



**Fiscal Year 2020**  
**GASB 67/68 Report**  
For  
**The City of New York**  
And  
**The New York City**  
**Retirement Systems**

prepared by the  
New York City  
Office of the Actuary

2020



## OFFICE OF THE ACTUARY

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**SHERRY S. CHAN**  
CHIEF ACTUARY

September 25, 2020

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

Re: GASB67/68 Report for Fiscal Year Ended June 30, 2020

Dear Comptroller Stringer:

This GASB67/68 Report is for the City of New York and the New York City Retirement Systems<sup>1</sup> (NYCRS) for Fiscal Year Ended June 30, 2020 (Report).

### **Executive Summary**

1. This Report presents information intended for use by the City of New York for accounting and financial reporting under Governmental Accounting Standards Board (GASB) Statement No. 68, as amended by GASB Statement No. 71 (GASB71), GASB Statement No. 73 (GASB73), GASB Statement No. 78 (GASB78), GASB Statement No. 82 (GASB 82), and GASB Statement No. 85 (GASB85) for Fiscal Year 2020.
2. This Report also presents information intended for use by each NYCRS for accounting and financial reporting under GASB Statement No. 67, as amended by GASB73, GASB82, and GASB85 for Fiscal Year 2020.

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

3. The following Table provides a summary of the principal GASB67/68 results for Fiscal Year 2020 by NYCERS and in total. Detailed results including results for participating employers (Obligors), if applicable, are provided in Appendices A-E.

SUMMARY OF PRINCIPAL GASB67/68 RESULTS FOR FISCAL YEAR 2020						
QUALIFIED PENSION PLAN ONLY UNLESS OTHERWISE STATED						
(\$ Millions)						
	NYCERS*	TRS	BERS	POLICE*	FIRE*	TOTAL
Total Pension Liability (TPL)	\$ 91,380.6	\$ 75,116.0	\$ 5,460.1	\$ 57,268.4	\$ 24,082.0	\$ 253,307.1
Plan Fiduciary Net Position (PFNP)	\$ 70,301.4	\$ 59,319.0	\$ 5,182.9	\$ 46,462.9	\$ 15,929.1	\$ 197,195.3
Net Pension Liability (NPL)	\$ 21,079.2	\$ 15,797.0	\$ 277.2	\$ 10,805.5	\$ 8,152.9	\$ 56,111.8
PFNP as a % of TPL	76.9%	79.0%	94.9%	81.1%	66.1%	77.8%
Pension Expense	\$ 3,074.9	\$ 2,434.0	\$ 83.5	\$ 1,644.3	\$ 1,249.0	\$ 8,485.7

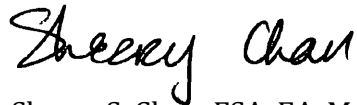
\*Includes Variable Supplements Funds (VSFs)

4. The portion of the New York City Off-Track Betting Corporation (OTB) that New York City has accepted the responsibility to fund is shown herein as an Obligor. It is unclear at this time whether this or any portion of OTB's pension costs, liabilities, and allocated assets are to be reported by the City.
5. Some of the Obligors operate on a fiscal year that is different from the City's fiscal year. Those Obligors should consult with their auditors to determine how to apply the results shown in this Report in their individual financial statements.
6. The results contained herein are based upon the Office of the Actuary's (OA) interpretation of GASB67, GASB68, GASB71, GASB73, GASB78, GASB82, and GASB85 in consultation with the New York City Office of the Comptroller (the Comptroller) and Grant Thornton, LLP, the City's auditors. The results are based upon an actuarial valuation date of June 30, 2019, a Measurement Date of June 30, 2020, and a Reporting Date of June 30, 2020 for Fiscal Year 2020. An actuarial valuation date of June 30, 2018 and a Measurement Date and a Reporting Date of June 30, 2019 were used for Fiscal Year 2019 items.
7. There are no changes in the actuarial assumptions and methods and no changes to any of the plan provisions since the prior year.
8. The results contained herein are for accounting and financial reporting purposes only. Therefore, these results are not to be relied upon for other purposes, including but not limited to, funding of the NYCERS, investment decisions, and plan design.
9. All costs, liabilities, and actuarial present values have been determined in accordance with generally accepted actuarial principles and procedures.

The Table of Contents, which immediately follows, outlines in more detail the contents of this report.

