Summary of Other Postemployment Benefits Provided under the New York City Health Benefits Program in Accordance with GASB 74 and 75

For Fiscal Year Ended June 30, 2017

Prepared as of June 30, 2016

OFFICE OF THE ACTUARY

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> SHERRY S. CHAN CHIEF ACTUARY

> > September 15, 2017

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, 2017 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, 2016 are projected forward to a measurement date of June 30, 2017 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) for Fiscal Year 2017 (i.e., July 1, 2016 to June 30, 2017) 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) 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.

GASB74, replaces Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans*, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, paragraphs 7 and 8. GASB74 is effective for fiscal years beginning after June 15, 2016. Similarly, GASB75 replaces Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions*, and Statement No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, and is effective for fiscal years beginning after June 15, 2017. Earlier adoption is encouraged under both standards. New York City has elected to adopt both GASB74 and GASB75 for Fiscal Year 2017.

Please note that GASB has not yet released the final implementation guidance for Statement No. 75. The Actuary relied upon the Implementation Guide for Statements No. 67, No. 68, No. 74, as well as Statements No. 74 and No. 75, and the exposure draft of the Statement No. 75 Implementation Guide in preparing this Report.

Results for Fiscal Year 2016 were presented in the Fiscal Year 2016 OPEB report under previous accounting requirements of GASB Statements No. 43 and 45. This Report presents comparative values using the Fiscal Year 2016 valuation results.

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).
- Census data used in the June 30, 2016 pension actuarial valuations of the New York City Retirement Systems (NYCRS)¹ to produce Preliminary Fiscal Year 2018 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 – College Retirement Equities Fund (TIAA-CREF or CUNY TIAA).
- Health insurance premium rates and related financial information for Fiscal Year 2017 provided by OLR.
- Welfare Fund contribution rates as of June 30, 2016, and negotiated increases, lumpsum and retroactive payments made on behalf of retirees to Welfare Funds for Fiscal Years 2015 to 2017, 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 and Appendix D.
- 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.

¹ 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)

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 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

SSC/srh

cc: <u>New York City Office of the Actuary</u> Ms. Marlene Markoe-Boyd Mr. Thomas O'Hara Mr. Sam Rumley Mr. Michael Samet Keith Snow, Esq.

Auditors

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Component Units

Mr. Robert Balducci - WFA Mr. Dan Frydberg - New York City Housing Authority Mr. Jeffrey Pagelson - 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

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Section 1 – GASB74/75 Information

None of the Component Units (CU) which have obligations included in this Report have separately identified OPEB assets as of June 30, 2017 or June 30, 2016. 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.

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 City's Administrative Code (ACNY).

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. ACNY 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 2017 OPEB valuation, membership consisted of the following. Comparative values for the Fiscal Year 2016 valuation are also shown.

Membership Status as of Beginning of Fiscal Year	FY 2017	FY 2016
Inactive plan members or beneficiaries currently receiving benefits	229,725	225,989
Inactive plan members entitled to but not yet receiving benefits	15,438	14,860
Active plan members	287,699	281,734
Active/Inactive plan members who may become eligible to receive benefits	<u>21,232</u>	<u>21,537</u>
Total	554,094	544,120

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 NYCRHBT 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 2017, the City contributed approximately \$3.0 billion to the OPEB Plan.

Assets: Assets are valued at fair value.

Appendix A includes two tables showing the detailed financial position of the Plan as of June 30, 2017 and June 30, 2016. The statement of Net Fiduciary Position represents assets of the Plan and not the NYCRHBT.

- 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 2017 and 2016.

Financial information reflected in this valuation for the City and the Plan was provided by OMB and checked for reasonability by the OA on August 23, 2017.

Investments

Rate of Return: The return was 0.55% the fiscal year ended June 30, 2017. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Receivables

See Appendix A.

Net OPEB Liability of the City

The components of the net OPEB liability at June 30, 2017, along with comparative values as of June 30, 2016 are as follows:

(\$'s in millions)	June 30, 2017	June 30, 2016
Total OPEB liability	\$93,053	\$98,513
Plan fiduciary net position	\$4,654	\$4,036
Net OPEB liability	\$88,399	\$94,477
Plan fiduciary net position as a percentage of the total OPEB liability	5.0%	4.1%

Actuarial Assumptions

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

Schedules of Required Supplementary Information

The Schedules of Required Supplementary Information can be found in Appendix C-6.

Notes to Schedules:

- Benefit changes: None
- **Methods and assumptions used:** See Section 4 and Appendix D of this Report for a detailed description of assumptions and methods.
- Changes of assumptions: The discount rate used to measure liabilities was updated to incorporate GASB74/75 guidance. Certain plan enrollment, election assumptions and per capita claims costs were updated based on recent experience. A "non-filer" assumption was introduced this year for future retirees (i.e. current active employees) who are not expected to file for OPEB at retirement. Please see Section 4 and Appendix D 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 Health Care Cost Trend Rate can be found in Appendix C-6.

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 be equal to the actual cost of benefits plus the average of contributions above the actual cost of benefits over the last five year period. A portion of the future employees 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 2026, during which the crossover point occurs. During 2026, 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 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 3.13%. This single equivalent rate of return is 3.17%.

Section 2 – Summary of Plan Provisions

Plan Sponsor 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.

Plan Name New York City Health Benefits Program (Program)

Eligibility (City) Retirees can participate if they satisfy one of the following criteria:

Retirees

- At least 10 years of credited service as a member of the NYCRS (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
- Receives a pension check from the NYCRS (or is eligible for certain Deferred Retirement benefits). Payability date varies by System and group.

Terminated Vested Members

• Eligible for OPEB the same as retirees once in receipt of a pension benefit if the other eligibility rules for retirees are satisfied.

Members Eligible for Certain Deferred Retirement Benefits

 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.

Members Terminated for Other than Immediate Retirement

 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).

Spouses and Other Dependents

- 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:
 - 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.

- 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.
- 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 between July 1, 1976 and August 31, 1985: Age 62 with 15 years of service.
- Hired on or after September 1, 1985: 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-CREF) 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
GroupingsThe City subsidizes only some of the OPEB described herein for various
groups of NYCRS retirees.

The table below presents, by payroll agency, those benefits assumed to be provided by the City for purposes of the Fiscal Year 2017 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.

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

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

* The City pays these benefits upfront, not out of the NYCRHBT, and then is reimbursed.

¹ Welfare Fund coverage not available to pre-1/1/1971 retirees. LOD death beneficiary coverage provided through

Stabilization Fund.

² 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
PremiumUpon 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)².

Contributions are sometimes made for active employees to Welfare Funds that are combined with retirees. Alternatively, contributions are made to

² Analysis of the Financial and Operating Practices of Union-Administered Benefit Funds with Fiscal Years Ending in Calendar Year 2011, issued December 17, 2014, <u>http://comptroller.nyc.gov/wpcontent/uploads/documents/SR14_100S.pdf</u> retrieved May 8, 2015.

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.

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 2017 OPEB valuation is based upon the census data used in the June 30, 2016 (Lag) pension actuarial valuations of the NYCRS to determine the Preliminary Fiscal Year 2018 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 NYCRS.

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

- Active employees of CUNY who participate in TIAA-CREF or CIRS.
- Retired employees of CUNY who participate in TIAA-CREF 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 NYCRS pension actuarial valuations:

- Actives (in payroll status as of the valuation date).
- Active/Inactives (generally, still a NYCRS 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 NYCRS 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 8,200 individuals were valued using this assumption. Based on multiple years' repetition of the non-filer status for many of these individuals, this valuation includes a new assumption that a portion of future retirees from NYCRS will also be non-filers.

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.

Attached in Appendix B are the following tables that set forth details of the census data used in this Report:

- Tables 1a-1g Plan Participation
- Tables 2a-2e Welfare Fund Contributions

Section 4 – Actuarial Assumptions and Methods

General

Basis for Assumptions	The actuarial assumptions used in the Fiscal Year 2017 and the Fiscal Year 2016 OPEB valuations are a combination of those used in the NYCRS pension actuarial valuations and those specific to the OPEB valuations. These assumptions are generally unchanged from the previous valuation except as noted below. The NYCRS pension assumptions are provided in the five "Silver Books" available on the Reports page of the OA website (www.nyc.gov/actuary). The probability of retirement set out in each of the Silver Books is assumed to be 100% at either age 63 or 70, depending upon the program of benefits for the individual employee. For the OPEB valuation, 100% of the individuals remaining in service at these ages are assumed to either retire with a benefit or to terminate employment without a benefit, depending upon whether they have attained the requisite service. For the Fiscal Year 2016 OPEB and pension valuations, new tables of post-retirement mortality were proposed by the Actuary and adopted by each of the NYCRS 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 A4 which was applied on a static projection basis.
Actuarial Cost Method	Entry Age Normal Cost Method, level percent of pay calculated on an individual basis.
Valuation Date	June 30, 2016
Measurement Date	June 30, 2017
Asset Valuation	Market value of assets.

Discount Rate 3.17% for benefits provided by the City, 3.13% for benefits provided by Component Units. Results as of the June 30, 2016 Measurement Date are presented at 2.75% for benefits provided by the City, and 2.71% 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 \$500 million as of Fiscal Year 2017. 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 members of Tier 6 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 2025. 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 4.00% net of investment expenses, which includes an inflation rate of 2.50%. **Rate of Return**

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.

	Target Allocation	Long-Term Expected
Asset Class	<u>as of June 30, 2017</u>	<u>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 BondS&P Municipal Bond 20 Year High Grade Rate Index, which was 3.13% as of20-year Index RateJune 30, 2017. Results as of the June 30, 2016 Measurement Date are
presented using the same index, which was 2.71% as of June 30, 2016.

Consumer Price Index 2.50%.

General Wage3.00% per annum which includes an inflation rate of 2.50% and a general wageIncreasesincrease rate of 0.50%. For more information see the Silver Books.

Assumed Health Care Cost Trend Rate

Year Ending ¹	Pre-Medicare Plans	Medicare Plans	Medicare Part B Premiums	Welfare Fund Contributions
2017 ²	7.84%	2.51%	5.0%	0.0%
2018	7.5%	5.0%	5.0%	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%

¹ Fiscal Year for Pre-Medicare and Medicare Plans and Calendar Year for Medicare Part B Premiums.

² Actual amounts based on the 2015 Health Care Savings Agreement Initiative Report of Status of Healthcare Savings dated June 19, 2017. Welfare Fund contribution rates assumed to increase based on current pattern bargaining (additional \$25 each for Fiscal Year 2017 and 2018, plus a one-time \$100 in Fiscal Year 2017).

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 7.83%. 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 have been updated since the prior valuation to reflect recent experience.

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

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

- Active/Inactive 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 have been updated since the prior valuation to reflect recent experience.

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 - HIP HMO - Other HMO - Waiver	72% 20% 4% 4%	65% 26% 4% 5%	72% 20% 4% 4%	80% 8% 2% 10%	70% 16% 2% 12%	85% 9% 4% 2%	80% 12% 6% 2%	90% 6% 4% 0%
Medicare - GHI - HIP HMO - Other HMO - Waiver	72% 20% 4% 4%	72% 20% 4% 4%	72% 20% 4% 4%	90% 6% 2% 2%	78% 16% 2% 4%	85% 9% 4% 2%	80% 12% 6% 2%	90% 6% 4% 0%
Post-Medicare Migration - Other HMO to GHI - HIP HMO to GHI - Pre-Med. Waiver - To GHI @ 65 - To HIP @ 65	0% 0% 0%	0% 23% 10% 10%	0% 0% 0%	0% 25% 40% 40%	0% 0% 67% 0%	0% 0% 0%	0% 0% 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 Health Savings Agreement changes.

	MONTHLY RATES
Plan	FY17
HIP HMO	
Non-Medicare Single	\$ 600.18 ¹
Non-Medicare Family	\$ 1,470.45 ¹
Medicare	\$ 160.83
GHI/EBCBS	
Non-Medicare Single	\$ 567.48 ¹
Non-Medicare Family	\$ 1,487.47 ¹
Medicare	\$ 168.35
Other HMOs ²	
Non-Medicare Single	\$ 1,030.56
Non-Medicare Family	\$ 2,226.45
Medicare Single	\$ 276.18
Medicare Family	\$ 546.28
	, HIP HMO premiums are decreased by re premiums are decreased by 0.82% to

Initial monthly premium rates used in valuations are shown below:

For the Fiscal Year 2017 valuation, HIP HMO premiums are decreased by 5.10% and GHI/EBCBS Pre-Medicare premiums are decreased by 0.82% to reflect Fiscal Year 2018 Health Savings agreement changes announced during Fiscal Year 2017.

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 2017 GHI and Fiscal Year 2017 Empire Blue Cross 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 Assumed to be included in reported premium amounts.

Expenses

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 Technical Bulletin No. 2006-1.

Medicare Part B	<u>Calendar Year</u>	<u>Monthly Premium</u>
Premiums	2013 – 2015	\$104.90
	2016	\$109.97
	2017	\$113.63

Medicare Part B Premium reimbursement amounts have been updated to reflect actual premium rates announced for calendar years through 2017. Due to no cost-of-living adjustment in Social Security benefits for Calendar Year 2016, and a minimal cost-of-living increase for Calendar Year 2017, most Medicare Part B participants will not be charged the Medicare Part B premium originally projected or ultimately announced for those years. Thus, the valuation uses a blended estimate as a better representation of future Part B premium costs.

For the Fiscal Year 2017 OPEB valuation the annual premium used was \$1,341.60, which is equal to:

- 70% of the basic \$104.90 monthly hold-harmless amount, assuming that there would be no claims made for the slight increase in Part B premiums for continuing retirees, and
- 30% of the announced premiums (6 months at \$121.80 for Calendar Year 2016 and 6 months at \$134.00 for Calendar Year 2017), representing the proportion of the Medicare population that will pay the announced amount.

