes	0	0	0
<b>k. Net Changes</b>	<b>\$ (417,161,281)</b>	<b>\$ 0</b>	<b>\$ (417,161,281)</b>
<b>3. Balances at June 30, 2017</b>	<b>\$ 4,790,643,607</b>	<b>\$ 0</b>	<b>\$ 4,790,643,607</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			<b>\$ 5,582,589,281</b>
m. 1% Increase			<b>\$ 4,163,252,338</b>
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			<b>\$ 4,004,662,325</b>
o. 1% Increase			<b>\$ 5,890,166,060</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

### Changes in Net OPEB Liability (NOL) by Source Balances at June 30, 2018

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2017</b>	<b>\$ 4,790,643,607</b>	<b>\$ 0</b>	<b>\$ 4,790,643,607</b>
<b>2. Changes for the Year:</b>			
a. Service Cost	279,873,620	0	279,873,620
b. Interest	158,153,822	0	158,153,822
c. Differences b/t Expected and Actual Experience	104,933,324	0	104,933,324
d. Change in Assumptions	110,707,118	0	110,707,118
e. Contributions - Employer	0	235,395,190	(235,395,190)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	0	0
h. Actual Benefit Payments	(235,395,190)	(235,395,190)	0
i. Administrative Expenses	0	0	0
j. Other Changes	0	0	0
<b>k. Net Changes</b>	<b>\$ 418,272,694</b>	<b>\$ 0</b>	<b>\$ 418,272,694</b>
<b>3. Balances at June 30, 2018</b>	<b>\$ 5,208,916,301</b>	<b>\$ 0</b>	<b>\$ 5,208,916,301</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			<b>\$ 6,106,586,377</b>
m. 1% Increase			<b>\$ 4,502,774,496</b>
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			<b>\$ 4,322,155,597</b>
o. 1% Increase			<b>\$ 6,460,618,094</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

### Schedule of Changes in Net OPEB Liability and Related Ratios

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>1. Total OPEB Liability</b>			
a. Service Cost	\$ 279,873,620	\$ 274,749,014	\$ 326,174,054
b. Interest	158,153,822	147,666,641	139,259,723
c. Changes of Benefit Terms	0	0	0
d. Differences b/t Expected and Actual Experience	104,933,324	(122,396,196)	(43,447,941)
e. Changes of Assumptions	110,707,118	(661,093,887)	0
f. Benefit Payments	(235,395,190)	(56,086,853)	(95,999,857)
<b>g. Net Changes in Total OPEB Liability</b>	<b>\$ 418,272,694</b>	<b>\$ (417,161,281)</b>	<b>\$ 325,985,979</b>
<b>2. Total OPEB Liability - Beginning</b>	<b>\$ 4,790,643,607</b>	<b>\$ 5,207,804,888</b>	<b>\$ 4,881,818,909</b>
<b>3. Total OPEB Liability - Ending</b>	<b>\$ 5,208,916,301</b>	<b>\$ 4,790,643,607</b>	<b>\$ 5,207,804,888</b>
<b>4. Plan Fiduciary Net Position</b>			
a. Contributions - Employer	\$ 235,395,190	56,086,853	95,999,857
b. Contributions - Employee	0	0	0
c. Net Investment Income	0	0	0
d. Benefit Payments	(235,395,190)	(56,086,853)	(95,999,857)
e. Administrative Expenses	0	0	0
f. Other Changes	0	0	0
<b>g. Net Changes in Plan Fiduciary Net Position</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>7. Net OPEB Liability</b>	<b>\$ 5,208,916,301</b>	<b>\$ 4,790,643,607</b>	<b>\$ 5,207,804,888</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>9. Covered Employee Payroll</b>	<b>\$2,211,014,210</b>	<b>\$2,283,056,125</b>	<b>\$2,171,335,699</b>
<b>10. Net OPEB Liability as a Percentage of Covered Employee Payroll</b>	<b>235.6%</b>	<b>209.8%</b>	<b>239.8%</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

Average Expected Remaining Service Lives @ 6/30/2017

<u>Group</u>	<u># Count</u>	Total Future WorkLife <u>@ 6/30/2017</u>	Average Expected Remaining Service Life <u>@ 6/30/2017</u>
Active	30,944	330,831	10.69
Active/Inactive <sup>1</sup>	4,350	60,707	13.96
Term Vested	1,536	0	0
Retired	<u>21,707</u>	<u>0</u>	<u>0</u>
Total	58,537	391,538	6.35

<sup>1</sup>Only 40% of inactives are assumed to return to active status

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Health and Hospitals Corporation (HHC)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Expected and Actual Experience**

<b>Year</b>	<b>Differences between Expected and Actual Experience</b>	<b>Period Recognition (Years)</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2016 <sup>1</sup>	\$ (43,447,941)	6.57	(6,613,081)	(6,613,081)	(6,613,081)	(6,613,081)	(6,613,081)	(6,613,081)	(3,769,455)	0	0
2017	\$ (122,396,196)	6.57	0	(18,629,558)	(18,629,558)	(18,629,558)	(18,629,558)	(18,629,558)	(18,629,558)	(10,618,848)	0
2018	\$ 104,933,324	6.35		0	16,524,933	16,524,933	16,524,933	16,524,933	16,524,933	16,524,933	5,783,726
2019											
2020											
2021											
Net increase (decrease) in OPEB Expense			<u>\$ (6,613,081)</u>	<u>\$ (25,242,639)</u>	<u>\$ (8,717,706)</u>	<u>\$ (8,717,706)</u>	<u>\$ (8,717,706)</u>	<u>\$ (8,717,706)</u>	<u>\$ (5,874,080)</u>	<u>\$ 5,906,085</u>	<u>\$ 5,783,726</u>

<sup>1</sup>Represents the Future Working Lifetime as of 6/30/2016

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Changes  
in Assumptions**

Year	Differences Due to Changes in Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024
2017	\$ (661,093,887)	6.57	(100,623,118)	(100,623,118)	(100,623,118)	(100,623,118)	(100,623,118)	(100,623,118)	(57,355,179)	0
2018	\$ 110,707,118	6.35	0	17,434,192	17,434,192	17,434,192	17,434,192	17,434,192	17,434,192	6,101,966
2019										
2020										
2021										
Net increase (decrease) in OPEB Expense			\$ (100,623,118)	\$ (83,188,926)	\$ (83,188,926)	\$ (83,188,926)	\$ (83,188,926)	\$ (83,188,926)	\$ (39,920,987)	\$ 6,101,966

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Health and Hospitals Corporation (HHC)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Projected and Actual Earnings on OPEB Plan Investments**

<b>Year</b>	<b>Differences between Projected and Actual Earnings on OPEB Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
2017	\$ 0	5	0	0	0	0	0	0
2018	\$ 0	5	0	0	0	0	0	0
2019								
2020								
2021								
Net increase (decrease) in OPEB Expense			\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Health and Hospitals Corporation (HHC)**

**Components of OPEB Expense for the Fiscal Year Ended June 30, 2017**

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 274,749,014
b. Interest on the Total OPEB Liability	147,666,641
c. Differences between Expected and Actual Experience	(25,242,639)
d. Changes of Assumptions	(100,623,118)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	0
<b>Total OPEB Expense</b>	<b>\$ 296,549,898</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

Components of OPEB Expense for the Fiscal Year Ended June 30, 2018

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 279,873,620
b. Interest on the Total OPEB Liability	158,153,822
c. Differences between Expected and Actual Experience	(8,717,706)
d. Changes of Assumptions	(83,188,926)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	0
<b>Total OPEB Expense</b>	<b>\$ 346,120,810</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2016, the City recognized OPEB Expense of \$458,820,696.

For June 30, 2016, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 0	\$ 36,834,860
Changes of Assumptions	0	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 0	\$ 36,834,860

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>		<u>Amount</u>
2016	\$	(6,613,081)
2017		(6,613,081)
2018		(6,613,081)
2019		(6,613,081)
2020		(6,613,081)
Thereafter		(10,382,536)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

For the Fiscal Year ended June 30, 2017, the City recognized OPEB Expense of \$296,549,898.

For June 30, 2017, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 103,766,638
Changes of Assumptions	0	560,470,769
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 0	\$ 664,237,407

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2017	\$ (119,252,676)
2018	(119,252,676)
2019	(119,252,676)
2020	(119,252,676)
2021	(119,252,676)
Thereafter	(187,226,703)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Health and Hospitals Corporation (HHC)

OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$346,120,810.