I, Sherry S. Chan, am the Chief Actuary for, and independent of, the New York City Retirement Systems and Pension Funds. I am a Fellow of the Society of Actuaries, an Enrolled Actuary under the Employee Retirement Income and Security Act of 1974, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, the results contained herein have been prepared in accordance with generally accepted actuarial principles and procedures and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Best Regards,

A handwritten signature in black ink that reads "Sherry Chan". The signature is written in a cursive, flowing style.

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

SSC/eh

**cc: New York City Office of the Actuary**

Mr. Craig Chu  
Mr. Michael Samet  
Keith Snow, Esq.

**Component Units**

Mr. Robert Balducci – Water Finance Authority  
Ms. Nicole Fleming – New York City Health and Hospitals Corporation  
Ms. Mary John – Housing Development Corporation  
Mr. Jeffrey Lesnoy – New York City Housing Authority  
Ms. Adriana Lau – City University of New York  
Mr. James Linhart – New York City Health and Hospitals Corporation  
Mr. Raymond Orlando – New York City Department of Education  
Mr. Aaron Stern – New York City Transit Authority  
Ms. Tamara Morgan – New York City Triborough Bridge and Tunnel Authority  
Ms. Yi-Wen Wang – School Construction Authority  
Mr. Jay Weinman – New York City Health and Hospitals Corporation

**New York City Office of the Comptroller**

Ms. Rosa Charles  
Mr. David Jeter  
Ms. Berta Lara  
Ms. Jaqueline Thompson  
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**Grant Thornton**

Ms. Marla Hummel  
Mr. Chris Mancusi

**New York City Office of Management and Budget**

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

## **New York City Retirement Systems**

Mr. Charles Barkley – New York City Employees' Retirement System  
Ms. Sunny Bavakutty – New York City Police Pension Fund  
Mr. Albert Connolly – New York City Fire Pension Fund  
Ms. Maureen Dale – New York City Fire Pension Fund  
Mr. Patrick Dunn – New York City Fire Pension Fund  
Ms. Chun Gong – New York City Employees' Retirement System  
Mr. Kevin Holloran – New York City Police Pension Fund  
Mr. Paul Raucci – New York City Teachers' Retirement System  
Ms. Patricia Reilly – New York City Teachers' Retirement System  
Mr. Sanford Rich – New York City Board of Education Retirement System  
Ms. Chithra Subramaniam – New York City Board of Education Retirement System  
Mr. Stanley Thomas – New York City Police Pension Fund  
Ms. Melanie Whinnery – New York City Employees' Retirement System

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## SECTION I: CENSUS DATA

The census data used in the development of the GASB67/68 results contained herein is the census data used in the June 30, 2019 (Lag) actuarial valuations of the New York City Retirement Systems<sup>1</sup> (NYCRS) to determine the Preliminary Fiscal Year 2021 employer pension contributions.

The Office of the Actuary (OA) performed tests on this data and, on the basis of these tests, the Chief Actuary of the New York City Retirement Systems (the Actuary) believes the data is sufficiently complete and appropriate for developing the GASB67/68 results contained in this Report. The following Table I-1 presents a summary of the census data used in the June 30, 2019 (Lag) actuarial valuations to determine the Preliminary Fiscal Year 2021 employer pension contributions. Further detail can be found in the Comprehensive Annual Financial Report (CAFR) for each NYCRS.

<b>Table I-1</b>						
<b>SUMMARY OF CENSUS DATA USED IN THE JUNE 30, 2019 (LAG) ACTUARIAL VALUATIONS</b>						
<b>GROUP</b>	<b>NYCERS</b>	<b>TRS</b>	<b>BERS</b>	<b>POLICE</b>	<b>FIRE</b>	<b>TOTAL</b>
Active	191,501	123,336	25,825	36,401	11,244	388,307
Active Off Payroll	31,273	8,174	11,422	1,640	28	52,537
Deferred Vested	21,788	13,410	2,019	497	67	37,781
Retired	157,153	88,507	18,502	50,727	16,628	331,517
Total	401,715	233,427	57,768	89,265	27,967	810,142

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<sup>1</sup> New York City Employees' Retirement System (NYCERS)  
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 New York City Police Pension Fund (POLICE)  
 New York City Fire Pension Fund (FIRE)



The following Table I-2 presents the salaries of the active members shown in Table I-1 at June 30, 2019.