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

Fiscal Year	Income-Related Medicare Part B Increase
2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027+	4.0% 4.5% 5.0% 5.2% 5.3% 5.4% 5.5% 5.6% 5.8% 5.8% 5.9% 6.0%

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

Welfare Funds The Welfare Fund contribution reported as of the valuation date, June 30, 2016, (including any reported retroactive amounts) was used as the per capita cost for valuation purposes.

The calculations reflect an additional one time \$100 contribution for Fiscal Year 2017 in July 2016. Projected contributions reflect \$25 increases at July 1, 2016 and July 1, 2017.

Reported annual contribution amounts for the last two years are shown in Appendix B, Tables 2a to 2e. Welfare Fund rates are based on actual reported Union Welfare Fund code for current retirees.

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

NYCERS	\$ 1,743
TRS	1,771
BERS	1,713
POLICE	1,593
FIRE	1,729

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 2017³.

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:

Age	<u>Male</u>	<u>Female</u>	Age	<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:

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

The age adjustment for the non-Medicare GHI/EBCBS premium reflects a 5% reduction in the GHI portion of the monthly premium (with the GHI portion representing \$254.27 out of \$572.19 for single coverage, and \$674.06 out of \$1,499.82 for family coverage for Fiscal Year 2017 rates) and a 3% reduction in the EBCBS portion of the premium (with the EBCBS portion representing the remainder of the premiums) for the estimated margin anticipated to be returned.

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 \$1,000 was assumed for terminations during Fiscal Year 2017. This amount is increased by the

³ <u>http://www1.nyc.gov/assets/olr/downloads/pdf/collectivebargaining/savings-report-q2-q3-fy2017.pdf</u>

Pre-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 2020 under HCR. The tax is 40% of the excess of (a) over (b) where (a) is the cost of medical coverage, and (b) is the statutory limits (\$10,200 for single coverage and \$27,500 for family coverage), adjusted for the following:
 - For Pre-Medicare retirees above the age of 55, the limit will be further increased by \$1,650 for single coverage; \$3,450 for family coverage.
 - The dollar limits are increased by CPI+1% (e.g. 3.5%) for 2019 and by CPI (e.g. 2.5%) for subsequent years. Indexing of limits starts in 2018; tax first applies in 2020.

The impact of the Cadillac Tax for the 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 additional Cadillac Tax due to the riders or optional benefit arrangements is assumed to be reflected in the contribution required for the rider or optional benefit.
- The additional Cadillac Tax due to amounts provided by Welfare Fund benefits is assumed to be absorbed by the Welfare Fund or by lower net Welfare Fund contribution amounts.
- Pre-Medicare retirees under age 55 are not assumed to have the higher limits that apply to employees engaged in high-risk professions because the majority of employees included in this valuation are not in such professions.

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

Stabilization Fund A 0.3% load is applied on all City GASB75 obligations to reflect certain benefits paid on behalf of retirees directly from the Stabilization Fund which was decreased from 0.4% in the Fiscal Year 2016 OPEB valuation based on recent data. The load is not applicable to Component Units.

Educational Construction Fund

Basis for Assumptions	The demographic assumptions and salary scale used for the ECF Fiscal Year 2017 OPEB valuation in the Report are based on the report "Development of Recommended Actuarial Assumptions Participating Agency Version," dated September 2016, prepared by Aon Hewitt (2016 State Report) ⁴ . 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 2016 State Report for this valuation. These assumptions reflect the revisions to the demographic assumptions (mortality, withdrawal, retirement, and disability rates) and salary scale as used in the prior OPEB valuation.				
Participation	Future retirees are assumed to continue in the health and dental insurance programs.				
Dependents	Based on the 2016 State Report, 60% of males and 50% of females are assumed to cover a spouse at retirement.				
		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.			
Per Capita Claim Costs	Based on the 2016 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:				
	Non-Medicare: Medicare (Reflecting EGWP):	\$19,446 \$3,809			
	The premiums for health coverage are:				
	<u>Empire Plan (Pre-Medicare)</u> Individual: Family:	\$944.39 monthly \$2,160.64 monthly			
	<u>Empire Plan (Medicare)</u> Individual: Family (two Medicares):	\$421.40 monthly \$1,114.63 monthly			
	65% of the Empire Plan (Medicare) premi for prescription drug benefits in develo Medicare premium.				
	Monthly dental premiums are \$33.50 for person coverage, and \$87.50 for family co				

⁴ <u>https://www.cs.ny.gov/GASB/2016-PA-Assumption-Report.pdf.</u>

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 2016 State Report. A sample of factors used are:

Age	Factor	Age	Factor
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

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

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 TIAA

Basis for
AssumptionsThe assumptions used for CUNY TIAA for mortality, and disability and
salary increase are the same as those used for TRS (i.e. the Silver
Books).

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–CREF account balances and/or 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 City's Postretirement Benefits Plan in accordance with the requirements of GASB Statements No. 74 and 75 as of June 30, 2017.

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.

Sherry S. Chan, FSA, FCA, MAAA Chief Actuary New York City Office of the Actuary

Thomas O'Hara

Thomas O'Hara, ASA, MAAA Administrative Actuary New York City Office of the Actuary

Appendix A: Assets

Appendix A - Table 1

NEW YORK CITY HEALTH BENEFITS PROGRAM

New York City Other Postemployment Benefits Plan

Statement of Net Position

As of June 30, 2017 and June 30, 2016

	June 30, 2017 ¹	L	June 30, 2016 ²
ASSETS			
Cash			
Settled Cash	\$ 1,050,735,390	\$	1,503,320,035
Receivables			
Trust	5,976,385		3,187,712
DOE Welfare Fund	0		0
Medicare Part D	2,023,355		301,229
Other	0		64,194
Payables	_		
Investment Securities Purchased	<u>0</u>		<u>(55,057,944)</u>
Total Cash	\$ 1,058,735,130	\$	1,451,815,226
Cash Equivalents			
US Treasury Bills	\$ 444,899,539	\$	149,270,366
Commercial Paper	1,737,195,742		825,286,723
Asset-Backed Securities	0		0
Short Term Funds	112,937,453		121,017,472
Government Agency	<u>0</u>		<u>0</u>
Total Cash Equivalents	\$ 2,295,032,734	\$	1,095,574,561
Fixed Income			
Corporate Bonds and Notes	\$ 0	\$	9,368,934
Government and Agencies	<u>1,633,387,795</u>		<u>1,806,852,288</u>
Total Fixed Income	\$ 1,633,387,795	\$	1,816,221,222
Prepaid Benefits / Expenses	\$ <u>41,586</u>	\$	40,902
Total Prepaid	\$ 41,586	\$	40,902
Total Assets	\$ 4,987,197,245	\$	4,363,651,911
LIABILITIES			
Medicare Part B	\$ 177,831,838	\$	176,690,845
Benefits Payable	155,400,926		150,566,391
Trustee Fees Payable	20,115		23,471
Audit Fees Payable	<u>41,100</u>		<u>40,000</u>
Total Liabilities	\$ 333,293,979	\$	327,320,707
NET POSITION			
Held in Trust for Benefit Payments	\$ 4,653,903,266	\$	4,036,331,204

¹ Based on Information Provided by OMB on August 23, 2017.

² Based on Information Provided by OMB on August 29, 2016.

Appendix A - Table 2

NEW YORK CITY HEALTH BENEFITS PROGRAM

New York City Other Postemployment Benefits Plan

Statement of Changes in Net Position

As of June 30, 2017 and June 30, 2016

	June 30, 2017 ¹	June 30, 2016 ²
ADDITIONS		
Employer Contributions		
Pay-As-You-Go	•	
Trust	\$ 2,758,597,721 ³	\$ 2,660,262,046 4
Non-Trust	262,344,833	236,866,895
Other	<u>0</u>	<u>0</u>
Total Contributions	\$ 3,020,942,554	\$ 2,897,128,941
Earned Income		
Interest Income	\$ 27,209,322	\$ 16,320,916
Net Accrued Income	2,788,673	438,668
Net Realized Gain / (Loss)	<u>1,975,989</u>	<u>865,762</u>
Total Investment Income	\$ 31,973,984	\$ 17,625,346
Net Unrealized Gain / (Loss)	<u>(10,458,396)</u>	2,940,089
TOTAL ADDITIONS	\$ 3,042,458,142	\$ 2,917,694,376
DEDUCTIONS		
Benefit Payments		
Trust	\$ 2,162,421,631 ³	\$ 2,040,648,748 ⁴
Non-Trust	<u>262,344,833</u>	236,866,895
Sub-Total	\$ 2,424,766,464	\$ 2,277,515,643
Expenses		
Administrative Expenses	\$ 41,100	\$ 40,000
Legal Fees	0	0
Trustee Fees	<u>78,516</u>	<u>331,067</u>
Sub-Total	\$ 119,616	\$ 371,067
TOTAL DEDUCTIONS	\$ 2,424,886,080	\$ 2,277,886,710
CHANGE IN NET POSITION	\$ 617,572,062	\$ 639,807,666
NET POSITION HELD IN TRUST FOR BENEFIT PAYMENTS		
Beginning of Year	\$ 4,036,331,204	\$ 3,396,523,538
End of Year	\$ 4,653,903,266	\$ 4,036,331,204

¹ Based on Information Provided by OMB on August 23, 2017.

² Based on Information Provided by OMB on August 29, 2016

³ Net of the Interfund Transfer of \$611,235,164 in Fiscal Year 2017.

⁴ Net of the Interfund Transfer of \$559,862,181 in Fiscal Year 2016.

Appendix B: Detailed Census Data

Appendix B - Table 1a New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - NYCERS

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City*	14,599	4,055	807	768	20,229
Component Units:					,
HHC	2,548	600	111	107	3,366
NYCHA	1,210	534	59	63	1,866
WFA	1	0	0	0	1

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City*	35,752	9,335	2,541	2,709	50,337
Component Units:					
HHC	13,058	3,192	619	892	17,761
NYCHA	4,334	1,175	217	318	6,044
WFA	1	1	0	0	2

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

Appendix B - Table 1b New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - TRS

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	9,665	1,135	236	918	11,954
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	56,630	4,199	1,458	2,926	65,213
Component Units:					
HHC	7	0	0	1	8
NYCHA	3	1	0	0	4
WFA	0	0	0	0	0

Appendix B - Table 1c New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - BERS

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City*	1,591	368	33	183	2,175
Component Units:					
HHC	1	0	0	0	1
NYCHA	3	0	1	1	5
WFA	0	0	0	0	0

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City*	10,490	2,176	212	811	13,689
Component Units:					
HHC	4	0	0	0	4
NYCHA	11	1	1	0	13
WFA	0	0	0	1	1

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

Appendix B - Table 1d New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - POLICE

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	24,074	2,415	1,301	1,237	29,027
Component Units:					
ННС	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	15,851	1,905	1,074	474	19,304
Component Units:	,	,	,		,
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Appendix B - Table 1e New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - FIRE

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	5,747	620	528	110	7,005
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	7,283	1,106	596	187	9,172
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Appendix B - Table 1f New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - TIAA

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	24	1	3	0	28
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	713	42	36	0	791
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Appendix B - Table 1g New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation

PLAN PARTICIPATION - LODW

Pre-Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	37	8	4	0	49
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Medicare Headcounts	GHI Indemnity	HIP HMO	Other HMO	Waived	Total
City	624	108	20	0	752
Component Units:					
HHC	0	0	0	0	0
NYCHA	0	0	0	0	0
WFA	0	0	0	0	0