For June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 88,408,391	\$ 0
Changes of Assumptions	93,272,926	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 181,681,317	\$ 0

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2018	\$ 33,959,125
2019	33,959,125
2020	33,959,125
2021	33,959,125
2022	33,959,125
Thereafter	45,844,817

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Health and Hospitals Corporation (HHC)**

### OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

**For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$346,120,810.**

**At June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:**

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 88,408,391	\$ 108,745,778
Changes of Assumptions	93,272,926	459,847,651
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 181,681,317	\$ 568,593,429

**Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:**

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2018	\$ (91,906,632)
2019	(91,906,632)
2020	(91,906,632)
2021	(91,906,632)
2022	(89,063,006)
Thereafter	(22,129,210)

**New York City Housing Authority (NYCHA)**

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City Housing Authority (NYCHA)

#### Summary of June 30, 2017 OPEB Data

	NYCERS	TRS	BERS	TOTAL
<b>1. Actives</b>				
a. Number	9,511	1	23	9,535
b. Salary	\$624,224,921	92,025	1,864,902	\$626,181,848
c. Average Age	48.66	69.00	53.04	48.67
d. Average Service	15.07	27.00	16.17	15.07
e. Average Salary	\$65,632	\$92,025	\$81,083	\$65,672
<b>2. Inactives</b>				
a. Number	1,027	0	4	1,031
b. Average Age	44.96	NA	49.00	44.97
c. Average Service	8.90	NA	9.00	8.90
<b>3. Deferreds</b> (Includes Deferred Retirees, if any)				
a. Number	565	0	1	566
b. Average Age	54.86	NA	55.10	54.86
<b>4. Retirees</b>				
a. Total <sup>1</sup>				
i. Number	8,915	4	20	8,939
ii. Average Age	71.49	79.96	71.05	71.49
b. By Benefit				<u>Participant / Spouse</u>
i. Pre-Medicare <sup>2</sup>				1,896 / 1,279
ii. Medicare Eligible <sup>2</sup>				6,222 / 2,019
iii. Welfare Fund <sup>2</sup>				7,590 / NA
iv. Medicare Part B <sup>3</sup>				8,939 / 3,770

<sup>1</sup> Retirees eligible for at least one benefit from NYCHA.

<sup>2</sup> Retirees currently eligible for benefit from NYCHA.

<sup>3</sup> Retirees eligible for benefit from NYCHA currently or in the future.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City Housing Authority (NYCHA)

#### June 30, 2016 Results of the Actuarial Valuation Based on a 3.13% Discount Rate

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$890,825,576	\$826,006,830	\$410,581,096	\$539,860,228	\$32,546,293	<b>\$2,699,820,023</b>
b. Deferred <sup>2</sup>	53,836,240	45,391,169	23,463,806	29,900,146	\$247,118	<b>\$152,838,479</b>
c. Retired	<u>234,468,515</u>	<u>376,901,308</u>	<u>246,702,421</u>	<u>265,459,727</u>	<u>\$268,219</u>	<b><u>\$1,123,800,190</u></b>
d. TOTAL	<b>\$1,179,130,331</b>	<b>\$1,248,299,307</b>	<b>\$680,747,323</b>	<b>\$835,220,101</b>	<b>\$33,061,630</b>	<b>\$3,976,458,692</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$341,950,080	\$367,353,905	\$174,311,197	\$240,135,258	\$7,670,932	<b>\$1,131,421,372</b>
b. Deferred <sup>2</sup>	53,836,240	45,391,169	23,463,806	29,900,146	247,118	<b>\$152,838,479</b>
c. Retired	<u>234,468,515</u>	<u>376,901,308</u>	<u>246,702,421</u>	<u>265,459,727</u>	<u>268,219</u>	<b><u>\$1,123,800,190</u></b>
d. TOTAL	<b>\$630,254,835</b>	<b>\$789,646,382</b>	<b>\$444,477,424</b>	<b>\$535,495,131</b>	<b>\$8,186,269</b>	<b>\$2,408,060,041</b>
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$2,408,060,041</b>
5. Entry Age Normal Cost						<b>\$112,636,963</b>
6. Salary of Active Participants						<b>\$645,395,386</b>
7. Normal Cost Percentage [5. / 6.]						<b>17.452%</b>

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City Housing Authority (NYCHA)

#### June 30, 2017 Results of the Actuarial Valuation

Based on a 3.13% Discount Rate

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$894,648,291	\$835,855,109	\$437,843,004	\$572,614,491	\$56,881,666	<b>\$2,797,842,561</b>
b. Deferred <sup>2</sup>	57,369,360	44,233,526	24,038,468	30,522,460	\$622,952	<b>\$156,786,766</b>
c. Retired	<u>246,485,954</u>	<u>405,462,396</u>	<u>262,309,280</u>	<u>296,845,739</u>	<u>\$853,724</u>	<b><u>\$1,211,957,093</u></b>
d. TOTAL	<b>\$1,198,503,605</b>	<b>\$1,285,551,031</b>	<b>\$724,190,752</b>	<b>\$899,982,690</b>	<b>\$58,358,342</b>	<b>\$4,166,586,420</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$356,506,199	\$379,745,679	\$188,820,201	\$260,194,138	\$14,611,828	<b>\$1,199,878,045</b>
b. Deferred <sup>2</sup>	57,369,360	44,233,526	24,038,468	30,522,460	622,952	<b>\$156,786,766</b>
c. Retired	<u>246,485,954</u>	<u>405,462,396</u>	<u>262,309,280</u>	<u>296,845,739</u>	<u>\$853,724</u>	<b><u>\$1,211,957,093</u></b>
d. TOTAL	<b>\$660,361,513</b>	<b>\$829,441,601</b>	<b>\$475,167,949</b>	<b>\$587,562,337</b>	<b>\$16,088,504</b>	<b>\$2,568,621,904</b>
3. Actuarial Value of Assets						<b>\$0</b>
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$2,568,621,904</b>
5. Entry Age Normal Cost						<b>\$115,760,055</b>
6. Salary of Active Participants						<b>\$626,181,848</b>
7. Normal Cost Percentage						<b>18.487%</b>
[5. / 6.]						

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

**New York City School Construction Authority (SCA)**

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City School Construction Authority (SCA)

#### Summary of June 30, 2017 OPEB Data

	NYCERS	BERS	TOTAL
<b>1. Actives</b>			
a. Number	58	641	699
b. Salary	\$6,787,678	66,388,984	73,176,662
c. Average Age	54.29	51.88	52.08
d. Average Service	19.95	10.66	11.43
e. Average Salary	\$117,029	\$103,571	\$104,688
<b>2. Inactives</b>			
a. Number	3	23	26
b. Average Age	46.67	45.78	45.88
c. Average Service	10.33	7.09	7.46
<b>3. Deferreds</b> (Includes Deferred Retirees, if any)			
a. Number	6	24	30
b. Average Age	54.33	54.50	54.47
<b>4. Retirees</b>			
a. Total <sup>1</sup>			
i. Number	46	233	279
ii. Average Age	71.25	72.98	72.69
b. By Benefit			<u>Participant / Spouse</u>
i. Pre-Medicare <sup>2</sup>			NR / NR
ii. Medicare Eligible <sup>2</sup>			NR / NR
iii. Welfare Fund <sup>2</sup>			279 / NA
iv. Medicare Part B <sup>3</sup>			NR / NR

<sup>1</sup> Retirees eligible for at least one benefit from SCA.

<sup>2</sup> Retirees currently eligible for benefit from SCA.

<sup>3</sup> Retirees eligible for benefit from SCA currently or in the future.

NR Benefit not the responsibility of SCA.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**June 30, 2016 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$0	\$0	\$21,927,735	\$0	\$0	\$21,927,735
b. Deferred <sup>2</sup>	0	0	963,101	0	0	963,101
c. Retired	<u>0</u>	<u>0</u>	<u>7,605,931</u>	<u>0</u>	<u>0</u>	<u>7,605,931</u>
d. TOTAL	<b>\$0</b>	<b>\$0</b>	<b>\$30,496,767</b>	<b>\$0</b>	<b>\$0</b>	<b>\$30,496,767</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$0	\$0	\$10,304,908	\$0	\$0	\$10,304,908
b. Deferred <sup>2</sup>	0	0	963,101	0	0	963,101
c. Retired	<u>0</u>	<u>0</u>	<u>7,605,931</u>	<u>0</u>	<u>0</u>	<u>7,605,931</u>
d. TOTAL	<b>\$0</b>	<b>\$0</b>	<b>\$18,873,940</b>	<b>\$0</b>	<b>\$0</b>	<b>\$18,873,940</b>
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$18,873,940
5. Entry Age Normal Cost						\$1,050,170
6. Salary of Active Participants						\$68,026,651
7. Normal Cost Percentage [5. / 6.]						1.544%

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**June 30, 2017 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$0	\$0	\$25,968,540	\$0	\$0	\$25,968,540
b. Deferred <sup>2</sup>	0	0	1,422,988	0	0	\$1,422,988
c. Retired	<u>0</u>	<u>0</u>	<u>8,472,671</u>	<u>0</u>	<u>0</u>	<u>\$8,472,671</u>
d. TOTAL	\$0	\$0	\$35,864,199	\$0	\$0	\$35,864,199
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$0	\$0	\$12,031,312	\$0	\$0	\$12,031,312
b. Deferred <sup>2</sup>	0	0	1,422,988	0	0	1,422,988
c. Retired	<u>0</u>	<u>0</u>	<u>8,472,671</u>	<u>0</u>	<u>0</u>	<u>\$8,472,671</u>
d. TOTAL	\$0	\$0	\$21,926,971	\$0	\$0	\$21,926,971
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$21,926,971
5. Entry Age Normal Cost						\$1,226,189
6. Salary of Active Participants						\$73,176,662
7. Normal Cost Percentage [5. / 6.]						1.676%