<b>Table I-2</b>	
<b>SALARIES OF ACTIVE MEMBERS</b>	
<b>System</b>	<b>June 30, 2019</b>
NYCERS	14,981,461,175
TRS	10,903,755,059
BERS	1,353,266,355
POLICE	4,244,806,289
FIRE	1,336,843,002
Total	32,820,131,880

The census data used in the June 30, 2019 (Lag) actuarial valuations contains either the negotiated retroactive wage increases or an estimate of any anticipated settlements (pattern bargaining).

## SECTION II: ASSETS

Asset values for each NYCRS, for the Variable Supplements Funds (VSFs), and for the Tax-Deferred Annuity (TDA) Programs are prepared by the Chief Accountants of each NYCRS on the basis of information provided by the investment managers of the respective NYCRS and by the Office of the Comptroller of the City of New York (the Comptroller).

The Board of Trustees of each NYCRS establishes an overall Investment Policy and has ultimate authority for the assets of the respective NYCRS.

By statute, the Comptroller is the custodian for each NYCRS' investments and also serves as an Investment Advisor to each NYCRS' Board of Trustees.

For purposes of developing the results contained in this Report, asset information was provided to the OA by the Office of the Comptroller and each NYCRS. For all NYCRS, the Plan Fiduciary Net Positions at June 30, 2020, as well as income items and cash flow items, have been given clearance by Grant Thornton. However, certain categories of assets may be subject to revision.

The Chief Actuary for the NYCRS (the Actuary) provides to the Boards of Trustees of NYCERS, POLICE, and FIRE information related to the transfer of SKIM from each NYCRS' Qualified Pension Plan (QPP) to its respective Variable Supplements Fund(s) (VSF). A memorandum dated August 28, 2020 to Ms. Jacqueline Thompson summarizes these estimates of Fiscal Year 2020 SKIM.

These transfers reduce the Market Value of Assets (MVA) of each NYCRS' QPP and increase the MVA of the VSFs as of June 30, 2020.

The SKIM amounts were estimated by the Actuary based on information provided by the Office of the Comptroller as of June 30, 2020 and on calculations performed by the Actuary for Fiscal Year 2020.

## SECTION III: ACTUARIAL ASSUMPTIONS AND METHODS

As described in item 7 of the Executive Summary, the actuarial assumptions and methods used to value the NYCRS are unchanged from those used in the prior year and are provided in the following five reports:

- Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Years Beginning on and after July 1, 2018 for the New York City Employees' Retirement System.
- Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Years Beginning on and after July 1, 2018 for the New York City Teachers' Retirement System.
- Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Years Beginning on and after July 1, 2018 for the New York City Board of Education Retirement System.
- Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Year Beginning on and after July 1, 2018 for the New York City Police Pension Fund.
- Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Years Beginning on and after July 1, 2018 for the New York City Fire Pension Fund.

These reports are available on the OA website ([www.nyc.gov/actuary](http://www.nyc.gov/actuary)) under the Reports tab.

### **Actuarial Asset Valuation Method**

The Plan Fiduciary Net Positions are based on the Market Values of Assets at the Measurement Dates with certain adjustments made to reflect the Actuary's understanding of the accruals within and the transfers between the QPP and the VSFs for NYCERS, POLICE, and FIRE.

### **Actuarial Cost Method**

The Entry Age Normal cost method, as set forth in Paragraph 46 of GASB67 and Paragraph 32 of GASB68, is used to determine the results contained in this Report.

### **Discount Rate**

The discount rate used to measure the Total Pension Liability (TPL) was 7.0% per annum. The projection of cash flows used to determine the discount rate assumed that each participating employer (Obligor) would contribute the actuarially-determined contribution each year. On this basis, the Plan Fiduciary Net Position (PFNP) of each NYCRS was projected to be sufficient to pay all benefits when due.

For all of the VSFs, liabilities are also discounted at 7.0% per annum, consistent with the assumptions and methodology used to determine employer contributions.

Additionally, in TRS and in BERS, Variable Fund liabilities have been developed consistent with Variable Fund investment earnings for Fiscal Years 2019 and 2020.

### **Long-Term Expected Rate of Return**

The Long-Term Expected Rate of Return (LTEROR) on the investments of the NYCERS was determined using a Building-Block method.

The Building-Block methodology develops total investment return by combining expected future inflation with an expected future Real Rate of Return (RROR) on plan assets.

For purposes of GASB67/68, the target asset allocation and estimates of arithmetic RROR for each major asset class were provided by the Comptroller and are summarized in the Appendix for each respective NYCERS.