Appendix B - Table 2a New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS

			6/30/14	6/30/15	6/30/16
UWF	Description	Count ¹	Rate ²	Rate ²	Rate ²
001	NYC MANAGEMENT WELFARE FUND	7,796	\$1,640	\$1,665	\$1,690
005	ALLIED BUILDING INSPECTORS	346	1,640	1,665	1,690
010	ASST DEP WARDENS ASSC SBF	410	1,490	1,515	1,540
030	CORRECTION CAPTAINS ASSOC	1,797	1,490	1,515	1,540
035	CORRECT OFFICRS BEN ASSOC	8,390	1,640	1,665	1,690
040	NYS COURT OFFICERS ASSOC	1	830	830	830
045	CWA LOCAL 1182 RETIREE SBF	406	1,640	1,665	1,690
046	CWA L1181 SEC BEN FND RET	297	1,640	1,665	1,690
048	DETECT END ASSN RET FUND	6	1,523	1,498	1,523
049	DET END ASSN RET FUND (T)	164	1,523	1,498	1,523
050	DET END ASSN RET FUND (H)	112	1,523	1,498	1,523
055	DEA RET FND(PBA OF THE DA)	118	1,523	1,548	1,523
060	DISTRICT COUNCIL 37	36,070	1,640	1,665	1,690
061	DC 37 - (TAPD CIVILIANS)	9	1,640	1,665	1,690
066	DC 37 MEBA - FERRYBOATS	102	1,640	1,665	1,690
070	DOCTORS CNCL RET WELF FND	481	1,540	1,540	1,540
070	LCL 3 IBEW ELECTR INSPECT	26	1,540 1,640	1,540 1,665	1,540
075	FIRE ALARM DSP BEN ASSOC	26 163	1,640 1,640	1,665 1,665	1,690 1,690
080	UNKNOWN	103	-	1,665 1,665	1,690
100	LPN RETIREE WELFARE FUND	1 621	n/a 1,640	1,665 1,665	1,690 1,690
100	OSA SUPV.EMG.MED.SVC.SPEC	27	1,640 1,640	1,665 1,665	1,690
105	OSA SUPV.EMG.MED.SVC.SPEC	33	-	1,665	-
100	OSA WELF FIND-SCHOOL SEC/ T	53 69	1,640 1,540	1,665 1,565	1,690 1,590
	OSA WELF FUND -SAN CHIEFS ORG OF STAFF ANALYSTS		1,540		
108		2,153	1,640	1,665	1,690
109	LCL 14 MUN W F-CRANE OPER	36	1,640	1,640	1,690
110 115	L144 DIV OF L1199 NHHSEU	539 7	1,590	1,615	1,640
	LOCAL 306 RETIR HLTH WELF		1,640	1,665	1,690
120	LOCAL 333 DOCKHANDS	184	1,640	1,665	1,690
129		215	1,640	1,665	1,690
130	LOCAL 832 RETIREES	47	1,840	1,865	2,170
131		57	1,640	1,665	1,690
135	RET CWA L1183 DOE H&W FND	123	1,753	1,778	1,803
140	1199 NHHSEU	372	1,640	1,665	1,690
155	LCL 1180 CWA RET BENE FND	5,830	1,675	1,700	1,725
156	L1180 RET BEN FD-TAPD CIV	1	1,675	1,700	1,725
160	NYC DEPY SHER ASS RET SBF	63	1,365	1,390	1,415
162		34	1,720	1,745	1,770
163	UFT WELFARE FUND	39	1,720	1,745	1,770
164	COUNCIL OF SUPERVISORS AND ADMINISTRATORS	8	1,720	1,745	1,770
165	RET WELF FND AUTO SVC WKR	39	1,640	1,665	1,690
170	PBA (NYPD)	8	1,579	1,579	1,579
171	PBA (NYPD) (TA)	1,508	1,579	1,579	1,579
172	PBA (NYPD) (HA)	516	1,579	1,579	1,579
185	NYS NURSES ASSOCIATION	3,369	1,640	1,665	1,690
187	PAVERS & RDBULDERS INSPCT	41	1,640	1,665	1,690
190	UNITED PROBATION OFFICERS	393	1,723	1,748	1,773
200	SANITATION OFF RET WEL FN	2,434	1,390	1,415	1,440
225	SOC NYPD LT BENEV ASSOCIA	2	1,565	1,590	1,615
226	SOC NYPD CAPT ENDOW ASSOC	8	1,565	1,590	1,615
228	SOC NYPD LT BENEV ASSO(T)	99	1,565	1,590	1,615
229	SOC NYPD CAPT END ASS (T)	32	1,565	1,590	1,615
230	SBA HLTH&WELF FUND/RET(T)	214	1,740	1,740	1,740
231	SOC NYPD LT BENEV ASSO(H)	71	1,565	1,590	1,615
		07	1,565	1,590	1 6 1 5
232	SOC NYPD CAPT END ASSN(H)	37	1,505	1,590	1,615
232 233	SOC NYPD CAPT END ASSN(H) SBA HLTH&WELF FUND/RET(H)	37 115	1,505 1,740	1,390 1,740	1,815 1,740

Appendix B - Table 2a (continued) New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS

			6/30/14	6/30/15	6/30/16
UWF	Description	Count¹	Rate ²	Rate ²	Rate ²
250	USA RETIREES' WELFARE FND	7,123	1,909	1,934	1,959
251	UNKNOWN	207	1,640	1,665	1,690
260	LCL 300 RETIREE WELF FUND	391	1,640	1,665	1,690
261	LEEBA RETIRED EES WELF FD	6	1,640	1,665	1,690
275	PROFESSIONAL STAFF CONGRESS	206	1,865	1,890	1,915
276	PROFESSIONAL STAFF CONGRESS	3	1,865	1,890	1,915
277	SBA HLTH & WELF FND/RETIR	-	1,865	1,890	1,915
555	CIVILIAN, TRANSIT POLICE DEPT. NYC TRANSIT	25	1,640	1,665	1,690
556	UNKNOWN	7	1,640	1,665	1,690
605	NYSCCA SEC BEN FND RETIRE	1	930	930	930
700	LCL 237 RWF(L621 SUP MEC)	237	1,640	1,665	1,690
701	LCL 237 RWF(L621 SUP I W)	11	1,640	1,665	1,690
702	LOCAL 237 RWF(L621 DDMEM)	5	1,640	1,665	1,690
703	L237 BRCKLYR RETIREES	102	1,840	1,865	2,170
704	L1969(L806 BRDG PAINTERS)	28	1,640	1,665	1,690
705	L.40 361&417 JT UN SEC FD	43	1,540	1,540	1,540
706	LCL 3 IBEW COMMUN ELEC ET	58	1,540	1,565	1,590
709	L237RWF (L621 ADFM)	3	1,640	1,665	1,690
710	LCL UNION#3 IBEW NYC ELEC	1	1,640	1,665	1,690
712	LCL 3 IBEW ELCTRCN SUP HL	486	1,640	1,665	1,690
713	UNKNOWN	26	1,640	1,665	1,690
714	LCL 237 ELEV MECH RETIREE	276	1,840	1,865	1,890
715	LCL237MASON'S HLPS RETIRE	24	1,840	1,865	2,170
717	LOCAL 1969, GLAZIERS	37	1,640	1,665	1,690
720	DC37 LOCKSMITH SUPV LKSMT	42	1,540	1,565	1,590
724	RET H&W FD L3 IBEW-SUP.ME	68	1,540	1,565	1,590
725	UNKNOWN	53	1,640	1,665	1,690
727	LCL 2 CIVIL SVC PLUMBERS	432	1,640	1,665	1,690
728	LCL 1969 NYC PAINTERS	309	1,640	1,665	1,690
730	PAVERS RDBLDR DC PAVERS	2	1,340	1,365	1,390
731	LCL 237 ROOF RETIREES	25	1,840	1,865	2,170
732	LCL237PLASTERERS RETIREES	186	1,840	1,865	2,170
736	RET.WF AUTO MECH-UPSTATE	27	1,640	1,665	1,690
738	RET WELF FND AUTO MECHNYC	869	1,640	1,665	1,690
739	RET WELF FUND-TRACT OPERS	7	1,640	1,665	1,690
741	RET WELFARE FUND MOTOR GRA OPERATOR	17	1,640	1,665	1,690
742	LCL 14 PILE DRIVING ENGNR	3	1,640	1,640	1,690
743	DC 37 HIGHWAY REPAIRERS	324	1,640	1,665	1,690
744	DC 37 FURNIT MAINTAINER	1	1,640	1,665	1,690
745	DC37 CYLD PRESS OPERATOR	16	1,640	1,665	1,690
746	LCL 300 HIGHWAY REPAIRERS	20	1,640	1,665	1,690
747	PAVERS RDBLDRS HW SP HW R	16	1,640	1,665	1,690
748	LCL 14-RETIR. GAS RLR ENG	14	1,640	1,640	1,690
749	DC37SUPERVISOR HIGHWAY RE	89	1,540	1,565	1,590
750	LCL300 SUPV.HWY REPAIRER	8	1,540	1,565	1,590
751	PAVERS & RDBULDERS - SUPERVISOR HIGHWAY RE	6	1,540	1,565	1,590
753	DC37 COMPOSITOR (JOB)	11	1,640	1,665	1,690
754	RET WEL FUND CARRGE UPHOL	1	1,640	1,665	1,690
756	LCL 237 CEMENT MAS RETIRE	52	1,840	1,865	2,170
777	PATROLMEN'S BENEVOLENT ASSOCIATION (LINE-OF-	4	1,040	1,000	2,110
	DUTY SURVIVORS)	-1	Ŭ	Ű	0
782	LCL 237 HORSE/HARN RETIRE	3	1,840	1,865	2,170
786	DC37 CITY LABORERS	506	1,640	1,665	1,690
	DC37 CONSTRUCTION LABORER	285	1,640	1,665	1,690
787 804	LCL 237 MAINT WKR RETIREE	997	1,840	1,865	2,170

Appendix B - Table 2a (continued) New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - NYCERS

UWF	Description	Count ¹	6/30/14	6/30/15	6/30/16
812	DC37 RADIO REPAIR MECHANI	44	1,640	1,665	1,690
814	LCL 246 RWF RUBR TIRE REP	14	1,640	1,665	1,690
816	DC37 SEWAGE TRTMT WKRS	420	1,640	1,665	1,690
818	RET WEL FND SGN PTRS/LTRS	420	1,640	1,665	1,690
820	LCL 30 STAT ENG SR ST ENG	473	1,640	1,665	1,690
823	NYC DIST.COUNCIL OF CARPS	407	1,640	1,665	1,690
825	NYC DIST COUNCIL OF CARPS	407	1,640	1,665	1,690
826	LCL 3 IBEW SR STAT ENGR E	4 94	1,640	1,665	1,690
820	RET WEL FND SHEET MTL WKR	94 49	1,640	1.665	1,690
828	LCL 3 IBEW STATN ENGR ELE	49 208	1,640 1,640	1,665	1,690
832	DC 37 HI-PRESS PLANT TEND	208 113	1,640 1,640	1,665	1,690
837			,	/	,
	LCL LDG 5 BLKSMTH HLP SUP	47	2,583	2,583	2,583
838	NYC DIST. COUNCIL OF CARP	30	1,640	1,665	1,690
839	LCL LDG 5 BOLRMKR HLP SUP	20	860	860	860
842	LCL 638 STMFTRS HLPR SUPR	75	1,640	1,665	1,690
843	LOCAL 15-GASOLINE RLR ENG	22	1,640	1,665	1,690
844	LOCAL 15-BASIN MACH OPERS	-	1,115	1,140	1,165
845	LCL 15 WELDERS FD	58	1,640	1,665	1,690
847	LCL 15 HIPRESS OPER.	2	965	990	1,015
848	LCL 15 TRACTOR OPER(SANI)	103	1,640	1,665	1,690
888		215	0	0	0
930		1	0	0	0
948	Either not entitled to Welfare Fund Benefits or UWF	1	0	0	0
950	contribution is not funded by the City. Medicare Part B	9	0	0	0
960	reimbursement.	10	0	0	0
999		60	0	0	0
Blank		4,895	0	0	0
	Total Count:	104,141			

¹ Data includes entire population provided by OLR and supplemented by the OA, including Component Units and other groups not attributable to the City for GASB45 purposes.

² Rates used as of June 30, 2014, June 30, 2015, and June 30, 2016 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 \$75 was added to each amount as of 7/1/2016, assuming that any welfare funds who have not yet negotiated the increase will do so in the future. In addition, a negotiated one time increase of \$100 was reflected as of 7/1/2016 for all funds.

Appendix B - Table 2b New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - TRS

			6/30/14	6/30/15	6/30/16
UWF	Description	Count ¹	Rate ²	Rate ²	Rate ²
001	NYC MANAGEMENT WELFARE FUND	181	\$1,640	\$1,665	\$1,690
035	CORRECT OFFICRS BEN ASSOC	1	1,640	1,665	1,690
045	CWA LOCAL 1182 SEC BEN FUND	1	1,640	1,665	1,690
055	DEA RET FUND (PBA OF THE DA)	1	1,523	1,548	1,573
060	DISTRICT COUNCIL 37	680	1,640	1,665	1,690
100	LPN RETIREE WELFARE FUND	1	1,640	1,665	1,690
108	ORG OF STAFF ANALYSTS	4	1,640	1,665	1,690
155	LCL 1180 CWA RET BENE FND	29	1,675	1,700	1,725
163	UFT	66391	1,720	1,745	1,770
164	COUNCIL OF SUPERVISORS AND ADMINISTRATORS	7294	1,720	1,745	1,770
185	NYS NURSES ASSOCIATION	1	1,640	1,665	1,690
190	UNITED PROBATION OFFICERS	1	1,723	1,748	1,773
200	SANITATION OFF RET WEL FN	1	1,390	1,415	1,440
235	L237 RETIREE BENE FND-CW	12	1,840	1,865	2,170
275	PROFESSIONAL STAFF CONGRESS	2310	1,865	1,890	1,915
276	PROFESSIONAL STAFF CONGRESS	25	1,865	1,890	1,915
277	SBA HLTH & WELF FND/RETIR	3	1,865	1,890	1,915
724	RET H&W Fd, L3, IBEW-SUP, ME	1	1,540	1,565	1,590
777	PATROLMENT'S BENEV. ASSOC.(LOD SURVIVORS)	1	0	0	0
888	Either not entitled to Welfare Fund Benefits or UWF	23	0	0	0
905	contribution is not funded by the City. Medicare Part B	1	0	0	0
940	reimbursement.	3	0	0	0
999	rembulaement.	38	0	0	0
Blank		1968	0	0	0
	Total Count:	78,971			

¹ Data includes entire population provided by OLR and supplemented by the OA, including Component Units and other groups not attributable to the City for GASB45 purposes.

² Rates used as of June 30, 2014, June 30, 2015, and June 30, 2016 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 \$75 was added to each amount as of 7/1/2016, assuming that any welfare funds who have not yet negotiated the increase will do so in the future. In addition, a negotiated one time increase of \$100 was reflected as of 7/1/2016 for all funds.