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

### Market Values of Assets

		<b>Total</b>
<b>1. Plan Net Position @ 6/30/2016</b>	\$	0
<b>2. Changes for the year:</b>		
a. ER Contributions		549,250
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(549,250)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>3. Plan Net Position @ 6/30/2017</b>	\$	0
<b>2. Changes for the year:</b>		
a. ER Contributions		567,069
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(567,069)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>3. Plan Net Position @ 6/30/2018</b>	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

Development of Asset (Gain) / Loss  
June 30, 2017

		<b>Total</b>
<b>1. Market Value 6/30/2016</b>	\$	0
<b>2. Market Value 6/30/2017</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**Development of Asset (Gain) / Loss**  
**June 30, 2018**

		<b>Total</b>
<b>1. Market Value 6/30/2017</b>	\$	0
<b>2. Market Value 6/30/2018</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City School Construction Authority (SCA)**

**Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2017**

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2016 <sup>1</sup>	\$	18,873,940
2. Entry Age Normal Cost at 6/30/2016 <sup>1</sup>		1,050,170
3. Estimated Benefit Payments-FY17		(524,525)
4. Interest <sup>1</sup>		615,479
5. Roll-Forward EAAL at 6/30/2017 <sup>1</sup>	\$	20,015,064

<sup>1</sup>Assumes a 3.13% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City School Construction Authority (SCA)**

**Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2018**

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2017 <sup>1</sup>	\$	21,926,971
2. Entry Age Normal Cost at 6/30/2017 <sup>1</sup>		1,226,189
3. Actual Benefit Payments-FY18		(567,069)
4. Interest <sup>1</sup>		715,888
5. (Gain)/Loss due to Discount Rate Change		539,255
5. Roll-Forward EAAL at 6/30/2018 <sup>2</sup>	\$	23,841,234

<sup>1</sup>Assumes a 3.13% interest rate

<sup>2</sup>Assumes a 2.98% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

### Changes in Net OPEB Liability (NOL) by Source Balances at June 30, 2017

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)		Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2016</b>	\$ 22,919,582	\$ 0	\$	22,919,582
<b>2. Changes for the Year:</b>				
a. Service Cost	1,050,170	0		1,050,170
b. Interest	615,479	0		615,479
c. Differences b/t Expected and Actual Experience	(761,806)	0		(761,806)
d. Changes in Assumptions	(3,259,111)	0		(3,259,111)
e. Contributions - Employer	0	549,250		(549,250)
f. Contributions - Employee	0	0		0
g. Net Investment Income	0	0		0
h. Actual Benefit Payments	(549,250)	(549,250)		0
i. Administrative Expenses	0	0		0
j. Other Changes	0	0		0
<b>k. Net Changes</b>	<b>\$ (2,904,518)</b>	<b>\$ 0</b>	<b>\$</b>	<b>(2,904,518)</b>
<b>3. Balances at June 30, 2017</b>	<b>\$ 20,015,064</b>	<b>\$ 0</b>	<b>\$</b>	<b>20,015,064</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>				
l. 1% Decrease			\$	23,408,727
m. 1% Increase			\$	17,284,050
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>				
n. 1% Decrease			\$	16,877,239
o. 1% Increase			\$	24,077,001

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**Changes in Net OPEB Liability (NOL) by Source**  
Balances at June 30, 2018

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)		Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2017</b>	\$ 20,015,064	\$ 0	\$	20,015,064
<b>2. Changes for the Year:</b>				
a. Service Cost	1,226,189	0		1,226,189
b. Interest	715,888	0		715,888
c. Differences b/t Expected and Actual Experience	1,943,051	0		1,943,051
d. Changes in Assumptions	508,111	0		508,111
e. Contributions - Employer	0	567,069		(567,069)
f. Contributions - Employee	0	0		0
g. Net Investment Income	0	0		0
h. Actual Benefit Payments	(567,069)	(567,069)		0
i. Administrative Expenses	0	0		0
j. Other Changes	0	0		0
<b>k. Net Changes</b>	<b>\$ 3,826,170</b>	<b>\$ 0</b>	<b>\$</b>	<b>3,826,170</b>
<b>3. Balances at June 30, 2018</b>	<b>\$ 23,841,234</b>	<b>\$ 0</b>	<b>\$</b>	<b>23,841,234</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>				
l. 1% Decrease			\$	27,932,016
m. 1% Increase			\$	20,553,618
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>				
n. 1% Decrease			\$	20,073,318
o. 1% Increase			\$	28,721,878

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

### Schedule of Changes in Net OPEB Liability and Related Ratios

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>1. Total OPEB Liability</b>			
a. Service Cost	\$ 1,226,189	\$ 1,050,170	\$ 1,281,787
b. Interest	715,888	615,479	611,500
c. Changes of Benefit Terms	0	0	0
d. Differences b/t Expected and Actual Experience	1,943,051	(761,806)	(32,395)
e. Changes of Assumptions	508,111	(3,259,111)	0
f. Benefit Payments	(567,069)	(549,250)	(477,190)
<b>g. Net Changes in Total OPEB Liability</b>	<b>\$ 3,826,170</b>	<b>\$ (2,904,518)</b>	<b>\$ 1,383,702</b>
<b>2. Total OPEB Liability - Beginning</b>	<b>\$ 20,015,064</b>	<b>\$ 22,919,582</b>	<b>\$ 21,535,880</b>
<b>3. Total OPEB Liability - Ending</b>	<b>\$ 23,841,234</b>	<b>\$ 20,015,064</b>	<b>\$ 22,919,582</b>
<b>4. Plan Fiduciary Net Position</b>			
a. Contributions - Employer	\$ 567,069	\$ 549,250	\$ 477,190
b. Contributions - Employee	0	0	0
c. Net Investment Income	0	0	0
d. Benefit Payments	(567,069)	(549,250)	(477,190)
e. Administrative Expenses	0	0	0
f. Other Changes	0	0	0
<b>g. Net Changes in Plan Fiduciary Net Position</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>7. Net OPEB Liability</b>	<b>\$ 23,841,234</b>	<b>\$ 20,015,064</b>	<b>\$ 22,919,582</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>9. Covered Employee Payroll</b>	<b>\$73,176,662</b>	<b>\$68,026,651</b>	<b>\$60,765,975</b>
<b>10. Net OPEB Liability as a Percentage of Covered Employee Payroll</b>	<b>32.6%</b>	<b>29.4%</b>	<b>37.7%</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City School Construction Authority (SCA)**

**Average Expected Remaining Service Lives @ 6/30/2017**

<u>Group</u>	<u># Count</u>	<u>Total Future WorkLife @ 6/30/2017</u>	<u>Average Expected Remaining Service Life @ 6/30/2017</u>
Active	699	6,429	9.20
Active/Inactive <sup>1</sup>	26	324	12.46
Term Vested	30	0	0
Retired	<u>279</u>	<u>0</u>	<u>0</u>
Total	1,034	6,753	6.44

<sup>1</sup>Only 40% of inactives are assumed to return to active status

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City School Construction Authority (SCA)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Expected and Actual Experience**

<b>Year</b>	<b>Differences between Expected and Actual Experience</b>	<b>Recognition Period (Years)</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2016 <sup>1</sup>	\$ (32,395)	6.41	(5,054)	(5,054)	(5,054)	(5,054)	(5,054)	(5,054)	(2,071)	0	0
2017	\$ (761,806)	6.41	0	(118,846)	(118,846)	(118,846)	(118,846)	(118,846)	(118,846)	(48,730)	0
2018	\$ 1,943,051	6.44			301,716	301,716	301,716	301,716	301,716	301,716	132,755
2019											
2020											
2021											
Net increase (decrease) in OPEB Expense			\$ (5,054)	\$ (123,900)	\$ 177,816	\$ 177,816	\$ 177,816	\$ 177,816	\$ 180,799	\$ 252,986	\$ 132,755

<sup>1</sup>Represents the Future Working Lifetime as of 6/30/2016

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City School Construction Authority (SCA)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Changes  
in Assumptions**

<b>Year</b>	<b>Differences Due to Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2017	\$ (3,259,111)	6.41	(508,442)	(508,442)	(508,442)	(508,442)	(508,442)	(508,442)	(208,459)	0
2018	\$ 508,111	6.44	0	78,899	78,899	78,899	78,899	78,899	78,899	34,717
2019										
2020										
2021										
Net increase (decrease) in OPEB Expense			<u>\$ (508,442)</u>	<u>\$ (429,543)</u>	<u>\$ (129,560)</u>	<u>\$ 34,717</u>				

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City School Construction Authority (SCA)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Projected and Actual Earnings on OPEB Plan Investments**

<b>Year</b>	<b>Differences between Projected and Actual Earnings on OPEB Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
2017	\$ 0	5	0	0	0	0	0	0
2018	\$ 0	5	0	0	0	0	0	0
2019								
2020								
2021								
Net increase (decrease) in OPEB Expense			\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

Components of OPEB Expense for the Fiscal Year Ended June 30, 2017

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 1,050,170
b. Interest on the Total OPEB Liability	615,479
c. Differences between Expected and Actual Experience	(123,900)
d. Changes of Assumptions	(508,442)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	0
<b>Total OPEB Expense</b>	<b>\$ 1,033,307</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

Components of OPEB Expense for the Fiscal Year Ended June 30, 2018

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 1,226,189
b. Interest on the Total OPEB Liability	715,888
c. Differences between Expected and Actual Experience	177,816
d. Changes of Assumptions	(429,543)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	0
<b>Total OPEB Expense</b>	<b>\$ 1,690,350</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

For the Fiscal Year ended June 30, 2016, the City recognized OPEB Expense of \$1,888,233.