### **Liability Loads**

In developing the results of the June 30, 2019 (Lag) actuarial valuations of the NYCERS, the Actuary included adjustments for liabilities and benefit payments related to the benefits provided by the World Trade Center laws and for certain other benefits payable to members of each NYCERS, if any.

The following Table III provides a brief description of the significant assumptions used in the June 30, 2019 (Lag) actuarial valuation to determine the Preliminary Fiscal Year 2021 employer contributions:

<b>Table III</b>	
<b>ACTUARIAL ASSUMPTIONS USED FOR DETERMINING PRELIMINARY FISCAL YEAR 2021 EMPLOYER CONTRIBUTIONS</b>	
<b>ITEM</b>	<b>PRELIMINARY FISCAL YEAR 2021 EMPLOYER CONTRIBUTIONS</b>
Valuation Date	June 30, 2019 (Lag).
Assumed Rate of Return on Investments	7.0% per annum, net of Investment Expenses (4.0% per annum for benefits payable under the Variable Annuity Programs of TRS and BERS).
Post-Retirement Mortality	Tables adopted by the Boards of Trustees during Fiscal Year 2019.
Active Service: Withdrawal, Death, Disability, and Retirement	Tables adopted by the Boards of Trustees during Fiscal Year 2019.
World Trade Center Benefits	Estimates of Certain Obligations.
Salary Increases	Tables adopted by the Boards of Trustees during Fiscal Year 2019. In general, Merit and Promotion Increases plus assumed General Wage Increase of 3.0% per year.
Inflation	Consumer Price Index (CPI) of 2.5% per year.
Assumed Cost-of-Living Adjustments	1.5% per year for Tier I, Tier II, Tier IV, and certain Tier III and Tier VI retirees. 2.5% per year for certain Tier III and Tier VI retirees.
Liability Loads	Estimates of Certain Obligations.

## **SECTION IV: SUMMARY OF PLAN PROVISIONS**

A summary of the benefits is contained in the June 30, 2018 and the June 30, 2019 Comprehensive Annual Financial Reports of each NYCRS.

## SECTION V: ROLL-FORWARD METHODOLOGY

In accordance with Paragraph 22 of GASB68, the Total Pension Liability (TPL) should be determined by:

- (a) an actuarial valuation as of the Measurement Date (i.e. June 30, 2020), or
- (b) the use of update procedures to roll forward to the Measurement Date amounts from an actuarial valuation as of a date no more than 30 months and 1 day earlier than the employer's fiscal year-end.

Actuarial valuations of the NYCERS are performed annually using a June 30, XX-2 actuarial valuation date to determine Fiscal Year XX employer contributions (e.g. June 30, 2019 (Lag) actuarial valuations are used to determine Fiscal Year 2021 employer contributions). This is referred to as One-Year Lag Methodology (OYLM).

Due to the time needed to prepare June 30, 2020 actuarial valuations, primarily related to the collection of census data, the Actuary has developed the TPL at June 30, 2020 by rolling-forward certain results of the June 30, 2019 actuarial valuations of the NYCERS that were used to determine the Preliminary Fiscal Year 2021 employer contributions.

Entry Age Normal accrued liabilities and normal costs are beginning-of-year amounts in this Report. Actual Benefit Payments are assumed to be made mid-year. Except for the Variable Funds of TRS and BERS, all roll-forward amounts assume compound interest at 7.0% per annum.

For TRS and BERS, all Fixed Fund liabilities were determined consistent with the methodology used for the other NYCERS. For TRS and BERS, Variable Fund liabilities were rolled forward using actual Variable Fund asset earnings.

The development of the TPL under the methodology described herein is shown for each NYCERS in the Appendices.

## SECTION VI: ALLOCATION METHODOLOGY

Three of the NYCRS (i.e. NYCERS, TRS, and BERS) are cost-sharing, multiple-employer public employee retirement systems. For these NYCRS, all GASB67/68 results were first determined in total as of the Measurement Date.

For each Obligor, a proportionate share of the Net Pension Liability, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources (the Collective Pension Amounts) were determined in accordance with GASB68 Paragraphs 48-55 and in accordance with a February 2014 whitepaper published by the State and Local Government Expert Panel (SLGEP) of the American Institute of Certified Public Accountants (AICPA).