Appendix B - Table 2c New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - BERS

			6/30/14	6/30/15	6/30/16
UWF	Description	Count ¹	Rate ²	Rate ²	Rate ²
001	NYC MANAGEMENT WELFARE FUND	585	\$1,640	\$1,665	\$1,690
035	CORRECT OFFICRS BEN ASSOC	1	1,640	1,665	1,690
045	CWA LOCAL 1182 SEC BEN FUND	1	1,640	1,665	1,690
060	DISTRICT COUNCIL 37	11,832	1,640	1,665	1,690
075	LCL 3 IBEW ELECTR INSPECT	0	1,640	1,665	1,690
106	OSA WELF FND-SCHOOL SEC/T	7	1,640	1,665	1,690
108	ORG OF STAFF ANALYSTS	20	1,640	1,665	1,690
115	LOCAL 306 RETIR HLTH WELF	12	1,640	1,665	1,690
130	LOCAL 832 RETIREES	317	1,840	1,865	2,170
131	DISTRICT COUNCIL 37	552	1,640	1,665	1,690
135	RET CWA L1183 DOE H&W FND	1	1,753	1,778	1,803
155	LCL 1180 CWA RET BENE FND	451	1,675	1,700	1,725
162	UFT WELFARE FUND	21	1,720	1,745	1,770
163	UFT WELFARE FUND	738	1,720	1,745	1,770
164	COUNCIL OF SUPERVISORS AND ADMINISTRATION	7	1,720	1,745	1,770
165	RET WELF FND AUTO SVC WKR	3	1,640	1,665	1,690
185	NYC RET HLTH&WEL FD-NYSNA	6	1,640	1,665	1,690
235	L237 RETIREE BENE FND-CW	420	1,840	1,865	2,170
250	USA RETIREES' WELFARE FUND	1	1,909	1,934	1,959
260	LCL 300 RETIREE WELF FUND	57	1,640	1,665	1,690
275	PROFESSIONAL STAFF CONGRESS	10	1,865	1,890	1,915
555	CIVILIAN, TRANSIT POLICE DEPT. NYC TRANSIT	1	1,640	1,665	1,690
700	LCL 237 RWF(L621 SUP MEC)	8	1,640	1,665	1,690
708	LOCAL 246, DEPT OF EDUCATION	3	1,640	1,665	1,690
711	LCL 3 IBEW ELECTRCN WEST	1	1,640	1,665	1,690
712	LCL 3 IBEW ELCTRCN SUP HL	40	1,640	1,665	1,690
714	LCL 237 ELEV MECH RETIREE	3	1,840	1,865	1,890
717	LOCAL1969 GLAZIERS	12	1,640	1,665	1,690
720	DC37 LOCKSMITH SUPV LKSMT	4	1,540	1,565	1,590
724	RET H&W FD L3 IBEW-SUP.ME	21	1,540	1,565	1,590
727	LCL 2 CIVIL SVC PLUMBERS	42	1,640	1,665	1,690
728	LCL 1969 NYC PAINTERS	24	1,640	1,665	1,690
731	LCL 237 ROOF RETIREES	7	1,840	1,865	2,170
732	LCL237PLASTERERS RETIREES	9	1,840	1,865	2,170
738	RET WELF FND AUTO MECHNYC	29	1,640	1,665	1,690
740	RET WELF FND GEN MECHANIC	1	1,190	1,215	1,240
744	DC 37 FURNIT MAINTAINER	5	1,640	1,665	1,690
745	DC37 CYLD PRESS OPERATOR	1	1,640	1,665	1,690
756	LCL 237 CEMENT MAS RETIRE	1	1,840	1,865	2,170
760	LOCAL 246, DEPT OF EDUCATION	7	1,640	1,665	1,690
786	DC37 CONSTRUCT LABORER	17	1,640	1,665	1,690
787	DC37 CONSTRUCTION LABORER	2	1,640	1,665	1,690
804	LCL 237 MAINT WKR RETIREE	17	1,840	1,865	2,170
812	DC37 RADIO REPAIR MECHANI	7	1,640	1,665	1,690
820	LCL 30 STAT ENG SR ST ENG	5	1,640	1,665	1,690
823	NYC DIST.COUNCIL OF CARPS	96	1,640	1,665	1,690
826	LCL 3 IBEW SR SSTAT ENGR E	1	1,640	1,665	1,690
827	RET WEL FND SHEET MTL WKR	- 7	1,640	1,665	1,690
832	DC 37 HI-PRESS PLANT TEND	1	1,640	1,665	1,690
838	NYC DIST. COUNCIL OF CARP	18	1,640	1,665	1,690
839	LOCAL LODGE 5	10	860	860	860
	LCL 638 STMFTRS HLPR SUPR	28	1,640	1,665	1,690

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Appendix B - Table 2c (continued) New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - BERS

UWF	Description	Count ¹	6/30/14 Rate ²	6/30/15 Rate ²	6/30/16 Rate ²
845	LCL 15 WELDERS FD	2	1,640	1,665	1,690
888	Either not entitled to Welfare Fund Benefits or UWF	9	0	0	0
999	contribution is not funded by the City. Medicare Part B	28	0	0	0
Blank	reimbursement.	420	0	0	0

Total Count: 15,920

¹ Data includes entire population provided by OLR and supplemented by the OA, including Component Units and other groups not

² Rates used as of June 30, 2014, June 30, 2015, and June 30, 2016 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 \$75 was added to each amount as of 7/1/2016, assuming that any welfare funds who have not yet negotiated the increase will do so in the future. In addition, a negotiated one time increase of \$100 was reflected as of 7/1/2016 for all funds.

Appendix B - Table 2d New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - POLICE

			6/30/14	6/30/15	6/30/16
UWF	Description	Count	Rate ¹	Rate ¹	Rate ¹
001	NYC MANAGEMENT WELFARE FUND	112	\$1,640	\$1,665	\$1,690
035	CORRECT OFFICRS BEN ASSOC	1	1,640	1,665	1,690
048	DETECT END ASSN RET FUND	12,040	1,523	1,498	1,523
055	DEA RET FUND (PBA OF THE DA)	1		1,548	1,573
170	PBA (NYPD)	22,839	1,579	1,579	1,579
225	SOC NYPD LT BENEV ASSOCIATION	3,750	1,565	1,590	1,615
226	SOC NYPD CAPT ENDOW ASSOCIATION	1,388	1,565	1,590	1,615
227	SBA HLTH & WELF FND/RETIR	7,383	1,740	1,740	1,740
777	PATROLEMEN'S BENEVOLENT ASSOCIATION (LINE-OF-	219	0	0	0
888		332	0	0	0
901		2	0	0	0
926		11	0	0	0
927	Either not entitled to Welfare Fund benefits or UWF	45	0	0	0
930	contribution is not funded by the City. Medicare Part B	22	0	0	0
931	reimbursement.	4	0	0	0
948	reimbursement.	88	0	0	0
949		2	0	0	0
999		1	0	0	0
Blank		91	0	0	0

Total Count:

48,331

¹ Rates used as of June 30, 2014, June 30, 2015, and June 30, 2016 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 \$75 was added to each amount as of 7/1/2016, assuming that any welfare funds who have not yet negotiated the increase will do so in the future. In addition, a negotiated one time increase of \$100 was reflected as of 7/1/2016 for all funds.

Appendix B - Table 2e New York City Health Benefits Program June 30, 2016 OPEB Actuarial Valuation ANNUAL WELFARE FUND CONTRIBUTIONS - FIRE

			6/30/14	6/30/15	6/30/16
UWF	Description	Count	Rate ¹	Rate ¹	Rate ¹
001	NYC MANAGEMENT WELFARE FUND	77	\$1,640	\$1,665	\$1,690
060	DISTRICT COUNCIL 37	3	1,640	1,665	1,690
065	DC 37 UNIF MARINE ENGR	109	1,660	1,685	1,710
163	UFT WELFARE FUND	3	1,720	1,745	1,770
170	PBA (NYPD)	1	1,579	1,579	1,579
205	RETIRED FIREFIGHTERS SBF	10,401	1,720	1,745	1,770
206	RET FIREFIGHTRS SBF-WIPER	10	1,570	1,595	1,620
240	UFOA LOCAL 854 RETIREES	4,774	1,595	1,620	1,645
888		223	0	0	0
901		1	0	0	0
905	Either not entitled to Welfare Fund Benefits or UWF	330	0	0	0
940	contribution is not funded by the City. Medicare Part B	187	0	0	0
941	reimbursement.	1	0	0	0
999		1	0	0	0
Blank		56	0	0	0
	Total Count:	16,177			

¹ Rates used as of June 30, 2014, June 30, 2015, and June 30, 2016 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 \$75 was added to each amount as of 7/1/2016, assuming that any welfare funds who have not yet negotiated the increase will do so in the future. In addition, a negotiated one time increase of \$100 was reflected as of 7/1/2016 for all funds.

Appendix C: Detailed Results

Governmental Accounting Standards Board Statements No. 74 and No. 75

New York City Educational Construction Fund (ECF)

Summary of June 30, 2016 Data

1. Actives	
a. Number	3
b. Salary	\$359,856
c. Average Age	50.71
d. Average Service	3.83
e. Average Salary	\$119,952
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	44.34
4. Retirees	
a. Total*	
i. Number	6
ii. Average Age	75.85
b. By Benefit	Participant / Spouse
i. Pre-Medicare**	1 / 0
ii. Medicare Eligible**	4 / 2
iii. Welfare Fund**	N/A / N/A
iv. Medicare Part B [#]	6 / 3

* Retirees eligible for at least one benefit from ECF.

** Retirees currently eligible for benefit from ECF.

Retirees eligible for benefit from ECF now or in the future.

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

New York City Educational Construction Fund (ECF)

June 30, 2015 Results of the Actuarial Valuation Based on a 2.71% Discount Rate

1. Total Present Value of Projected Benefits						
	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$165,847	\$1,122,546	\$0	\$277,280	\$51,580	\$1,617,253
b. Deferred ²	\$201,653	\$288,014	\$0	\$70,681	\$95,273	655,621
c. Retired	<u>\$0</u>	\$642,938	<u>\$0</u>	<u>\$184,776</u>	<u>\$514</u>	828,228
d. TOTAL	\$367,500	\$2,053,498	\$0	\$532,737	\$147,367	\$3,101,102
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$36,362	\$336,876	\$0	\$83,298	\$13,557	\$470,093
b. Deferred ²	\$201,653	\$288,014	\$0	\$70,681	\$95,273	655,621
c. Retired	<u>\$0</u>	\$642,938	<u>\$0</u>	<u>\$184,776</u>	<u>\$514</u>	<u>828,228</u>
d. TOTAL	\$238,015	\$1,267,828	\$0	\$338,755	\$109,344	\$1,953,942
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$1,953,942
5. Entry Age Normal Cost						\$92,498
6. Salary of Active Participants						\$483,451

7. Normal Cost Percentage

[5./6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

19.133%

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						
1. Total Fresent value of Frojecteu Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$124,656	\$722,212	\$0	\$164,175	\$211,534	\$1,222,577
b. Deferred ²	\$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>	\$1,095,320
d. TOTAL	\$1,151,459	\$2,132,860	\$0	\$507,050	\$569,434	\$4,360,803
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$16,627	\$178,545	\$0	\$40,398	\$40,666	\$276,236
b. Deferred ²	\$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>	\$1,095,320
d. TOTAL	\$1,043,430	\$1,589,193	\$0	\$383,273	\$398,566	\$3,414,462
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UA	AL)					\$3,414,462
5. Entry Age Normal Cost						\$76,223
6. Salary of Active Participants						\$359,856

7. Normal Cost Percentage

[5./6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

21.182%

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

New York City Educational Construction Fund (ECF)

Market Values of Assets

	Total
1. Plan Net Position @ 6/30/2015	\$ 0
2. Changes for the year:	
a. ER Contributions	62,303
b. EE Contributions	0
c. Net Investment Income	0
d. Benefit Payments	(62,303)
e. Administrative Expenses	0
f. Other	0
g. Net Changes	\$ 0
3. Plan Net Position @ 6/30/2016	\$ 0
4. Changes for the year:	
a. ER Contributions	59,650
b. EE Contributions	0
c. Net Investment Income	0
d. Benefit Payments	(59,650)
e. Payment of Interest on TDA Fixed Funds	0
e. Administrative Expenses	0
f. Other	0
g. Net Changes	\$ 0
5. Plan Net Position @ 6/30/2017	\$ 0

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, 2016

	Total
1. Market Value 6/30/2015	\$ 0
2. Market Value 6/30/2016	0
3. Net Investment Income	0
4. Cash Flow (2 1 3.)	0
5. Projected Earnings (4% * 1. + 1.980% * 4.)	0
6. (Gain) / Loss (5 3.)	0
7. Recognition Period	5 Years
8. Amount Recognized in OPEB Expense (6. / 7.)	0
9. Deferred (Inflow) / Outflow of Resources (6 8.)	\$ 0

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

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

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, 2016

	Total
1. Entry Age Accrued Liability (EAAL) at 6/30/2015	\$ 1,953,942
2. Entry Age Normal Cost at 6/30/2015	92,498
3. Estimated Benefit Payments-FY16	42,249
4. Interest ¹	54,890
5. Roll-Forward EAAL at 6/30/2016	\$ 2,059,081

¹Assumes a 2.71% interest rate

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

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

¹Assumes a 3.13% interest rate

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

		Average Expected
		Remaining Service Life
<u>Group</u>	<u># Count</u>	@ 6/30/2016
Active	3	3.18
Active/Inactive	0	0
Term Vested	1	0
Retired	<u>6</u>	<u>0</u>
Total	10	0.95

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

Year	Differences between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2017	2018	2019	2020	2021
2017	\$ 0	5	 0	0	0	0	0
2018							
2019							
2020							
2021							
Net increase	(decrease) in OPEB Ex	apense	\$ 0 \$	0 \$	0 \$	0 \$	0

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	betv រ	Differences veen Expected and Actual Experience	Recognition Period (Years)	2016	2017	2018	2019	2020	2021
2016	\$	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									
2019									
2020									
2021									
Net increase	decre	ase) in OPEB Ex	pense	\$ 20,054 \$	2,178,629	\$ 0 \$	0 \$	0 \$	0

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

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	due	ifferences to Changes Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021
2017	\$	(820,838)	1.00	(820,838)	0	0	0	0
2018								
2019								
2020								
2021								
Net increas	e (decrea	se) in OPEB Ex	pense	\$ (820,838) \$	0 \$	0 \$	0 \$	0

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, 2016

<u>Component</u>		<u>Amount</u>
	¢	02 400
a. Service Cost	\$	92,498
b. Interest on the Total OPEB Liability		54,890
c. Changes of Assumptions		0
d. Differences between Expected and Actual Experience		20,054
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
Total OPEB Expense	\$	167,442

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>	Amount
a. Service Cost	\$ 76,223
b. Interest on the Total OPEB Liability	108,370
c. Changes of Assumptions	(820,838)
d. Differences between Expected and Actual Experience	2,178,629
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
Total OPEB Expense	\$ 1,542,384

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, 2016, the City recognized OPEB Expense of \$167,442.