For June 30, 2016, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 27,341
Changes of Assumptions	0	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 0	\$ 27,341

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>		<u>Amount</u>
2016	\$	(5,054)
2017		(5,054)
2018		(5,054)
2019		(5,054)
2020		(5,054)
Thereafter		(7,125)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

For the Fiscal Year ended June 30, 2017, the City recognized OPEB Expense of \$1,033,307.

For June 30, 2017, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 0	\$ 642,960
Changes of Assumptions	0	2,750,669
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 0	\$ 3,393,629

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2017	\$ (627,288)
2018	(627,288)
2019	(627,288)
2020	(627,288)
2021	(627,288)
Thereafter	(884,477)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

**For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$1,690,350.**

**For June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:**

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 1,641,335	\$ 0
Changes of Assumptions	429,212	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 2,070,547	\$ 0

**Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:**

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2018	\$ 380,615
2019	380,615
2020	380,615
2021	380,615
2022	380,615
Thereafter	548,087

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City School Construction Authority (SCA)

OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$1,690,350.

At June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 1,641,335	\$ 541,347
Changes of Assumptions	429,212	2,242,227
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 2,070,547	\$ 2,783,574

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>		<u>Amount</u>
2018	\$	(251,727)
2019		(251,727)
2020		(251,727)
2021		(251,727)
2022		(248,744)
Thereafter		290,898

**New York City Municipal Water Finance Authority (WFA)**

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

#### New York City Municipal Water Finance Authority (WFA)

#### Summary of June 30, 2017 OPEB Data

	NYCERS	BERS	TOTAL
<b>1. Actives</b>			
a. Number	9	0	9
b. Salary	\$858,968	NA	\$858,968
c. Average Age	47.56	NA	47.56
d. Average Service	10.33	NA	10.33
e. Average Salary	\$95,441	NA	\$95,441
<b>2. Inactives</b>			
a. Number	2	0	2
b. Average Age	42.00	NA	42.00
c. Average Service	5.00	NA	5.00
<b>3. Deferreds</b> (Includes Deferred Retirees, if any)			
a. Number	0	0	0
b. Average Age	NA	NA	NA
<b>4. Retirees</b>			
a. Total <sup>1</sup>			
i. Number	3	1	4
ii. Average Age	71.74	73.81	72.26
b. By Benefit			<u>Participant / Spouse</u>
i. Pre-Medicare <sup>2</sup>			N/A / NA
ii. Medicare Eligible <sup>2</sup>			4 / 1
iii. Welfare Fund <sup>2</sup>			4 / NA
iv. Medicare Part B <sup>3</sup>			NR / NR

<sup>1</sup> Retirees eligible for at least one benefit from WFA.

<sup>2</sup> Retirees currently eligible for benefit from WFA.

<sup>3</sup> Retirees eligible for benefit from WFA currently or in the future.

NR Benefit not the responsibility of WFA.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

**June 30, 2016 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$1,098,188	\$934,918	\$432,904	\$0	\$30,480	<b>\$2,496,490</b>
b. Deferred <sup>2</sup>	\$0	\$0	\$0	\$0	\$0	<b>0</b>
c. Retired	<u>\$0</u>	<u>\$134,057</u>	<u>\$121,967</u>	<u>\$0</u>	<u>\$41</u>	<b><u>256,065</u></b>
d. TOTAL	<b>\$1,098,188</b>	<b>\$1,068,975</b>	<b>\$554,871</b>	<b>\$0</b>	<b>\$30,521</b>	<b>\$2,752,555</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$431,937	\$399,661	\$185,735	\$0	\$8,848	<b>\$1,026,181</b>
b. Deferred <sup>2</sup>	0	0	0	0	0	<b>0</b>
c. Retired	<u>0</u>	<u>134,057</u>	<u>121,967</u>	<u>0</u>	<u>41</u>	<b><u>256,065</u></b>
d. TOTAL	<b>\$431,937</b>	<b>\$533,718</b>	<b>\$307,702</b>	<b>\$0</b>	<b>\$8,889</b>	<b>\$1,282,246</b>
3. Actuarial Value of Assets						<b>\$0</b>
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$1,282,246</b>
5. Entry Age Normal Cost						<b>\$101,168</b>
6. Salary of Active Participants						<b>\$1,038,842</b>
7. Normal Cost Percentage [5. / 6.]						<b>9.739%</b>

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

**June 30, 2017 Results of the Actuarial Valuation  
Based on a 3.13% Discount Rate**

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$1,020,762	\$893,924	\$435,002	\$0	\$48,892	<b>\$2,398,580</b>
b. Deferred <sup>2</sup>	0	0	0	0	0	<b>\$0</b>
c. Retired	<u>0</u>	<u>134,741</u>	<u>122,773</u>	<u>0</u>	<u>122</u>	<b><u>\$257,636</u></b>
d. TOTAL	<b>\$1,020,762</b>	<b>\$1,028,665</b>	<b>\$557,775</b>	<b>\$0</b>	<b>\$49,014</b>	<b>\$2,656,216</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>1</sup>	\$420,928	\$408,841	\$200,858	\$0	\$15,203	<b>\$1,045,830</b>
b. Deferred <sup>2</sup>	0	0	0	0	0	<b>\$0</b>
c. Retired	<u>0</u>	<u>134,741</u>	<u>122,773</u>	<u>0</u>	<u>122</u>	<b><u>\$257,636</u></b>
d. TOTAL	<b>\$420,928</b>	<b>\$543,582</b>	<b>\$323,631</b>	<b>\$0</b>	<b>\$15,325</b>	<b>\$1,303,466</b>
3. Actuarial Value of Assets						<b>\$0</b>
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$1,303,466</b>
5. Entry Age Normal Cost						<b>\$93,822</b>
6. Salary of Active Participants						<b>\$858,968</b>
7. Normal Cost Percentage [5. / 6.]						<b>10.923%</b>

<sup>1</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>2</sup> Includes Deferred Retirees, if any.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

### Market Values of Assets

		<b>Total</b>
<b>1. Plan Net Position @ 6/30/2016</b>	\$	0
<b>2. Changes for the year:</b>		
a. ER Contributions		14,901
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(14,901)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>3. Plan Net Position @ 6/30/2017</b>	\$	0
<b>4. Changes for the year:</b>		
a. ER Contributions		20,396
b. EE Contributions		0
c. Net Investment Income		0
d. Benefit Payments		(20,396)
e. Administrative Expenses		0
f. Other		0
g. Net Changes	\$	0
<b>5. Plan Net Position @ 6/30/2018</b>	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

### Development of Asset (Gain) / Loss June 30, 2017

		<b>Total</b>
<b>1. Market Value 6/30/2016</b>	\$	0
<b>2. Market Value 6/30/2017</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

Development of Asset (Gain) / Loss

June 30, 2018

		<b>Total</b>
<b>1. Market Value 6/30/2017</b>	\$	0
<b>2. Market Value 6/30/2018</b>		0
<b>3. Net Investment Income</b>		0
<b>4. Cash Flow</b> (2. - 1. - 3.)		0
<b>5. Projected Earnings</b> (4% * 1. + 1.980% * 4.)		0
<b>6. (Gain) / Loss</b> (5. - 3.)		0
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		0
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Municipal Water Finance Authority (WFA)**

**Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2017**

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2016 <sup>1</sup>	\$	1,282,246
2. Entry Age Normal Cost at 6/30/2016 <sup>1</sup>		101,168
3. Estimated Benefit Payments-FY17		(14,668)
4. Interest <sup>1</sup>		43,073
5. Roll-Forward EAAL at 6/30/2017 <sup>1</sup>	\$	1,411,819

<sup>1</sup>Assumes a 3.13% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2018

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2017 <sup>1</sup>	\$	1,303,466
2. Entry Age Normal Cost at 6/30/2017 <sup>1</sup>		93,822
3. Actual Benefit Payments-FY18		(20,396)
4. Interest <sup>1</sup>		43,418
5. (Gain)/Loss due to Discount Rate Change		37,160
5. Roll-Forward EAAL at 6/30/2018 <sup>2</sup>	\$	1,457,470

<sup>1</sup>Assumes a 3.13% interest rate

<sup>2</sup>Assumes a 2.98% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

### Changes in Net OPEB Liability (NOL) by Source Balances at June 30, 2017

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2016</b>	<b>\$ 1,601,155</b>	<b>\$ 0</b>	<b>\$ 1,601,155</b>
<b>2. Changes for the Year:</b>			
a. Service Cost	101,168	0	101,168
b. Interest	43,073	0	43,073
c. Differences b/t Expected and Actual Experience	(96,417)	0	(96,417)
d. Change in Assumptions	(222,259)	0	(222,259)
e. Contributions - Employer	0	14,901	(14,901)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	0	0
h. Actual Benefit Payments	(14,901)	(14,901)	0
i. Administrative Expenses	0	0	0
j. Other Changes	0	0	0
<b>k. Net Changes</b>	<b>\$ (189,336)</b>	<b>\$ 0</b>	<b>\$ (189,336)</b>
<b>3. Balances at June 30, 2017</b>	<b>\$ 1,411,819</b>	<b>\$ 0</b>	<b>\$ 1,411,819</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			<b>\$ 1,702,595</b>
m. 1% Increase			<b>\$ 1,189,302</b>
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			<b>\$ 1,126,828</b>
o. 1% Increase			<b>\$ 1,826,992</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