The Collective Pension Amounts were allocated consistent with the total employer contribution of each NYCRS. Each respective NYCRS' Appendix contains the development of the allocation percentage for each Obligor. This percentage is based on Fiscal Year 20XX employer contributions which, under OYLM, is based on a June 30, 20XX-2 actuarial valuation date (see Paragraph 50 of GASB68).

The components of Pension Expense were allocated ratably for each Obligor. Although these component allocations produce results for some Obligors that appear illogical (e.g. a Service Cost for OTB and for the VSFs of HP and TP despite there being no active members), it is the understanding of the Actuary that this methodology is permitted for purposes of determining GASB68 results and that the components (as opposed to the total) are relatively unimportant for developing the key financial reporting results.



## SECTION VII: SUBSEQUENT EVENTS

None.

## SECTION VIII: SENSITIVITY ANALYSIS

The following Table VIII presents the Net Pension Liability of each NYCERS, calculated as of the Measurement Date of June 30, 2020, using the Discount Rate of 7.0% per annum (the Current Rate). The Table also shows what each NYCERS' Net Pension Liability would be if it were calculated using a Discount Rate that is 1-percentage-point lower (i.e. 6.0% per annum) or 1-percentage-point higher (i.e. 8.0% per annum) than the Current Rate.

<b>Table VIII</b>			
<b>SENSITIVITY ANALYSIS</b>			
<b>NET PENSION LIABILITY AS OF JUNE 30, 2020</b>			
<b>System</b>	<b>1% Decrease (6.0%)</b>	<b>Current Discount Rate (7.0%)</b>	<b>1% Increase (8.0%)</b>
NYCERS	\$ 31,512,965,858	\$ 21,079,190,886	\$ 12,273,109,045
TRS	\$ 24,391,175,064	\$ 15,797,046,676	\$ 8,601,991,520
BERS	\$ 942,100,213	\$ 277,250,692	\$ (281,429,817)
POLICE	\$ 17,294,228,921	\$ 10,805,573,223	\$ 5,402,936,501
FIRE	\$ 10,807,444,130	\$ 8,152,888,372	\$ 5,922,035,279
Total	\$ 84,947,914,186	\$ 56,111,949,849	\$ 31,918,642,528

# Appendix A

## APPENDIX A

### NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

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## NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

## Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

## Statement of Fiduciary Net Position

June 30, 2020 and June 30, 2019

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 80,415	\$ 64,699
Receivables:		
Investment securities sold	1,725,083	1,177,445
Member loans	1,120,769	1,150,018
Accrued interest and dividends	359,762	338,691
Other receivables	0	0
Receivables due from NYCERS	<u>0</u>	<u>0</u>
Total receivables	\$ 3,205,614	\$ 2,666,154
Investments - at fair value		
Short-term investments:		
Commercial paper	254,826	608,362
Discount notes	0	153,810
Short-term investment fund	678,945	600,601
U.S. treasury bills and agencies	1,638,571	40,309
Debt securities:		
Bank Loans	408,691	590,699
Corporate and other	7,559,129	5,899,916
Mortgage debt securities	3,966,276	2,429,941
Treasury inflation protected securities	2,714,217	2,387,976
U.S. Government and agency	6,474,964	8,481,413
Equity securities:		
Domestic equity	21,794,066	20,979,595
International equity	11,847,317	13,129,539
Collective trust funds:		
Bank Loans	624,967	653,292
Corporate and other	14,051	0
Domestic equity	1,253	0
International equity	0	0
Mortgage debt securities	464,167	435,441
Opportunistic Fixed Income	219,577	210,496
Treasury inflation protected securities	0	736,640
U.S. Government and agency	0	0
Alternative investments:		
Infrastructure	785,629	654,868
Opportunistic Fixed Income	2,145,127	1,927,058
Private Equity	4,660,981	4,657,470
Private Real Estate	3,802,066	3,564,548
Hedge Fund	3,735	6,979
Collateral from securities lending	6,007,306	6,406,505
Total investments	<u>\$ 76,065,861</u>	<u>\$ 74,555,459</u>
Other assets	137,428	128,259
Total assets	<u>\$ 79,489,318</u>	<u>\$ 77,414,571</u>
<b>LIABILITIES</b>		
Accounts payable	126,800	464,094
Payables for investment securities purchased	3,091,164	1,406,303
Accrued benefits payable	357,557	454,936
Amount due to Variable Supplements Funds	5,051	4,581
Transferable earnings due from QPP to COVSF	8,000	153,411
Due to other retirement systems	1,052	617
Securities lending	6,007,306	6,406,505
Total liabilities	<u>\$ 9,596,930</u>	<u>\$ 8,890,447</u>
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS</b>	<u>\$ 69,892,388</u>	<u>\$ 68,524,124</u>