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

U	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between Expected and Actual Experience	\$	0	\$	0
Changes of Assumptions		0		0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		0		0
Total	\$	0	\$	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	
June 30	Amount
2016	\$ 20,054
2017	0
2018	0
2019	0
2020	0

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, 2017, the City recognized OPEB Expense of \$1,542,384.

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

U	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between Expected and Actual Experience	\$	0	\$	0
Changes of Assumptions		0		0
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		0		0
Total	\$	0	\$	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	
June 30	Amount
2017	\$ 1,357,791
2018	0
2019	0
2020	0
2021	0

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, 2016

		Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
1a.	Balances at June 30, 2015	\$ 1,953,942 \$	6 0	\$ 1,953,942
2.	Changes for the Year:			
	a. Service Cost	92,498	0	92,498
	b. Interest	54,890	0	54,890
	c. Differences b/t Expected and Actual Experience	20,054	0	20,054
	d. Contributions - Employer	0	62,303	(62,303)
	e. Contributions - Employee	0	0	0
	f. Net Investment Income	0	0	0
	g. Actual Benefit Payments	(62,303)	(62,303)	0
	h. Administrative Expenses	0	0	0
	i. Other Changes	0	0	0
	j. Net Changes	\$ 105,139 \$	6 0	\$ 105,139
3.	Balances at June 30, 2016	\$ 2,059,081 \$	6 0	\$ 2,059,081

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)
1a.	Balances at June 30, 2016	\$	2,059,081 \$	6 0	\$ 2,059,081
2.	Changes for the Year:				
	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
	k. Net Changes		1,482,734 \$	6 0	\$ 1,482,734
3.	Balances at June 30, 2017	\$	3,541,815 \$	6 0	\$ 3,541,815
4.	Sensitivity of the Net OPEB Liability to Changes in the l	Discou	int Rate		
	l. 1% Decrease				\$ 4,865,812
	m. 1% Increase				\$ 2,688,327
5.	Sensitivity of the Net OPEB Liability to Changes in the I	Health	care Cost Trend Rate		
	n. 1% Decrease				\$ 2,496,872
	o. 1% Increase				\$ 5,129,604

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

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, 2016 OPEB Data

	NYCERS	TRS	BERS	TOTAL
1. Actives				
a. Number	32,322	0	2	32,324
b. Salary	\$2,282,921,332	\$0	\$134,793	\$2,283,056,125
c. Average Age	49.71	NA	60.50	49.71
d. Average Service	11.13	NA	15.00	11.13
e. Average Salary	\$70,631	NA	\$67,397	\$70,630
2. Inactives				
a. Number	3,910	0	0	3,910
b. Average Age	43.70	NA	NA	43.70
c. Average Service	5.53	NA	NA	5.53
3. Deferreds (Includes Deferred Retirees, if any)				
a. Number	1,633	0	0	1,633
b. Average Age	54.53	NA	NA	54.53
4. Retirees				
a. Total*				
i. Number	21,127	8	5	21,140
ii. Average Age	73.37	73.10	73.86	73.37
 b. By Benefit Pre-Medicare** Medicare Eligible** Welfare Fund** iv. Medicare Part B[#] 				Participant / Spouse 3,367 / 1,775 17,773 / 4,276 19,703 / NA NR / NR

* Retirees eligible for at least one benefit from HHC

** Retirees currently eligible for benefit from HHC

Retirees eligible for benefit from HHC now or in the future

NR Benefit not the responsibility of HHC

\$2,171,335,699

15.022%

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, 2015 Results of the Actuarial Valuation Based on a 2.71% Discount Rate

1. Total Present Value of Projected Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$2,471,967,258	\$3,039,976,625	\$1,718,324,226	\$0	\$88,856,055	\$7,319,124,164
b. Deferred ²	\$144,420,567	\$149,569,029	\$90,078,219	\$0	\$659,313	\$384,727,128
c. Retired	\$304,049,654	<u>\$920,498,266</u>	\$564,927,084	<u>\$0</u>	<u>\$412,172</u>	<u>\$1,789,887,176</u>
d. TOTAL	\$2,920,437,479	\$4,110,043,920	\$2,373,329,529	\$0	\$89,927,540	\$9,493,738,468
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$802,067,664	\$1,215,788,632	\$670,336,905	\$0	\$19,011,404	\$2,707,204,605
b. Deferred ²	\$144,420,567	\$149,569,029	\$90,078,219	\$0	\$659,313	384,727,128
c. Retired	\$304,049,654	<u>\$920,498,266</u>	<u>\$564,927,084</u>	<u>\$0</u>	<u>\$412,172</u>	<u>1,789,887,176</u>
d. TOTAL	\$1,250,537,885	\$2,285,855,927	\$1,325,342,208	\$0	\$20,082,889	\$4,881,818,909
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$4,881,818,909
5. Entry Age Normal Cost						\$326,174,054

6. Salary of Active Participants

7. Normal Cost Percentage [5. / 6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

12.034%

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

7. Normal Cost Percentage [5. / 6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

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

	Total
1. Plan Net Position @ 6/30/2015	\$ 0
2. Changes for the year:	
a. ER Contributions	95,999,857
b. EE Contributions	0
c. Net Investment Income	0
d. Benefit Payments	(95,999,857)
e. Administrative Expenses	0
f. Other	 0
g. Net Changes	\$ 0
3. Plan Net Position @ 6/30/2016	\$ 0
2. Changes for the year:	
a. ER Contributions	56,086,853
b. EE Contributions	0
c. Net Investment Income	0
d. Benefit Payments ¹	(56,086,853)
e. Administrative Expenses	0
f. Other	0
g. Net Changes	\$ 0
3. Plan Net Position @ 6/30/2017	\$ 0

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

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, 2016

	Total
1. Market Value 6/30/2015	\$ 0
2. Market Value 6/30/2016	0
3. Net Investment Income	0
4. Cash Flow (2 1 3.)	0
5. Projected Earnings (4% * 1. + 1.980% * 4.)	0
6. (Gain) / Loss (5 3.)	0
7. Recognition Period	5 Years
8. Amount Recognized in OPEB Expense (6. / 7.)	0
9. Deferred (Inflow) / Outflow of Resources (6 8.)	\$ 0

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

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

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, 2016

Total

1. Entry Age Accrued Liability (EAAL) at 6/30/2015	\$ 4,881,818,909
2. Entry Age Normal Cost at 6/30/2015	\$ 326,174,054
3. Estimated Benefit Payments-FY16	\$ 139,447,798
4. Interest ¹	\$ 139,259,723
5. Roll-Forward EAAL at 6/30/2016	\$ 5,207,804,888

¹Assumes a 2.71% interest rate

Total

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

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

¹Assumes a 3.13% interest rate

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

		Average Expected
		Remaining Service Life
Group	<u># Count</u>	@ 6/30/2016
Active	32,324	10.86
Active/Inactive ¹	3,910	13.62
Term Vested	1,633	0
Retired	<u>21,140</u>	<u>0</u>
Total	59,007	6.57

¹Only 40% of inactives are assumed to return to active status

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

	Earnings on OPEB Plan Investments	Recognition Period (Years)	2017	2018	2019	2020	2021
2017 \$	0	5	0	0	0	0	0
2018							
2019							
2020							
2021							

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

and Actual	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	2022	2023
(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
(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)
		Experience (Years) (43,447,941) 6.57	Experience(Years)2016(43,447,941)6.57(6,613,081)	Experience(Years)20162017(43,447,941)6.57(6,613,081)(6,613,081)	Experience(Years)201620172018(43,447,941)6.57(6,613,081)(6,613,081)(6,613,081)	Experience(Years)2016201720182019(43,447,941)6.57(6,613,081)(6,613,081)(6,613,081)(6,613,081)	Experience(Years)20162017201820192020(43,447,941)6.57(6,613,081)(6,613,081)(6,613,081)(6,613,081)(6,613,081)	Experience(Years)201620172018201920202021(43,447,941)6.57(6,613,081)(6,613,081)(6,613,081)(6,613,081)(6,613,081)(6,613,081)	Experience(Years)2016201720182019202020212022(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)

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

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
2017 2018	\$ (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)
2019									
2020									
2021									
Net increas	se (decrease) in OP	EB Expense	\$ (100,623,118)	\$ (100,623,118)	\$ (100,623,118)	\$ (100,623,118)	\$ (100,623,118)	\$ (100,623,118)	\$ (57,355,179)

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, 2016

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 326,174,054
b. Interest on the Total OPEB Liability	139,259,723
c. Changes of Assumptions	0
d. Differences between Expected and Actual Experience	(6,613,081)
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
Total OPEB Expense	\$ 458,820,696

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

Component Amount a. Service Cost \$ 274,749,014 b. Interest on the Total OPEB Liability 147,666,641 c. Changes of Assumptions (100, 623, 118)d. Differences between Expected and Actual Experience (25, 242, 639)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 **Total OPEB Expense** \$ 296,549,898

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.

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

	Defe Outf of Res	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>	Amount
2016	\$ (6,613,081)
2017	(6,613,081)
2018	(6,613,081)
2019	(6,613,081)
2020	(6,613,081)
Thereafter	(10,382,536)

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:

	Defe Outf of Res	Deferred Inflows of Resources		
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>	Amount
2017	\$ (119,252,676)
2018	(119,252,676)
2019	(119,252,676)
2020	(119,252,676)
2021	(119,252,676)
Thereafter	(187,226,703)

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.

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

	Defe Outf of Res	Deferred Inflows of Resources		
Differences between Expected and Actual Experience	\$	0	\$	133,988,417
Changes of Assumptions		0		560,470,769
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		0		0
Total	\$	0	\$	694,459,186

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

<u>Amount</u>
(125,865,757)
(125,865,757)
(125,865,757)
(125,865,757)
(125,865,757)
(190,996,158)

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, 2016

		Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
1a.	Balances at June 30, 2015	\$ 4,881,818,909 \$	6 0	\$ 4,881,818,909
2.	Changes for the Year:			
	a. Service Cost	326,174,054	0	326,174,054
	b. Interest	139,259,723	0	139,259,723
	c. Differences b/t Expected and Actual Experience	(43,447,941)	0	(43,447,941)
	d. Contributions - Employer	0	95,999,857	(95,999,857)
	e. Contributions - Employee	0	0	0
	f. Net Investment Income	0	0	0
	g. Actual Benefit Payments	(95,999,857)	(95,999,857)	0
	h. Administrative Expenses	0	0	0
	i. Other Changes	0	0	0
	j. Net Changes	\$ 325,985,979 \$	6 O	\$ 325,985,979
3.	Balances at June 30, 2016	\$ 5,207,804,888 \$	6 0	\$ 5,207,804,888

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)
1a.	Balances at June 30, 2016	\$	5,207,804,888	\$	0	\$ 5,207,804,888
2.	Changes for the Year:					
	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
	k. Net Changes	\$	(417,161,281)	\$	0	\$ (417,161,281)
3.	Balances at June 30, 2017	\$	4,790,643,607	\$	0	\$ 4,790,643,607
4.	Sensitivity of the Net OPEB Liability to Changes in	n the Di	scount Rate			
	1. 1% Decrease					\$ 5,582,589,281
	m. 1% Increase					\$ 4,163,252,338
5.	Sensitivity of the Net OPEB Liability to Changes in	n the H	ealthcare Cost Trei	nd Ra	ate	
	n. 1% Decrease					\$ 4,004,662,325
	o. 1% Increase					\$ 5,890,166,060

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

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

New York City Housing Authority (NYCHA)

Summary of June 30, 2016 OPEB Data

	NYCERS	TRS	BERS	TOTAL
1. Actives				
a. Number	9,914	3	24	9,941
b. Salary	\$643,231,062	233,540	1,930,784	\$645,395,386
c. Average Age	48.46	52.67	53.88	48.47
d. Average Service	14.87	10.00	16.75	14.87
e. Average Salary	\$64,881	\$77,847	\$80,449	\$64,923
2. Inactives				
a. Number	1,015	0	8	1,023
b. Average Age	45.23	NA	47.88	45.25
c. Average Service	9.05	NA	8.63	9.05
3. Deferreds (Includes Deferred Retiree	s, if any)			
a. Number	611	0	0	611
b. Average Age	54.70	NA	NA	54.70
4. Retirees				
a. Total*				
i. Number	8,767	4	18	8,789
ii. Average Age	71.34	78.96	70.91	71.34
 b. By Benefit i. Pre-Medicare** ii. Medicare Eligible** iii. Welfare Fund** iv. Medicare Part B* 				Participant / Spouse 1,871 / 1,269 6,061 / 1,982 7,493 / NA 8,789 / 3,741

* Retirees eligible for at least one benefit from NYCHA.