### Changes in Net OPEB Liability (NOL) by Source

Balances at June 30, 2018

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2017</b>	\$ 1,411,819	\$ 0	\$ 1,411,819
<b>2. Changes for the Year:</b>			
a. Service Cost	93,822	0	93,822
b. Interest	43,418	0	43,418
c. Differences b/t Expected and Actual Experience	(106,042)	0	(106,042)
d. Change in Assumptions	34,849	0	34,849
e. Contributions - Employer	0	20,396	(20,396)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	0	0
h. Actual Benefit Payments	(20,396)	(20,396)	0
i. Administrative Expenses	0	0	0
j. Other Changes	0	0	0
<b>k. Net Changes</b>	<b>\$ 45,651</b>	<b>\$ 0</b>	<b>\$ 45,651</b>
<b>3. Balances at June 30, 2018</b>	<b>\$ 1,457,470</b>	<b>\$ 0</b>	<b>\$ 1,457,470</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			<b>\$ 1,747,595</b>
m. 1% Increase			<b>\$ 1,233,836</b>
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			<b>\$ 1,164,356</b>
o. 1% Increase			<b>\$ 1,884,825</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

### Schedule of Changes in Net OPEB Liability and Related Ratios

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>1. Total OPEB Liability</b>			
a. Service Cost	\$ 93,822	\$ 101,168	\$ 136,444
b. Interest	43,418	43,073	42,584
c. Changes of Benefit Terms	0	0	0
d. Differences b/t Expected and Actual Experience	(106,042)	(96,417)	(8,454)
e. Changes of Assumptions	34,849	(222,259)	0
f. Benefit Payments	(20,396)	(14,901)	(16,973)
<b>g. Net Changes in Total OPEB Liability</b>	<b>\$ 45,651</b>	<b>\$ (189,336)</b>	<b>\$ 153,601</b>
<b>2. Total OPEB Liability - Beginning</b>	<b>\$ 1,411,819</b>	<b>\$ 1,601,155</b>	<b>\$ 1,447,554</b>
<b>3. Total OPEB Liability - Ending</b>	<b>\$ 1,457,470</b>	<b>\$ 1,411,819</b>	<b>\$ 1,601,155</b>
<b>4. Plan Fiduciary Net Position</b>			
a. Contributions - Employer	\$ 20,396	\$ 14,901	\$ 16,973
b. Contributions - Employee	0	0	0
c. Net Investment Income	0	0	0
d. Benefit Payments	(20,396)	(14,901)	(16,973)
e. Administrative Expenses	0	0	0
f. Other Changes	0	0	0
<b>g. Net Changes in Plan Fiduciary Net Position</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>7. Net OPEB Liability</b>	<b>\$ 1,457,470</b>	<b>\$ 1,411,819</b>	<b>\$ 1,601,155</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>9. Covered Employee Payroll</b>	<b>\$ 858,968</b>	<b>\$ 1,038,842</b>	<b>\$ 1,147,964</b>
<b>10. Net OPEB Liability as a Percentage of Covered Employee Payroll</b>	<b>169.7%</b>	<b>135.9%</b>	<b>139.5%</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Municipal Water Finance Authority (WFA)**

**Average Expected Remaining Service Lives @6/30/2017**

<u>Group</u>	<u># Count</u>	Total of Future WorkLife <u>@ 6/30/2017</u>	Average Expected Remaining Service Life <u>@ 6/30/2017</u>
Active	9	108.83	12.09
Active/Inactive <sup>1</sup>	2	28.27	14.14
Term Vested	0	0	0
Retired	<u>4</u>	<u>0</u>	<u>0</u>
Total	15	137.10	8.71

<sup>1</sup>Only 40% of inactives are assumed to return to active status

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Expected and Actual Experience**

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016 <sup>1</sup>	\$ (8,454)	9.26	(913)	(913)	(913)	(913)	(913)	(913)	(913)	(913)	(913)	(237)	0
2017	\$ (96,417)	9.26	0	(10,412)	(10,412)	(10,412)	(10,412)	(10,412)	(10,412)	(10,412)	(10,412)	(10,412)	(2,709)
2018	\$ (106,042)	8.71		0	(12,175)	(12,175)	(12,175)	(12,175)	(12,175)	(12,175)	(12,175)	(12,175)	(8,642)
2019													
2020													
2021													
Net increase (decrease) in OPEB Expense			\$ (913)	\$ (11,325)	\$ (23,500)	\$ (23,500)	\$ (23,500)	\$ (23,500)	\$ (23,500)	\$ (23,500)	\$ (23,500)	\$ (22,824)	\$ (11,351)

<sup>1</sup>Represents the Future Working Lifetime as of 6/30/2016



**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Municipal Water Finance Authority (WFA)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Projected and Actual Earnings on OPEB Plan Investments**

<b>Year</b>	<b>Differences between Projected and Actual Earnings on OPEB Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
2017	\$ 0	5	0	0	0	0	0	0
2018	\$ 0	5	0	0	0	0	0	0
2019								
2020								
2021								
Net increase (decrease) in OPEB Expense			\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

Components of OPEB Expense for the Fiscal Year Ended June 30, 2017

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 101,168
b. Interest on the Total OPEB Liability	43,073
c. Differences between Expected and Actual Experience	(11,325)
d. Changes of Assumptions	(24,002)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	0
<b>Total OPEB Expense</b>	<b>\$ 108,914</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Municipal Water Finance Authority (WFA)**

**Components of OPEB Expense for the Fiscal Year Ended June 30, 2018**

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 93,822
b. Interest on the Total OPEB Liability	43,418
c. Differences between Expected and Actual Experience	(23,500)
d. Changes of Assumptions	(20,001)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	0
g. Differences between Projected and Actual Earnings on Plan Investments	0
h. OPEB Plan Administrative Expenses	0
i. Other Changes in Fiduciary Net Position	0
	0
<b>Total OPEB Expense</b>	<b>\$ 93,739</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Municipal Water Finance Authority (WFA)**

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

**For the Fiscal Year ended June 30, 2016, the City recognized OPEB Expense of \$178,115.**

**For June 30, 2016, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:**

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 7,541
Changes of Assumptions	0	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 0	\$ 7,541

**Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:**

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2016	\$ (913)
2017	(913)
2018	(913)
2019	(913)
2020	(913)
Thereafter	(3,889)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**New York City Municipal Water Finance Authority (WFA)**

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

**For the Fiscal Year ended June 30, 2017, the City recognized OPEB Expense of \$108,914.**

**For June 30, 2017, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:**

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 86,005
Changes of Assumptions	0	198,257
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 0	\$ 284,262

**Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:**

<u>Fiscal Year Ended June 30</u>	<u>Amount</u>
2017	\$ (34,414)
2018	(34,414)
2019	(34,414)
2020	(34,414)
2021	(34,414)
Thereafter	(146,606)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$93,739.

For June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 93,867
Changes of Assumptions	30,848	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 30,848	\$ 93,867

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2018	(8,174)
2019	(8,174)
2020	(8,174)
2021	(8,174)
2022	(8,174)
Thereafter	(30,323)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

New York City Municipal Water Finance Authority (WFA)

**OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources**

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$93,739.

At June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 175,175
Changes of Assumptions	30,848	174,255
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	0	0
Total	\$ 30,848	\$ 349,430

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2018	\$ (43,501)
2019	\$ (43,501)
2020	\$ (43,501)
2021	\$ (43,501)
2022	\$ (43,501)
Thereafter	\$ (144,578)

**City of New York (Excluding Component Units)**

## NEW YORK CITY HEALTH BENEFITS PROGRAM

### Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75) City of New York (Excluding Component Units) Summary of June 30, 2017 OPEB Data

#### By System Not Including Component Units <sup>1</sup>

	NYCERS	TRS	BERS	POLICE	FIRE	NYCRS TOTAL
<b>1. Actives</b>						
a. Number	101,067	116,877	25,115	36,165	11,091	290,315
b. Salary	\$7,248,865,092	\$9,607,429,284	\$1,132,070,671	\$3,904,289,147	\$1,209,570,069	\$23,102,224,263
c. Average Age	46.50	43.70	51.04	37.52	40.69	44.42
d. Average Service	12.03	11.47	8.82	11.49	13.98	11.53
e. Average Salary	\$71,723	\$82,201	\$45,075	\$107,958	\$109,059	\$79,576
<b>2. Inactives</b>						
a. Number	10,376	7,686	2,590	1,822	15	22,489
b. Average Age	42.63	41.58	47.33	36.84	37.87	42.34
c. Average Service	6.82	8.42	6.20	2.79	10.13	6.97
<b>3. Deferreds (Includes Deferred Retirees, if any)</b>						
a. Number	4,405	9,760	1,096	461	58	15,780
b. Average Age	55.15	51.72	55.88	42.01	42.57	52.65
<b>4. Retirees</b>						
a. Total <sup>2</sup>						
i. Number	71,863	77,883	16,209	48,979	16,212	231,146
ii. Average Age	70.23	73.19	74.49	61.80	66.96	69.51
b. By Benefit <sup>3</sup>	<u>Participant / Spouse</u>					
i. Pre-Medicare <sup>4</sup>	20,327 / 12,523	11,444 / 5,213	2,095 / 898	29,699 / 20,746	7,064 / 6,437	70,629 / 45,817
ii. Medicare Eligible <sup>4</sup>	51,536 / 16,633	66,439 / 19,625	14,114 / 4,379	19,280 / 11,040	9,148 / 5,143	160,517 / 56,820
iii. Welfare Fund <sup>4</sup>	70,240 / NA	75,891 / NA	15,524 / NA	48,515 / NA	15,437 / NA	225,607 / NA
iv. Medicare Part B <sup>5</sup>	94,914 / 35,731	79,607 / 25,599	16,241 / 5,284	48,979 / 31,786	16,212 / 11,580	255,953 / 109,980
	<b>TIAA</b>	<b>LODW</b>				<b>GRAND TOTAL</b>
<b>1. Actives</b>						
a. Number	2,357	0				292,672
b. Salary	\$216,621,656	0				\$23,318,845,919
c. Average Age	50.99	NA				44.48
d. Average Service	14.85	NA				11.56
e. Average Salary	\$91,906	NA				\$79,676
<b>2. Inactives</b>						
a. Number	99	0				22,588
b. Average Age	55.61	NA				42.40
c. Average Service	19.13	NA				7.02
<b>3. Deferreds (Includes Deferred Retirees, if any)</b>						
a. Number	91 <sup>6</sup>	0				15,871
b. Average Age	54.50	NA				52.66
<b>4. Retirees</b>						
a. Total						
i. Number	852	772				232,770
ii. Average Age	74.45	80.33				69.56
b. By Benefit <sup>3</sup>	<u>Participant / Spouse</u>	<u>Participant / Spouse</u>				<u>Participant / Spouse</u>
i. Pre-Medicare <sup>4</sup>	31 / 54	50 / 0				70,710 / 45,871
ii. Medicare Eligible <sup>4</sup>	821 / 323	722 / 0				162,060 / 57,143
iii. Welfare Fund <sup>4</sup>	852 / NA	NA / NA				226,459 / NA
iv. Medicare Part B <sup>5</sup>	2,946 / 1,321	772 / 0				259,671 / 111,301

<sup>1</sup> City results also include Medicare Part B coverage for 48,923 actives, 6,047 inactives, 28,003 retirees and 2,023 deferred participants in HHC, SCA, WFA and CUNY Senior Colleges; Health Insurance coverage for 699 actives, 26 inactives, 1,100 retirees and 30 deferred participants in NYCHA (Housing Police retirees only) and SCA; and Welfare Fund coverage for 4,305 actives, 752 inactives, 2,867 retirees and 74 deferred participants in NYCHA (Housing Police retirees only) and CUNY Senior Colleges (non-pedagogical).

<sup>2</sup> Retirees eligible for receipt of Health Insurance, excluding Component Units.

<sup>3</sup> Includes Component Unit participants with City-provided benefits.

<sup>4</sup> Retirees currently eligible for benefit.

<sup>5</sup> Retirees eligible for benefit currently or in the future.

<sup>6</sup> Estimate due to lack of data.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

June 30, 2016 Results of the Actuarial Valuation

Based on a 3.17% Discount Rate

1. Total Present Value of Projected Benefits <sup>1</sup>	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$40,738,885,422	\$29,042,500,655	\$13,592,508,732	\$21,188,236,269	\$2,215,440,745	<b>\$106,777,571,823</b>
b. Deferred <sup>2</sup>	2,196,545,678	1,419,043,436	813,682,069	1,034,474,585	24,745,637	<b>5,488,491,405</b>
c. Retired	<u>14,252,459,084</u>	<u>13,206,491,378</u>	<u>7,626,694,258</u>	<u>9,118,712,253</u>	<u>25,537,533</u>	<b>44,229,894,506</b>
d. TOTAL	<b>\$57,187,890,184</b>	<b>\$43,668,035,469</b>	<b>\$22,032,885,059</b>	<b>\$31,341,423,107</b>	<b>\$2,265,723,915</b>	<b>\$156,495,957,734</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>2</sup>	\$13,939,493,634	\$10,822,720,909	\$5,215,256,167	\$8,043,731,997	\$432,330,372	<b>\$38,453,533,079</b>
b. Deferred <sup>3</sup>	2,196,545,678	1,419,043,436	813,682,069	1,034,474,585	24,745,637	<b>5,488,491,405</b>
c. Retired	<u>14,252,459,084</u>	<u>13,206,491,378</u>	<u>7,626,694,258</u>	<u>9,118,712,253</u>	<u>25,537,533</u>	<b>44,229,894,506</b>
d. TOTAL	<b>\$30,388,498,396</b>	<b>\$25,448,255,723</b>	<b>\$13,655,632,494</b>	<b>\$18,196,918,835</b>	<b>\$482,613,542</b>	<b>\$88,171,918,990</b>
3. Actuarial Value of Assets						<b>\$4,036,331,204</b>
4. Unfunded Actuarial Accrued Liability (UAL)						<b>\$84,135,587,786</b>
5. Entry Age Normal Cost						<b>\$4,521,008,728</b>
6. Salary of Active Participants <sup>4</sup>						<b>\$25,112,110,958</b>
7. Normal Cost Percentage [5. / 6.]						<b>18.003%</b>

<sup>1</sup> City results also include Medicare Part B coverage for 47,647 actives, 5,483 inactive, 27,382 retirees and 2,083 deferred participants in HHC, SCA, WFA and CUNY Senior College; Health Insurance coverage for 650 actives, 39 inactive, 1,125 retirees and 23 deferred participants in NYCHA (Housing Police retirees only) and SCA; and Welfare Fund coverage for 4,104 actives, 721 inactive, 2,903 retirees and 81 deferred participants in NYCHA (Housing Police retirees only) and CUNY Senior Colleges (non-pedagogical).

<sup>2</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>3</sup> Includes Deferred Retirees, if any.

<sup>4</sup> Includes Component Units.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**  
**City of New York (Excluding Component Units)**  
**June 30, 2017 Results of the Actuarial Valuation**  
**Based on a 3.17% Discount Rate**

1. Total Present Value of Projected Benefits <sup>1</sup>	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active <sup>1</sup>	\$43,299,889,908	\$31,076,757,852	\$14,693,095,104	\$23,681,696,200	\$3,890,846,123	<b>\$116,642,285,187</b>
b. Deferred <sup>2</sup>	2,383,908,605	1,554,456,713	883,314,945	1,179,950,142	58,839,087	<b>6,060,469,492</b>
c. Retired	<u>15,017,667,441</u>	<u>13,984,195,138</u>	<u>8,037,639,431</u>	<u>10,140,026,669</u>	<u>68,476,927</u>	<b><u>47,248,005,606</u></b>
d. TOTAL	<b>\$60,701,465,954</b>	<b>\$46,615,409,703</b>	<b>\$23,614,049,480</b>	<b>\$35,001,673,011</b>	<b>\$4,018,162,137</b>	<b>\$169,950,760,285</b>
2. Entry Age Actuarial Accrued Liability						
a. Active <sup>2</sup>	\$14,969,988,363	\$11,513,156,766	\$5,627,365,478	\$8,972,872,022	\$819,054,774	<b>\$41,902,437,403</b>
b. Deferred <sup>3</sup>	2,383,908,605	1,554,456,713	883,314,945	1,179,950,142	58,839,087	<b>6,060,469,492</b>
c. Retired	<u>15,017,667,441</u>	<u>13,984,195,138</u>	<u>8,037,639,431</u>	<u>10,140,026,669</u>	<u>68,476,927</u>	<b><u>47,248,005,606</u></b>
d. TOTAL	<b>\$32,371,564,409</b>	<b>\$27,051,808,617</b>	<b>\$14,548,319,854</b>	<b>\$20,292,848,833</b>	<b>\$946,370,788</b>	<b>\$95,210,912,501</b>
3. Actuarial Value of Assets						<b>\$4,653,903,266</b>
4. Unfunded Actuarial Accrued Liability (UAAL)						<b>\$90,557,009,235</b>
5. Entry Age Normal Cost						<b>\$4,860,387,841</b>
6. Salary of Active Participants <sup>4</sup>						<b>\$26,230,448,259</b>
7. Normal Cost Percentage [5. / 6.]						<b>18.530%</b>

<sup>1</sup> City results also include Medicare Part B coverage for 48,923 actives, 6,047 inactive, 28,003 retirees and 2,023 deferred participants in HHC, SCA, WFA and CUNY Senior College; Health Insurance coverage for 699 actives, 26 inactive, 1,100 retirees and 30 deferred participants in NYCHA (Housing Police retirees only) and SCA; and Welfare Fund coverage for 4,305 actives, 752 inactive, 2,867 retirees and 74 deferred participants in NYCHA (Housing Police retirees only) and CUNY Senior Colleges (non-pedagogical).

<sup>2</sup> Includes Total Present Value of Projected Benefits for Inactives, if any.

<sup>3</sup> Includes Deferred Retirees, if any.