** Retirees currently eligible for benefit from NYCHA.

Retirees eligible for benefit from NYCHA now or in the future.

22.353%

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, 2015 Results of the Actuarial Valuation Based on a 2.71% Discount Rate

1. Actuarial Present Value of Benefits	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$1,119,011,847	\$1,054,538,657	\$558,810,199	\$669,298,183	\$43,067,944	\$3,444,726,830
b. Deferred ²	\$65,251,811	\$57,337,818	\$32,047,355	\$36,648,544	\$352,333	\$191,637,861
c. Retired	\$239,153,424	\$388,802,193	\$242,714,466	\$267,631,197	\$299,051	<u>\$1,138,600,331</u>
d. TOTAL	\$1,423,417,082	\$1,500,678,668	\$833,572,020	\$973,577,924	\$43,719,328	\$4,774,965,022
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$388,506,757	\$428,765,853	\$218,331,457	\$272,255,858	\$9,160,162	\$1,317,020,087
b. Deferred ²	65,251,811	57,337,818	32,047,355	36,648,544	352,333	\$191,637,861
c. Retired	239,153,424	388,802,193	242,714,466	267,631,197	299,051	<u>\$1,138,600,331</u>
d. TOTAL	\$692,911,992	\$874,905,864	\$493,093,278	\$576,535,599	\$9,811,546	\$2,647,258,279
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$2,647,258,279
5. Entry Age Normal Cost						\$142,274,970
6. Salary of Active Participants						\$636,503,155

7. Normal Cost Percentage [5. / 6.]

¹ Includes Actuarial Present Value of Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

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

[5. / 6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

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

New York City School Construction Authority (SCA)

Summary of June 30, 2016 OPEB Data

	NYCERS	BERS	TOTAL
1. Actives			
a. Number	55	595	650
b. Salary	\$6,403,317	61,623,334	68,026,651
c. Average Age	54.76	52.12	52.34
d. Average Service	20.71	11.09	11.90
e. Average Salary	\$116,424	\$103,569	\$104,656
2. Inactives			
a. Number	4	35	39
b. Average Age	52.00	45.23	45.92
c. Average Service	8.25	4.97	5.31
3. Deferreds (Includes Deferred Retirees, if any)			
a. Number	7	16	23
b. Average Age	54.57	54.63	54.61
4. Retirees			
a. Total*			
i. Number	44	223	267
ii. Average Age	71.23	72.76	72.51
b. By Benefit			Participant / Spouse
i. Pre-Medicare**			NR / NR
ii. Medicare Eligible**			NR / NR
iii. Welfare Fund**			267 / NA
iv. Medicare Part B [#]			NR / NR

* Retirees eligible for at least one benefit from SCA.

** Retirees currently eligible for benefit from SCA.

Retirees eligible for benefit from SCA now or in the future.

NR Benefit not the responsibility of SCA.

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

New York City School Construction Authority (SCA)

June 30, 2015 Results of the Actuarial Valuation Based on a 2.71% Discount Rate

1. Total Present Value of Projected Benefits

	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$0	\$0	\$27,165,606	\$0	\$0	\$27,165,606
b. Deferred ²	0	0	1,207,665	0	0	1,207,665
c. Retired	<u>0</u>	<u>0</u>	7,847,194	<u>0</u>	<u>0</u>	7,847,194
d. TOTAL	\$0	\$0	\$36,220,465	\$0	\$0	\$36,220,465
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$0	\$0	\$12,481,021	\$0	\$0	\$12,481,021
b. Deferred ²	0	0	1,207,665	0	0	1,207,665
c. Retired	<u>0</u>	<u>0</u>	7,847,194	<u>0</u>	<u>0</u>	7,847,194
d. TOTAL	\$0	\$0	\$21,535,880	\$0	\$0	\$21,535,880

3. Actuarial Value of Assets	\$0
4. Unfunded Actuarial Accrued Liability (UAAL)	\$21,535,880
5. Entry Age Normal Cost	\$1,281,787
6. Salary of Active Participants	\$60,765,975
7. Normal Cost Percentage [5. / 6.]	2.109%

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

\$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)

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

	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$0	\$0	\$21,927,735	\$0	\$0	\$21,927,735
b. Deferred ²	0	0	963,101	0	0	\$963,101
c. Retired	<u>0</u>	<u>0</u>	7,605,931	<u>0</u>	<u>0</u>	<u>\$7,605,931</u>
d. TOTAL	\$0	\$0	\$30,496,767	\$0	\$0	\$30,496,767
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$0	\$0	\$10,304,908	\$0	\$0	\$10,304,908
b. Deferred ²	0	0	963,101	0	0	963,101
c. Retired	<u>0</u>	<u>0</u>	7,605,931	<u>0</u>	<u>0</u>	<u>7,605,931</u>
d. TOTAL	\$0	\$0	\$18,873,940	\$0	\$0	\$18,873,940

3. Actuarial Value of Assets

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%

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

rnmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 7

New York City School Construction Authority (SCA)

Market Values of Assets

	Total
1. Plan Net Position @ 6/30/2015	\$ 0
2. Changes for the year:	
a. ER Contributions	477,190
b. EE Contributions	0
c. Net Investment Income	0
d. Benefit Payments	(477,190)
e. Administrative Expenses	0
f. Other	 0
g. Net Changes	\$ 0
3. Plan Net Position @ 6/30/2016	\$ 0
2. Changes for the year:	
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
3. Plan Net Position @ 6/30/2017	\$ 0

Total

NEW YORK CITY HEALTH BENEFITS PROGRAM

ernmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74

New York City School Construction Authority (SCA)

Development of Asset (Gain) / Loss June 30, 2016

	Iotui
1. Market Value 6/30/2015	\$ 0
2. Market Value 6/30/2016	0
3. Net Investment Income	0
4. Cash Flow (2 1 3.)	0
5. Projected Earnings (4% * 1. + 1.980% * 4.)	0
6. (Gain) / Loss (5 3.)	0
7. Recognition Period	5 Years
8. Amount Recognized in OPEB Expense (6. / 7.)	0
9. Deferred (Inflow) / Outflow of Resources (6 8.)	\$ 0

ernmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74

New York City School Construction Authority (SCA)

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

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

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, 2016

	Total
1. Entry Age Accrued Liability (EAAL) at 6/30/2015	\$ 21,535,880
2. Entry Age Normal Cost at 6/30/2015	1,281,787
3. Estimated Benefit Payments-FY16	509,585
4. Interest ¹	611,500
5. Roll-Forward EAAL at 6/30/2016	\$ 22,919,582

¹Assumes a 2.71% interest rate

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

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

¹Assumes a 3.13% interest rate

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

		Average Expected
		Remaining Service Life
<u>Group</u>	<u># Count</u>	<u>@ 6/30/2016</u>
Active	650	9.15
Active/Inactive ¹	39	11.53
Term Vested	23	0
Retired	<u>267</u>	<u>0</u>
Total	979	6.41

¹Only 40% of inactives are assumed to return to active status

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

Year	Differences between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2017	2018	2019	2020	2021
2017	\$ 0	5	 0	0	0	0	0
2018	Ψ Ŭ	c	Ũ	Ŭ	Ŭ	Ū.	Ũ
2019							
2020							
2021							
Net increase	(decrease) in OPEB Ex	kpense	\$ 0 \$	0 \$	0 \$	0 \$	0

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 Exected and Actual Experience

Year	Differe between F and A Experi	Expected ctual	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	2022	2023
2016 1	\$	(32,395)	6.41	 (5,054)	(5,054)	(5,054)	(5,054)	(5,054)	(5,054)	(2,071)	0
2017	\$	(761,806)	6.41	0	(118,846)	(118,846)	(118,846)	(118,846)	(118,846)	(118,846) \$	(48,730)
2018											
2019											
2020											
2021											
Net increase (decrease) in	n OPEB Ex	pense	\$ (5,054) \$	(123,900) \$	(123,900) \$	(123,900) \$	(123,900) \$	(123,900) \$	(120,917) \$	(48,730)

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

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

Year		Differences Due to Changes in Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023
2017 2018 2019 2020 2021	\$	(3,259,111)	6.41	(508,442)	(508,442)	(508,442)	(508,442)	(508,442)	(508,442) \$	(208,459)
	(decr	ease) in OPEB Exp	pense	\$ (508,442) \$	(508,442) \$	(508,442) \$	(508,442) \$	(508,442) \$	(508,442) \$	(208,459)

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, 2016

<u>Component</u>		Amount
a. Service Cost	\$	1,281,787
b. Interest on the Total OPEB Liability	Ψ	611,500
c. Changes of Assumptions		0
d. Differences between Expected and Actual Experience		(5,054)
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
Total OPEB Expense	\$	1,888,233

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

Component	<u>Amount</u>
a. Service Cost	\$ 1,050,170
b. Interest on the Total OPEB Liability	615,479
c. Changes of Assumptions	(508,442)
d. Differences between Expected and Actual Experience	(123,900)
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
Total OPEB Expense	\$ 1,033,307

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.

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

	Defe Outi of Res	Deferred Inflows of Resources		
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

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

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:

	Defe Outf of Res	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

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

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.

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

	Defe Outf of Res	Deferred Inflows of Resources		
Differences between Expected and Actual Experience	\$	0	\$	665,247
Changes of Assumptions		0		2,750,669
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		0		0
Total	\$	0	\$	3,415,916

Fiscal Year	
Ended	
June 30	Amount
2017	\$ (632,342)
2018	(632,342)
2019	(632,342)
2020	(632,342)
2021	(632,342)
Thereafter	(886,548)

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, 2016

	Total OPEB Liability (a)				Net OPEB Liability (a) - (b)	
1a. Balances at June 30, 2015	\$	21,535,880	\$	0 \$	21,535,880	
2. Changes for the Year:						
a. Service Cost		1,281,787		0	1,281,787	
b. Interest		611,500		0	611,500	
c. Differences b/t Expected and Actual Experience		(32,395)		0	(32,395)	
d. Contributions - Employer		0	477,19	0	(477,190)	
e. Contributions - Employee		0		0	0	
f. Net Investment Income		0		0	0	
g. Actual Benefit Payments		(477,190)	(477,19	0)	0	
h. Administrative Expenses		0		0	0	
i. Other Changes		0		0	0	
j. Net Changes	\$	1,383,702	\$	0\$	1,383,702	
3. Balances at June 30, 2016	\$	22,919,582	\$	0\$	22,919,582	

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

1a.	Balances at June 30, 2016	\$	Total OPEB Liability (a) 22,919,582		Plan Fiduciary Net Position (b) 0	\$	Net OPEB Liability (a) - (b) 22,919,582
144		Ψ		Ψ	0	Ψ	
2.	Changes for the Year:						
	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
	k. Net Changes	\$	(2,904,518)	\$	0	\$	(2,904,518)
3.	Balances at June 30, 2017	\$	20,015,064	\$	0	\$	20,015,064
4.	Sensitivity of the Net OPEB Liability to Changes in the	Disco	ount Rate				
	1. 1% Decrease					\$	23,408,727
	m. 1% Increase					\$	17,284,050
5.	Sensitivity of the Net OPEB Liability to Changes in the	Healt	hcare Cost Trend F	Rate			
	n. 1% Decrease					\$	16,877,239
	o. 1% Increase					\$	24,077,001

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

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, 2016 OPEB Data

	NYCERS	BERS	TOTAL
1. Actives			
a. Number	10	0	10
b. Salary	\$1,038,842	NA	\$1,038,842
c. Average Age	46.90	NA	46.90
d. Average Service	9.10	NA	9.10
e. Average Salary	\$103,884	NA	\$103,884
2. Inactives			
a. Number	2	0	2
b. Average Age	36.00	NA	36.00
c. Average Service	3.50	NA	3.50
3. Deferreds (Includes Deferred Retirees, if any)			
a. Number	0	0	0
b. Average Age	NA	NA	NA
4. Retirees			
a. Total*			
i. Number	3	1	4
ii. Average Age	70.74	72.81	71.26
b. By Benefit			Participant / Spouse
i. Pre-Medicare**			1 / NA
ii. Medicare Eligible**			3 / 1
iii. Welfare Fund**			4 / NA
iv. Medicare Part B [#]			NR / NR

* Retirees eligible for at least one benefit from WFA.

** Retirees currently eligible for benefit from WFA.

Retirees eligible for benefit from WFA now or in the future.

NR Benefit not the responsibility of WFA.