<sup>4</sup> Includes Component Units.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### Market Values of Assets

	<b>Total</b>
<b>1. Plan Net Position @ 6/30/2016</b>	\$ 4,036,331,204
<b>2. Changes for the year:</b>	
a. ER Contributions	3,020,942,554
b. EE Contributions	0
c. Net Investment Income	21,515,588
d. Benefit Payments	(2,424,766,464)
e. Administrative Expenses	(41,100)
f. Other	(78,516)
g. Net Changes	\$ 617,572,062
<b>3. Plan Net Position @ 6/30/2017</b>	\$ 4,653,903,266
<b>4. Changes for the year:</b>	
a. ER Contributions	2,681,020,067
b. EE Contributions	0
c. Net Investment Income	48,093,613
d. Benefit Payments	(2,617,044,303)
e. Administrative Expenses	(43,105)
f. Other	(130,323)
g. Net Changes	\$ 111,895,949
<b>5. Plan Net Position @ 6/30/2018</b>	\$ 4,765,799,215

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

Development of Asset (Gain) / Loss  
June 30, 2017

		<b>Total</b>
<b>1. Market Value 6/30/2016</b>	\$	4,036,331,204
<b>2. Market Value 6/30/2017</b>		4,653,903,266
<b>3. Net Investment Income</b>		21,515,588
<b>4. Cash Flow</b> (2. - 1. - 3.)		596,056,474
<b>5. Projected Earnings<sup>1</sup></b> (4% * 1. + 1.980% * 4.)		173,255,166
<b>6. (Gain) / Loss</b> (5. - 3.)		151,739,578
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		30,347,916
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	121,391,662

<sup>1</sup> Assumes middle of year payments

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

Development of Asset (Gain) / Loss  
June 30, 2018

		<b>Total</b>
<b>1. Market Value 6/30/2017</b>	\$	4,653,903,266
<b>2. Market Value 6/30/2018</b>		4,765,799,215
<b>3. Net Investment Income</b>		48,093,613
<b>4. Cash Flow</b> (2. - 1. - 3.)		63,802,336
<b>5. Projected Earnings<sup>1</sup></b> (4% * 1. + 1.980% * 4.)		187,419,417
<b>6. (Gain) / Loss</b> (5. - 3.)		139,325,804
<b>7. Recognition Period</b>		5 Years
<b>8. Amount Recognized in OPEB Expense</b> (6. / 7.)		27,865,161
<b>9. Deferred (Inflow) / Outflow of Resources</b> (6. - 8.)	\$	111,460,643

<sup>1</sup> Assumes middle of year payments

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### Roll Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2017

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2016 <sup>1</sup>	\$	88,171,918,990
2. Entry Age Normal Cost at 6/30/2016 <sup>1</sup>		4,521,008,728
3. Estimated Benefit Payments-FY 17		(2,538,355,868)
4. Interest <sup>1</sup>		2,898,446,758
5. Roll-Forward EAAL at 6/30/2017 <sup>1</sup>	\$	93,053,018,608

<sup>1</sup>Assumes a 3.17% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### Roll Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2018

		<b>Total</b>
1. Entry Age Accrued Liability (EAAL) at 6/30/2017 <sup>1</sup>	\$	95,210,912,501
2. Entry Age Normal Cost at 6/30/2017 <sup>1</sup>		4,860,387,841
3. Actual Benefit Payments-FY18		(2,617,044,303)
4. Interest <sup>1</sup>		3,131,103,689
5. (Gain)/Loss due to Discount Rate Change		2,648,935,441
6. Roll-Forward EAAL at 6/30/2018 <sup>2</sup>	\$	103,234,295,169

<sup>1</sup>Assumes a 3.17% interest rate

<sup>2</sup>Assumes a 3.01% interest rate

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

Changes in Net OPEB Liability (NOL) by Source  
Balances at June 30, 2017

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2016</b>	<b>\$ 98,513,708,539</b>	<b>\$ 4,036,331,204</b>	<b>\$ 94,477,377,335</b>
<b>2. Changes for the Year:</b>			
a. Service Cost	4,521,008,728	0	4,521,008,728
b. Interest	2,898,446,758	0	2,898,446,758
c. Differences b/t Expected and Actual Experienc	519,255,914	0	519,255,914
d. Changes in Assumptions	(10,974,634,867)	0	(10,974,634,867)
e. Contributions - Employer	0	3,020,942,554	(3,020,942,554)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	21,515,588	(21,515,588)
h. Actual Benefit Payments	(2,424,766,464)	(2,424,766,464)	0
i. Administrative Expenses	0	(41,100)	41,100
j. Other Changes	0	(78,516)	78,516
<b>k. Net Changes</b>	<b>\$ (5,460,689,931)</b>	<b>\$ 617,572,062</b>	<b>\$ (6,078,261,993)</b>
<b>3. Balances at June 30, 2017</b>	<b>\$ 93,053,018,608</b>	<b>\$ 4,653,903,266</b>	<b>\$ 88,399,115,342</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			<b>\$ 105,382,211,687</b>
m. 1% Increase			<b>\$ 75,132,422,342</b>
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			<b>\$ 72,209,887,931</b>
o. 1% Increase			<b>\$ 111,472,821,262</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

Changes in Net OPEB Liability (NOL) by Source  
Balances at June 30, 2018

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>1. Balances at June 30, 2017</b>	<b>\$ 93,053,018,608</b>	<b>\$ 4,653,903,266</b>	<b>\$ 88,399,115,342</b>
<b>2. Changes for the Year:</b>			
a. Service Cost	4,860,387,841	0	4,860,387,841
b. Interest	3,131,103,689	0	3,131,103,689
c. Differences b/t Expected and Actual Experienc	2,293,748,135	0	2,293,748,135
d. Changes in Assumptions	2,513,081,199	0	2,513,081,199
e. Contributions - Employer	0	2,681,020,067	(2,681,020,067)
f. Contributions - Employee	0	0	0
g. Net Investment Income	0	48,093,613	(48,093,613)
h. Actual Benefit Payments	(2,617,044,303)	(2,617,044,303)	0
i. Administrative Expenses	0	(43,105)	43,105
j. Other Changes	0	(130,323)	130,323
<b>k. Net Changes</b>	<b>\$ 10,181,276,561</b>	<b>\$ 111,895,949</b>	<b>\$ 10,069,380,612</b>
<b>3. Balances at June 30, 2018</b>	<b>\$ 103,234,295,169</b>	<b>\$ 4,765,799,215</b>	<b>\$ 98,468,495,954</b>
<b>4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>			
l. 1% Decrease			<b>\$ 117,735,345,310</b>
m. 1% Increase			<b>\$ 83,498,528,055</b>
<b>5. Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate</b>			
n. 1% Decrease			<b>\$ 79,972,799,539</b>
o. 1% Increase			<b>\$ 124,978,417,672</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### Schedule of Changes in Net OPEB Liability and Related Ratios

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>1. Total OPEB Liability</b>			
a. Service Cost	\$ 4,860,387,841	\$ 4,521,008,728	\$ 5,112,510,498
b. Interest	3,131,103,689	2,898,446,758	2,668,923,050
c. Changes of Benefit Terms	0	0	0
d. Differences b/t Expected and Actual Experience	2,293,748,135	519,255,914	(120,146,814)
e. Changes of Assumptions	2,513,081,199	(10,974,634,867)	0
f. Benefit Payments	(2,617,044,303)	(2,424,766,464)	(2,277,515,643)
<b>g. Net Changes in Total OPEB Liability</b>	<b>\$ 10,181,276,561</b>	<b>\$ (5,460,689,931)</b>	<b>\$ 5,383,771,091</b>
<b>2. Total OPEB Liability - Beginning</b>	<b>\$ 93,053,018,608</b>	<b>\$ 98,513,708,539</b>	<b>\$ 93,129,937,448</b>
<b>3. Total OPEB Liability - Ending</b>	<b>\$ 103,234,295,169</b>	<b>\$ 93,053,018,608</b>	<b>\$ 98,513,708,539</b>
<b>4. Plan Fiduciary Net Position</b>			
a. Contributions - Employer	\$ 2,681,020,067	\$ 3,020,942,554	\$ 2,897,128,941
b. Contributions - Employee	0	0	0
c. Net Investment Income	48,093,613	21,515,588	20,565,435
d. Benefit Payments	(2,617,044,303)	(2,424,766,464)	(2,277,515,643)
e. Administrative Expenses	(43,105)	(41,100)	(40,000)
f. Other Changes	(130,323)	(78,516)	(331,067)
<b>g. Net Changes in Plan Fiduciary Net Position</b>	<b>\$ 111,895,949</b>	<b>\$ 617,572,062</b>	<b>\$ 639,807,666</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 4,653,903,266</b>	<b>\$ 4,036,331,204</b>	<b>\$ 3,396,523,538</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 4,765,799,215</b>	<b>\$ 4,653,903,266</b>	<b>\$ 4,036,331,204</b>
<b>7. Net OPEB Liability</b>	<b>\$ 98,468,495,954</b>	<b>\$ 88,399,115,342</b>	<b>\$ 94,477,377,335</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	<b>4.6%</b>	<b>5.0%</b>	<b>4.1%</b>
<b>9. Covered Employee Payroll<sup>1</sup></b>	<b>\$26,230,448,259</b>	<b>\$25,112,110,958</b>	<b>\$24,204,772,333</b>
<b>10. Net OPEB Liability as a Percentage of Covered Employee Payroll</b>	<b>375.4%</b>	<b>352.0%</b>	<b>390.3%</b>

<sup>1</sup>Includes Component Units.