\$1,147,964

11.886%

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, 2015 Results of the Actuarial Valuation Based on a 2.71% Discount Rate

1. Total Present Value of Projected Benefits						
	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$1,429,168	\$1,319,027	\$677,417	\$0	\$42,481	\$3,468,093
b. Deferred ²	\$0	\$0	\$0	\$0	\$0	0
c. Retired	\$12,910	<u>\$144,492</u>	<u>\$138,148</u>	<u>\$0</u>	<u>\$51</u>	295,601
d. TOTAL	\$1,442,078	\$1,463,519	\$815,565	\$0	\$42,532	\$3,763,694
2. Entry Age Actuarial Accrued Liability						
a. Active ¹	\$468,315	\$449,786	\$223,925	\$0	\$9,927	\$1,151,953
b. Deferred ²	0	0	0	0	0	0
c. Retired	<u>12,910</u>	144,492	138,148	<u>0</u>	<u>51</u>	<u>295,601</u>
d. TOTAL	\$481,225	\$594,278	\$362,073	\$0	\$9,978	\$1,447,554
3. Actuarial Value of Assets						\$0
4. Unfunded Actuarial Accrued Liability (UAAL)						\$1,447,554
5. Entry Age Normal Cost						\$136,444

6. Salary of Active Participants

7. Normal Cost Percentage

[5./6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

\$1,038,842

9.739%

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 Pres	sent Value of Projected Benefits						
		Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	Total
a. Ac	ctive ¹	\$1,098,188	\$934,918	\$432,904	\$0	\$30,480	\$2,496,490
b. De	eferred ²	0	0	0	0	0	\$0
c. Re	etired	<u>0</u>	134,057	121,967	<u>0</u>	<u>41</u>	<u>\$256,065</u>
d. TO	OTAL	\$1,098,188	\$1,068,975	\$554,871	\$0	\$30,521	\$2,752,555
2. Entry Age	e Actuarial Accrued Liability						
a. Ac	ctive ¹	\$431,937	\$399,661	\$185,735	\$0	\$8,848	\$1,026,181
b. De	eferred ²	0	0	0	0	0	\$0
c. Re	etired	<u>0</u>	134,057	121,967	<u>0</u>	<u>41</u>	\$256,065
d. To	OTAL	\$431,937	\$533,718	\$307,702	\$0	\$8,889	\$1,282,246
3. Actuarial	Value of Assets						\$0
4. Unfunded	Actuarial Accrued Liability (UAAL)						\$1,282,246
5. Entry Age	e Normal Cost						\$101,168

6. Salary of Active Participants

7. Normal Cost Percentage

[5./6.]

¹ Includes Total Present Value of Projected Benefits for Inactives, if any.

² Includes Deferred Retirees, if any.

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

	Total
1. Plan Net Position @ 6/30/2015	\$ 0
2. Changes for the year:	
a. ER Contributions	16,973
b. EE Contributions	0
c. Net Investment Income	0
d. Benefit Payments	(16,973)
e. Administrative Expenses	0
f. Other	 0
g. Net Changes	\$ 0
3. Plan Net Position @ 6/30/2016	\$ 0
2. Changes for the year:	
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
3. Plan Net Position @ 6/30/2017	\$ 0

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, 2016

	Total
1. Market Value 6/30/2015	\$ 0
2. Market Value 6/30/2016	0
3. Net Investment Income	0
4. Cash Flow (2 1 3.)	0
5. Projected Earnings (4% * 1. + 1.980% * 4.)	0
6. (Gain) / Loss (5 3.)	0
7. Recognition Period	5 Years
8. Amount Recognized in OPEB Expense (6. / 7.)	0
9. Deferred (Inflow) / Outflow of Resources (6 8.)	\$ 0

Total

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

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

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, 2016

	Total
1. Entry Age Accrued Liability (EAAL) at 6/30/2015	\$ 1,447,554
2. Entry Age Normal Cost at 6/30/2015	136,444
3. Estimated Benefit Payments-FY16	25,427
4. Interest ¹	42,584
5. Roll-Forward EAAL at 6/30/2016	\$ 1,601,155

¹Assumes a 2.71% interest rate

Total

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

 Entry Age Accrued Liability (EAAL) at 6/30/2016 Entry Age Normal Cost at 6/30/2016 Estimated Benefit Payments-FY17 Interest¹ 	\$ 1,282,246 101,168 14,668 43,073
5. Roll-Forward EAAL at 6/30/2017	\$ 1,411,819

¹Assumes a 3.13% interest rate

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

		Average Expected
		Remaining Service Life
Group	<u># Count</u>	@ 6/30/2016
Active	10	12.30
Active/Inactive ¹	2	17.52
Term Vested	0	0
Retired	<u>4</u>	<u>0</u>
Total	16	9.26

¹Only 40% of inactives are assumed to return to active status

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

Year	Differences between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2017	2018	2019	2020	2021
2017	\$ 0	5	 0	0	0	0	0
2018							
2019							
2020							
2021							
Net increase	(decrease) in OPEB E	xpense	\$ 0 \$	0 \$	0 \$	0 \$	0

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	be	Differences etween Expected and Actual Experience	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016	\$	(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														
2019														
2020														
2021														
Net increase	(dec	crease) in OPEB Exp	pense	\$ (913)	\$(11,325)	\$(11,325)	\$(11,325)	\$(11,325)	\$(11,325)	\$ (11,325)	\$(11,325)	\$(11,325)	\$ (10,649)	\$ (2,709)

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

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 Changes in Assumptions

Year	C	Differences Due to Changes in ssumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	A	<u> </u>	<u>,</u>								-		
2017	\$	(222,259)	9.26	(24,002)	(24,002)	(24,002)	(24,002)	(24,002)	(24,002)	(24,002)	(24,002)	(24,002)	(6,241)
2018													
2019													
2020													
2021													
Net increas	e (decr	ease) in OPEB E	xpense	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (24,002)	\$ (6,241)

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, 2016

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 136,444
b. Interest on the Total OPEB Liability	42,584
c. Changes of Assumptions	0
d. Differences between Expected and Actual Experience	(913)
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
Total OPEB Expense	\$ 178,115

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. Changes of Assumptions		(24,002)
d. Differences between Expected and Actual Experience		(11,325)
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
Total OPEB Expense	\$	108,914

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.

At 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 Resource		Inflo	Deferred Inflows Resources	
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	

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

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:

	Deferred Outflows of Resources			Deferred Inflows of Resources	
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	

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

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.

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

U	Deferred Outflows of Resources			Deferred Inflows of Resources	
Differences between Expected and Actual Experience	\$	0	\$	92,633	
Changes of Assumptions		0		198,257	
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		0		0	
Total	\$	0	\$	290,890	

Fiscal Year	
Ended	
<u>June 30</u>	Amount
2017	\$ (35,327)
2018	(35,327)
2019	(35,327)
2020	(35,327)
2021	(35,327)
Thereafter	(149,582)

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, 2016

		Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
1a.	Balances at June 30, 2015	\$ 1,447,554		\$ 1,447,554
2.	Changes for the Year:			
	a. Service Cost	136,444	0	136,444
	b. Interest	42,584	0	42,584
	c. Differences b/t Expected and Actual Experience	(8,454)	0	(8,454)
	d. Contributions - Employer	0	16,973	(16,973)
	e. Contributions - Employee	0	0	0
	f. Net Investment Income	0	0	0
	g. Actual Benefit Payments	(16,973)	(16,973)	0
	h. Administrative Expenses	0	0	0
	i. Other Changes	0	0	0
	j. Net Changes	\$ 153,601	\$ 0	\$ 153,601
3.	Balances at June 30, 2016	\$ 1,601,155	\$ 0	\$ 1,601,155

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)
1a.	Balances at June 30, 2016	\$	1,601,155	\$	0	\$ 1,601,155
2.	Changes for the Year:					
	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
	k. Net Changes	\$	(189,336)	\$	0	\$ (189,336)
3.	Balances at June 30, 2017	\$	1,411,819	\$	0	\$ 1,411,819
4.	Sensitivity of the Net OPEB Liability to Changes in t	he Disc	ount Rate			
	l. 1% Decrease					\$ 1,702,595
	m. 1% Increase					\$ 1,189,302
5.	Sensitivity of the Net OPEB Liability to Changes in t	he Hea	lthcare Cost Trend	l Ra	te	
	n. 1% Decrease					\$ 1,126,828
	o. 1% Increase					\$ 1,826,992

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

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75) City of New York (Excluding Component Units) Summary of June 30, 2016 OPEB Data

By System Not Including Component Units¹

	NYCERS	TRS	BERS	POLICE	FIRE	NYCRS TOTAL
1. Actives						
a. Number	98,754	114,461	25,229	35,961	10,951	285,356
b. Salary	\$6,888,668,670	\$9,012,128,199	\$1,085,036,571	\$3,752,581,891	\$1,180,226,281	\$21,918,641,612
c. Average Age	46.80	43.78	51.20	37.48	40.68	44.57
d. Average Service	12.29	11.44	9.93	11.39	14.00	11.69
e. Average Salary	\$69,756	\$78,735	\$43,008	\$104,351	\$107,773	\$76,812
e. menuge suury	\$03,120	\$10,100	\$15,000	\$101,001	<i>Q101,115</i>	070,012
2. Inactives						
a. Number	9,755	7,102	2,584	1,659	21	21,121
b. Average Age	42.56	40.84	44.29	36.92	36.62	41.74
c. Average Service	6.89	7.91	4.22	2.87	8.19	6.59
3. Deferreds (Includes Deferred Retir	ees, if any)					
a. Number	4,889	9,324	498	524	58	15,293
b. Average Age	54.62	51.44	54.49	42.42	42.16	52.21
5. Hvenage rige	54.02	51.44	54.49	42.42	42.10	52.21
4. Retirees						
a. Total ³						
i. Number	70,566	77,167	15,864	48,331	16,177	228,105
ii. Average Age	70.12	72.90	74.34	61.53	66.81	69.30
b. By Benefit*	Participant / Spouse	Participant / Spouse	Participant / Spouse	Participant / Spouse	Participant / Spouse	Participant / Spouse
i. Pre-Medicare**	20,229 / 12,536	11,954 / 5,458	2,175 / 908	29,027 / 20,557	7,005 / 6,383	70,390 / 45,842
ii. Medicare Eligible**	· · · ·		13,689 / 4,298	, , ,	· · ·	
	50,337 / 16,265	65,213 / 19,102		19,304 / 10,991	9,172 / 5,187	157,715 / 55,843
iii. Welfare Fund**	69,434 / NA	75,153 / NA	15,205 / NA	47,514 / NA	15,378 / NA	222,684 / NA
iv. Medicare Part B [#]	93,012 / 35,150	78,967 / 25,354	15,899 / 5,212	48,331 / 31,548	16,177 / 11,570	252,386 / 108,834
	TIAA	LODW				GRAND TOTAL
1. Actives						
a. Number	2,343	0				287,699
b. Salary	\$195,592,485	0				\$22,114,234,097
c. Average Age	51.08	NA				44.62
d. Average Service	14.91	NA				11.72
e. Average Salary	\$83,480	NA				\$76,866
2. Inactives						
a. Number	111	0				21,232
b. Average Age	56.14	NA				41.82
c. Average Service	18.67	NA				6.65
Ũ		INA				0.05
3. Deferreds (Includes Deferred Retir						
a. Number	79 ²	0				15,372
b. Average Age	54.57	NA				52.23
4. Retirees						
a. Total						
i. Number	819	801				229,725
ii. Average Age	76.15	80.20				69.36
b. By Benefit*	Participant / Spouse	Participant / Spouse				Participant / Spouse
i. Pre-Medicare**	28 / 54	49 / 0				70,467 / 45,896
ii. Medicare Eligible**	791 / 302	4970 752/10				159,258 / 56,155
ii. Welfare Fund**	791 / 302 819 / NA	/52/10 NA/NA				
						223,503 / NA
iv. Medicare Part B [#]	2,795 / 1,247	801 / 10				255,982 / 110,091

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

² Estimate due to lack of data.
 ³ Detimate due to lack of data.

³ Retirees eligible for receipt of Health Insurance, excluding Component Units.

* Includes Component Unit participants with City-provided benefits.

** Retirees currently eligible for benefit.

[#] Retirees eligible for benefit now or in the future.

Governmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/75) City of New York (Excluding Component Units) June 30, 2015 Results of the Actuarial Valuation Based on a 2.75% Discount Rate

1. Total Present Value of Projected Benefits ¹	Pre-Medicare	Medicare	Welfare Funds	Part B Premium	Cadillac Tax	T ()
	Pre-Medicare	Medicare	weifare Funds	Part B Premium	Cadillac Tax	Total
a. Active ¹	\$44,376,222,173	\$33,719,557,037	\$16,843,157,070	\$23,958,450,642	\$2,413,309,004	\$121,310,695,926
b. Deferred ²	2,253,333,318	1,569,879,468	955,075,412	1,106,388,504	25,913,483	5,910,590,185
c. Retired	14,223,829,189	13,784,372,017	8,310,253,220	9,261,832,923	27,706,011	45,607,993,360
d. TOTAL	\$60,853,384,680	\$49,073,808,522	\$26,108,485,702	\$34,326,672,069	\$2,466,928,498	\$172,829,279,471
2. Entry Age Actuarial Accrued Liability						
a. Active ²	\$14,393,909,230	\$11,960,299,498	\$6,166,896,939	\$8,631,980,767	\$458,267,469	\$41,611,353,903
b. Deferred ³	2,253,333,318	1,569,879,468	955,075,412	1,106,388,504	25,913,483	5,910,590,185
c. Retired	14,223,829,189	13,784,372,017	8,310,253,220	9,261,832,923	27,706,011	45,607,993,360
d. TOTAL	\$30,871,071,737	\$27,314,550,983	\$15,432,225,571	\$19,000,202,194	\$511,886,963	\$93,129,937,448
3. Actuarial Value of Assets						\$3,396,523,538
4. Unfunded Actuarial Accrued Liability (UAAL)						\$89,733,413,910
5. Entry Age Normal Cost						\$5,112,510,498
6. Salary of Active Participants						\$24,204,772,333
7. Normal Cost Percentage [5. / 6.]						21.122%

¹ City results also include Medicare Part B coverage for 47,402 actives, 5,210 inactives, 26,790 retirees and 2,196 deferred participants in HHC, SCA, WFA and CUNY Senior Colleges and Health Insurance coverage for 609 actives, 46 inactives, 1,147 retirees and 23 deferred participants in NYCHA (Housing Police retirees only) and SCA and Welfare

Fund coverage for 4,055 actives, 570 inactives, 2,959 retirees and 80 deferred participants in NYCHA (Housing Police retirees only) and CUNY Senior Colleges (non-pedagogical).

² Includes Total Present Value of Projected Benefits for Inactives, if any.

³ Includes Deferred Retirees, if any.

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

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

¹ City results also include Medicare Part B coverage for 47,752 actives, 5,443 inactives, 27,382 retirees and 2,083 deferred participants in HHC, SCA, WFA and CUNY Senior Colleges and Health Insurance coverage for 650 actives, 39 inactives, 1,125 retirees and 23 deferred participants in NYCHA (Housing Police retirees only) and SCA and Welfare

Fund coverage for 4,104 actives, 721 inactives, 2,903 retirees and 81 deferred participants in NYCHA (Housing Police retirees only) and CUNY Senior Colleges (non-pedagogical).

² Includes Total Present Value of Projected Benefits for Inactives, if any.

³ Includes Deferred Retirees, if any.

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

City of New York (Excluding Component Units)

Market Values of Assets

	Total
1. Plan Net Position @ 6/30/2015	\$ 3,396,523,538
2. Changes for the year:	
a. ER Contributions	2,897,128,941
b. EE Contributions	2,097,120,911
c. Net Investment Income	20,565,435
d. Benefit Payments	(2,277,515,643)
-	
e. Administrative Expenses f. Other	(40,000)
	\$ (331,067)
g. Net Changes	\$ 639,807,666
3. Plan Net Position @ 6/30/2016	\$ 4,036,331,204
4. Changes for the year:	
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
5. Plan Net Position @ 6/30/2017	\$ 4,653,903,266

vernmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/7

City of New York (Excluding Component Units)

Development of Asset (Gain) / Loss June 30, 2016

	Total
1. Market Value 6/30/2015	\$ 3,396,523,538
2. Market Value 6/30/2016	4,036,331,204
3. Net Investment Income	20,565,435
4. Cash Flow (2 1 3.)	619,242,231
5. Projected Earnings ¹ (4% * 1. + 1.980% * 4.)	148,121,938
6. (Gain) / Loss (5 3.)	127,556,503
7. Recognition Period	5 Years
8. Amount Recognized in OPEB Expense (6. / 7.)	25,511,301
9. Deferred (Inflow) / Outflow of Resources (6 8.)	\$ 102,045,202

¹ Assumes middle of year payments

overnmental Accounting Standards Board Statements No. 74 and No. 75 (GASB 74/7

City of New York (Excluding Component Units)

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

	Total
1. Market Value 6/30/2016	\$ 4,036,331,204
2. Market Value 6/30/2017	4,653,903,266
3. Net Investment Income	21,515,588
4. Cash Flow (2 1 3.)	596,056,475
5. Projected Earnings ¹ (4% * 1. + 1.980% * 4.)	173,255,166
6. (Gain) / Loss (5 3.)	151,739,578
7. Recognition Period	5 Years
8. Amount Recognized in OPEB Expense (6. / 7.)	30,347,916
9. Deferred (Inflow) / Outflow of Resources (6 8.)	\$ 121,391,662

¹ Assumes middle of year payments

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, 2016

	Total
1. Entry Age Accrued Liability (EAAL) at 6/30/2015	\$ 93,129,937,448
 2. Entry Age Normal Cost at 6/30/2015 3. Estimated Benefit Payments-FY16 	5,112,510,498 2,397,662,457
4. Interest ¹	2,668,923,050
5. Roll-Forward EAAL at 6/30/2016	\$ 98,513,708,539

¹Assumes a 2.75% interest rate

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

	Total
1. Entry Age Accrued Liability (EAAL) at 6/30/2016	\$ 88,171,918,990
 2. Entry Age Normal Cost at 6/30/2016 3. Estimated Benefit Payments-FY17 	4,521,008,728 2,538,355,868
4. Interest ¹	2,898,446,758
5. Roll-Forward EAAL at 6/30/2017	\$ 93,053,018,608

¹Assumes a 3.17% interest rate

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

		Average Expected
		Remaining Service Life
Group	<u># Count</u>	@ 6/30/2016
Active	335,346	12.16
Active/Inactive ¹	26,715	14.07
Term Vested	17,692	0
Retired	257,625	<u>0</u>
Total	637,378	6.81

¹Only 40% of inactives are assumed to return to active status

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

Year	be	Differences tween Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2016	2017	2018	2019	2020	2021
2016	\$	127,556,503	5	25,511,301	25,511,301	25,511,301	25,511,301	25,511,299	0
2017	\$	151,739,578	5	0	30,347,916	30,347,916	30,347,916	30,347,916	30,347,914
2018									
2019									
2020									
2021									
Net increase	(dec	rease) in OPEB Exp	pense	\$ 25,511,301 \$	55,859,217	\$ 55,859,217	\$ 55,859,217	\$ 55,859,215	\$ 30,347,914

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

Year	be	Differences etween Expected and Actual Experience	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	2022	2023
2016 1	\$	(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)	
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
2018		, ,					, ,	, ,	, ,	, ,	, ,
2019											
2020											
2021											
Net increase ((dec	crease) in OPEB Exp	pense	\$ (17,642,704)	\$ 58,606,329	\$ 58,606,329	\$ 58,606,329	\$ 58,606,329	\$ 58,606,329	\$ 61,958,443	\$ 61,761,716

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

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

Year	Differences Due to Changes in Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023
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)	
2018	¢ (10,57 1,00 1,007)	0.01	(1,011,010,770)	(1,011,010,70)	(1,011,010,070)	(1,011,010,070)	(1,011,010,070)	(1,011,010,070)	(1,000,000,000,000)
2019									
2020									
2021									
_0_1									
Net increa	ase (decrease) in OPEI	3 Expense	\$(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)

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, 2016

Component		<u>Amount</u>
a. Service Cost	\$	5,112,510,498
b. Interest on the Total OPEB Liability	Ψ	2,668,923,050
c. Changes of Assumptions		0
d. Differences between Expected and Actual Experience		(17,642,704)
e. Employee Contributions		0
f. Projected Earnings on OPEB Plan Investments		(148,121,938)
g. Differences between Projected and Actual Earnings on Plan Investments		25,511,301
h. OPEB Plan Administrative Expenses		40,000
i. Other Changes in Fiduciary Net Position		331,067
Total OPEB Expense	\$	7,641,551,274

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

Component Amount a. Service Cost \$ 4,521,008,728 b. Interest on the Total OPEB Liability 2,898,446,758 c. Changes of Assumptions (1,611,546,970) d. Differences between Expected and Actual Experience 58,606,329 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 \$ **Total OPEB Expense** 5,749,238,512

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.

At 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	\$	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	
June 30	Amount
2016	\$ 7,868,597
2017	7,868,597
2018	7,868,597
2019	7,868,597
2020	7,868,595
Thereafter	(31,933,294)

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:

	(Deferred Outflows of Resources	Deferred Inflows of Resources		
Differences between Expected and Actual Experience	\$	443,006,881	\$	0	
Changes of Assumptions		0	9	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	
June 30	Amount
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)

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.

At 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	\$	443,006,881	\$	84,861,406		
Changes of Assumptions		0		9,363,087,897		
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		197,925,563		0		
Total	\$	640,932,444	\$	9,447,949,303		

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

Fiscal Year	
Ended	
June 30	Amount
2017	\$ (1,497,081,424)
2018	(1,497,081,424)
2019	(1,497,081,424)
2020	(1,497,081,426)
2021	(1,522,592,727)
Thereafter	(2,793,179,858)

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, 2016

		Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
1a.	. Balances at June 30, 2015	\$ 93,129,937,448 \$	3,396,523,538 \$	89,733,413,910
2.	Changes for the Year:			
	a. Service Cost	5,112,510,498	0	5,112,510,498
	b. Interest	2,668,923,050	0	2,668,923,050
	c. Differences b/t Expected and Actual Experience	(120,146,814)	0	(120,146,814)
	d. Contributions - Employer	0	2,897,128,941	(2,897,128,941)
	e. Contributions - Employee	0	0	0
	f. Net Investment Income	0	20,565,435	(20,565,435)
	g. Actual Benefit Payments	(2,277,515,643)	(2,277,515,643)	0
	h. Administrative Expenses	0	(40,000)	40,000
	i. Other Changes	0	(331,067)	331,067
	j. Net Changes	\$ 5,383,771,091 \$	639,807,666 \$	4,743,963,425
3.	Balances at June 30, 2016	\$ 98,513,708,539 \$	4,036,331,204 \$	94,477,377,335

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)
1a.	Balances at June 30, 2016	\$	98,513,708,539	\$	4,036,331,204	\$ 94,477,377,335
2.	Changes for the Year:					
	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 Experience		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
	k. Net Changes	\$	(5,460,689,931)	\$	617,572,062	\$ (6,078,261,993)
3.	Balances at June 30, 2017	\$	93,053,018,608	\$	4,653,903,266	\$ 88,399,115,342
4.	Sensitivity of the Net OPEB Liability to Changes in t	the Di	scount Rate			
	1. 1% Decrease					\$ 105,382,211,687
	m. 1% Increase					\$ 75,132,422,342
5.	Sensitivity of the Net OPEB Liability to Changes in t	the He	ealthcare Cost Trend	l Ra	ite	
	n. 1% Decrease					\$ 72,209,887,931
	o. 1% Increase					\$ 111,472,821,262

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>2017</u>		<u>2016</u>	
1. Total OPEB Liability					
a. Service Cost	\$	4,521,008,728	\$	5,112,510,498	
b. Interest		2,898,446,758		2,668,923,050	
c. Changes of Benefit Terms		0		0	
d. Differences b/t Expected and Actual Experience		519,255,914		(120,146,814)	
e. Changes of Assumptions		(10,974,634,867)		0	
f. Benefit Payments		(2,424,766,464)		(2,277,515,643)	
g. Net Changes in Total OPEB Liability	\$	(5,460,689,931)	\$	5,383,771,091	
2. Total OPEB Liability - Beginning	\$	98,513,708,539	\$	93,129,937,448	
3. Total OPEB Liability - Ending	\$	93,053,018,608	\$	98,513,708,539	
4. Plan Fiduciary Net Position					
a. Contributions - Employer	\$	3,020,942,554	\$	2,897,128,941	
b. Contributions - Employee		0		0	
c. Net Investment Income		21,515,588		20,565,435	
d. Benefit Payments	(2,424,766,464) ((2,277,515,643)	
e. Administrative Expenses	(41,100) (40,000			(40,000)	
f. Other Changes	(78,516)			(331,067)	
g. Net Changes in Plan Fiduciary Net Position	\$	617,572,062	\$	639,807,666	
5. Plan Fiduciary Net Position - Beginning	\$	4,036,331,204	\$	3,396,523,538	
6. Plan Fiduciary Net Position - Ending	\$	4,653,903,266	\$	4,036,331,204	
7. Net OPEB Liability	\$	88,399,115,342	\$	94,477,377,335	
8. Plan Fiduciary Net Position as a Percentage					
of Total OPEB Liability		5.0%		4.1%	
9. Covered Employee Payroll		\$25,112,110,958		\$24,204,772,333	
10. Net OPEB Liability as a Percentage					
of Covered Employee Payroll		352.0%		390.3%	

Appendix D: Details to Actuarial Assumptions and Methods

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.

Welfare Fund 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/or 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,⁵ the valuation should reflect age adjusted costs for pooled plans except in very limited cases. Factors to be considered include:

- 1. The purpose of the measurement (for example, for a projection of short-term cash flow needs the use of the premium may be appropriate);
- 2. Whether for the type of benefit plan being valued (for example, certain dental plans), the impact of using age-specific costs would not be material;
- 3. The extent to which there are no age-related implicit subsidies between actives and retirees that occur within the pooled health plan; and

⁵ Actuarial Standard of Practice, Number 6, *Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Cost or Actuarially Determined Contributions.*

4. Whether the pooled health plan and its premium structure are sustainable over the measurement period, even if other groups or active participants 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.

Stabilization Fund: The amount reflected for the Stabilization Fund in the current OPEB valuation is based on an actual allocation between active and retired participants of actual Fiscal Year 2017 Stabilization Fund benefits provided by OLR. The allocation reflects the fact that retirees are on average older and have more costly medical benefits than actives, and separates out Welfare Fund contribution reimbursements from other Stabilization Fund benefits. The allocation amount is used to develop a load that is only reflected in the OPEB valuation for the City.

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

Other OPEBThe valuation reflects an estimate for the cost of the implicit subsidyCoverageprovided to terminated employees who elect COBRA.

The valuation includes an estimate of the value of benefits provided to existing survivors of POLICE and FIRE retirees and retired uniformed members of the Departments of Correction and Sanitation who died other than in the Line of Duty, who qualified for lifetime continuation coverage prior to the valuation date.

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 are either fully paid by the employees or retirees who enroll in that benefit, or are 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.⁶ Thus, this valuation does not include any implicit subsidy on these separately rated riders in this valuation.

⁶ 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 43 and 45 on Other Postemployment Benefits, published by GASB. In particular, question 4.118 says "Only if the amounts contributed by active employees exceed the expected claim costs, or the age-adjusted premiums

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 general account.^{7.} The City and the Component Units (except CUNY for certain retirees and ECF) generally provide most death and disability benefits through the NYCRS. Those benefits are measured as part of the obligations of the NYCRS 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 2017 was less than \$1 million.

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.

approximating claim costs, on an ongoing basis can it be concluded that the active employees are subsidizing the inactive-plan member healthcare benefit. ..."

⁷ Such benefits may be funded through the mechanisms of the Welfare Benefit Funds.

Appendix E: Summary of Key Accounting Terms

Actuarially determined contribution

A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

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).

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.

Money-weighted rate of return

A method of calculating period-by-period returns on OPEB plan investments that adjusts for the changing amounts actually invested. For purposes of GASB74/75, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.

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.

Real rate of return

The rate of return on an investment after adjustment to eliminate inflation.

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.