## NEW YORK CITY HEALTH BENEFITS PROGRAM

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**City of New York (Excluding Component Units)**

**Average Expected Remaining Service Lives @ 6/30/2017**

<u>Group</u> <sup>1</sup>	<u># Count</u>	<u>Total Future WorkLife @ 6/30/2017</u>	<u>Average Expected Remaining Service Life @ 6/30/2017</u>
Active	339,239	4,157,104	12.25
Active/Inactive <sup>2</sup>	28,534	398,387	13.96
Term Vested	17,894	0	0
Retired	<u>260,773</u>	<u>0</u>	<u>0</u>
Total	646,440	4,555,491	6.86

<sup>1</sup>Includes Component Units.

<sup>2</sup>Only 40% of inactives are assumed to return to active status.

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**City of New York (Excluding Component Units)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Expected and Actual Experience**

<b>Year</b>	<b>Differences between Expected and Actual Experience</b>	<b>Recognition Period (Years)</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2016 <sup>1</sup>	\$ (120,146,814)	6.81	(17,642,704)	(17,642,704)	(17,642,704)	(17,642,704)	(17,642,704)	(17,642,704)	(14,290,590)	0	0
2017	\$ 519,255,914	6.81	0	76,249,033	76,249,033	76,249,033	76,249,033	76,249,033	76,249,033	61,761,716	0
2018	\$ 2,293,748,135	6.86	0	0	334,365,617	334,365,617	334,365,617	334,365,617	334,365,617	334,365,617	287,554,433
2019											
2020											
2021											
2022											
Net increase (decrease) in OPEB Expense			<u>\$ (17,642,704)</u>	<u>\$ 58,606,329</u>	<u>\$ 392,971,946</u>	<u>\$ 392,971,946</u>	<u>\$ 392,971,946</u>	<u>\$ 392,971,946</u>	<u>\$ 396,324,060</u>	<u>\$ 396,127,333</u>	<u>\$ 287,554,433</u>

<sup>1</sup>Represents the Future Working Lifetime as of 6/30/2016

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**City of New York (Excluding Component Units)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Changes  
in Assumptions**

<b>Year</b>	<b>Differences Due to Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2017	\$ (10,974,634,867)	6.81	(1,611,546,970)	(1,611,546,970)	(1,611,546,970)	(1,611,546,970)	(1,611,546,970)	(1,611,546,970)	(1,305,353,047)	0
2018	\$ 2,513,081,199	6.86	0	366,338,367	366,338,367	366,338,367	366,338,367	366,338,367	366,338,367	315,050,997
2019										
2020										
2021										
2022										
Net increase (decrease) in OPEB Expense			\$ (1,611,546,970)	\$ (1,245,208,603)	\$ (1,245,208,603)	\$ (1,245,208,603)	\$ (1,245,208,603)	\$ (1,245,208,603)	\$ (939,014,680)	\$ 315,050,997

**NEW YORK CITY HEALTH BENEFITS PROGRAM**

**Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)**

**City of New York (Excluding Component Units)**

**Increase (Decrease) in OPEB Expense Arising from the Recognition of Differences  
between Projected and Actual Earnings on OPEB Plan Investments**

<b>Year</b>	<b>Differences between Projected and Actual Earnings on OPEB Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
2016	\$ 127,556,503	5	25,511,301	25,511,301	25,511,301	25,511,301	25,511,299	0	0
2017	\$ 151,739,578	5	0	30,347,916	30,347,916	30,347,916	30,347,916	30,347,914	0
2018	\$ 139,325,804	5	0	0	27,865,161	27,865,161	27,865,161	27,865,161	27,865,160
2019									
2020									
2021									
2022									
Net increase (decrease) in OPEB Expense			<u>\$ 25,511,301</u>	<u>\$ 55,859,217</u>	<u>\$ 83,724,378</u>	<u>\$ 83,724,378</u>	<u>\$ 83,724,376</u>	<u>\$ 58,213,075</u>	<u>\$ 27,865,160</u>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### Components of OPEB Expense for the Fiscal Year Ended June 30, 2017

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 4,521,008,728
b. Interest on the Total OPEB Liability	2,898,446,758
c. Differences between Expected and Actual Experience	58,606,329
d. Changes of Assumptions	(1,611,546,970)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	(173,255,166)
g. Differences between Projected and Actual Earnings on Plan Investments	55,859,217
h. OPEB Plan Administrative Expenses	41,100
i. Other Changes in Fiduciary Net Position	78,516
	78,516
<b>Total OPEB Expense</b>	<b>\$ 5,749,238,512</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

Components of OPEB Expense for the Fiscal Year Ended June 30, 2018

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 4,860,387,841
b. Interest on the Total OPEB Liability	3,131,103,689
c. Differences between Expected and Actual Experience	392,971,946
d. Changes of Assumptions	(1,245,208,603)
e. Employee Contributions	0
f. Projected Earnings on OPEB Plan Investments	(187,419,417)
g. Differences between Projected and Actual Earnings on Plan Investments	83,724,378
h. OPEB Plan Administrative Expenses	43,105
i. Other Changes in Fiduciary Net Position	130,323
	7,035,733,262
<b>Total OPEB Expense</b>	<b>\$ 7,035,733,262</b>

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2016, the City recognized OPEB Expense of \$7,641,551,274.

For June 30, 2016, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 0	\$ 102,504,110
Changes of Assumptions	0	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	102,045,202	0
Total	\$ 102,045,202	\$ 102,504,110

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2016	\$ 7,868,597
2017	7,868,597
2018	7,868,597
2019	7,868,597
2020	7,868,595
Thereafter	(31,933,294)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2017, the City recognized OPEB Expense of \$5,749,238,512.

For June 30, 2017, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 443,006,881	\$ 0
Changes of Assumptions	0	9,363,087,897
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	121,391,662	0
Total	\$ 564,398,543	\$ 9,363,087,897

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2017	\$ (1,504,950,021)
2018	(1,504,950,021)
2019	(1,504,950,021)
2020	(1,504,950,021)
2021	(1,504,950,023)
Thereafter	(2,778,889,268)

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$7,035,733,262.

For June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 1,959,382,518	0
Changes of Assumptions	2,146,742,832	0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	111,460,643	0
Total	\$ 4,217,585,993	\$ 0

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended	<u>Amount</u>
<u>June 30</u>	
2018	\$ 728,569,145
2019	728,569,145
2020	728,569,145
2021	728,569,145
2022	728,569,144
Thereafter	1,303,309,414

## NEW YORK CITY HEALTH BENEFITS PROGRAM

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75)

City of New York (Excluding Component Units)

### OPEB Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

For the Fiscal Year ended June 30, 2018, the City recognized OPEB Expense of \$7,035,733,262.

At June 30, 2018, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 2,326,140,366	\$ 67,218,702
Changes of Assumptions	2,146,742,832	7,751,540,927
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	253,526,989	0
Total	\$ 4,726,410,187	\$ 7,818,759,629

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Fiscal Year Ended <u>June 30</u>	<u>Amount</u>
2018	\$ (768,512,279)
2019	(768,512,279)
2020	(768,512,281)
2021	(794,023,582)
2022	(821,019,383)
Thereafter	59,718,083

## SECTION 8 – SUMMARY OF KEY TERMS

### **Actuarial present value of projected benefit payments**

Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

### **Actuarial valuation**

The determination, as of a point in time (the actuarial valuation date), of the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.

### **Actuarial valuation date**

The date as of which an actuarial valuation is performed.

### **Discount rate**

The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following:

- a. The actuarial present value of benefit payments projected to be made in future periods in which
  - (1) the amount of the OPEB plan's fiduciary net position is projected to be greater than the benefit payments that are projected to be made in that period, and
  - (2) OPEB plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on OPEB plan investments
- b. The actuarial present value of projected benefit payments not included in (a), calculated using a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

### **Employer Group Waiver Plan (EGWP)**

A group Medicare Part D prescription drug plan option that is offered to retirees who are entitled to prescription drug coverage as part of their OPEB plan.

### **Entry age actuarial cost method**

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the Total OPEB Liability for purposes of measurements under GASB74 and GASB75.

### **Healthcare cost trend rates**

The rates of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

### **Income Related Monthly Adjustment Amount (IRMAA)**

An additional premium amount for Medicare Part B and Medicare prescription drug coverage for higher income beneficiaries.

### **Net OPEB liability**

The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit OPEB plan that is administered through a trust where OPEB assets are dedicated to providing OPEB to plan members and are protected from creditors of the employers.

### **Other postemployment benefits (OPEB)**

Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the

period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

**Projected benefit payments**

All benefits (including refunds of employee contributions) estimated to be payable through the OPEB plan (including amounts to be paid by employers or non-employer contributing entities as the benefits come due) to current active and inactive employees as a result of their past service and their expected future service.

**Service cost**

The portions of the actuarial present value of projected benefit payments that are attributed to a valuation year.

**Total OPEB liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service.