VARIABLE SUPPLEMENTS FUND OF NYCERS

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Statement of Fiduciary Net Position  
June 30, 2020

(Dollar amounts in thousands)

	<u>COVSF</u>	<u>HPOVSF</u>	<u>HPSOVSF</u>	<u>TPOVSF</u>	<u>TPSOVSF</u>
<b>ASSETS</b>					
Cash	\$ 4,459	\$ 37	\$ 63	\$ 84	\$ 52
Receivables:					
Accrued interest	\$ 104	\$ 0	\$ 0	\$ 0	\$ 0
Receivables from QPP to VSFs	8,000	858	1,186	1,661	1,346
Other receivables	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total receivables	\$ 8,104	\$ 858	\$ 1,186	\$ 1,661	\$ 1,346
Investments - at fair value:					
Short-term investment fund	\$ 391,147	\$ 0	\$ 0	\$ 0	\$ 0
Accrued Transfer from QPP	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total assets	<u>\$ 403,710</u>	<u>\$ 895</u>	<u>\$ 1,249</u>	<u>\$ 1,745</u>	<u>\$ 1,398</u>
<b>LIABILITIES</b>					
Accounts Payable	\$ 0	\$ 0	\$ 0	\$ 22	\$ 0
Accrued Benefits Payable	\$ 50,462	\$ 895	\$ 1,249	\$ 1,723	\$ 1,398
Total Liabilities	<u>\$ 50,462</u>	<u>\$ 895</u>	<u>\$ 1,249</u>	<u>\$ 1,745</u>	<u>\$ 1,398</u>
<b>Plan Net Position held in Trust for Benefits</b>	<u>\$ 353,248</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>

Statement of Fiduciary Net Position  
June 30, 2019

(Dollar amounts in thousands)

	<u>COVSF</u>	<u>HPOVSF</u>	<u>HPSOVSF</u>	<u>TPOVSF</u>	<u>TPSOVSF</u>
<b>ASSETS</b>					
Cash	\$ 7,469	\$ 215	\$ 178	\$ 253	\$ 190
Receivables:					
Accrued interest	\$ 618	\$ 0	\$ 0	\$ 0	\$ 0
Receivables from QPP to VSFs	153,411	710	1,130	1,520	1,221
Other receivables	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total receivables	\$ 154,029	\$ 710	\$ 1,130	\$ 1,520	\$ 1,221
Investments - at fair value:					
Short-term investment fund	\$ 303,529	\$ 0	\$ 0	\$ 0	\$ 0
Accrued Transfer from QPP	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total assets	<u>\$ 465,027</u>	<u>\$ 925</u>	<u>\$ 1,308</u>	<u>\$ 1,773</u>	<u>\$ 1,411</u>
<b>LIABILITIES</b>					
Accounts Payable	\$ 0	\$ 0	\$ 0	\$ 22	\$ 0
Accrued Benefits Payable	\$ 48,799	\$ 925	\$ 1,308	\$ 1,751	\$ 1,411
Total Liabilities	<u>\$ 48,799</u>	<u>\$ 925</u>	<u>\$ 1,308</u>	<u>\$ 1,773</u>	<u>\$ 1,411</u>
<b>Plan Net Position held in Trust for Benefits</b>	<u>\$ 416,228</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>

## NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

## Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

## Statement of Changes in Fiduciary Net Position

June 30, 2020 and June 30, 2019

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 563,893	\$ 547,807
Employer Contributions	<u>3,727,558</u>	<u>3,692,711</u>
<i>Total contributions</i>	\$ 4,291,451	\$ 4,240,518
Investment income:		
Interest income	904,771	988,963
Dividend income	933,200	914,719
Net appreciation (depreciation) in fair value	<u>766,682</u>	<u>2,728,030</u>
Total investment income	\$ 2,604,653	\$ 4,631,712
Less:		
Investment expenses	222,501	240,544
Net income	2,382,152	4,391,168
Securities lending transactions:		
Securities lending income	24,500	45,331
Securities lending fees	<u>2,336</u>	<u>4,573</u>
Net securities lending income	22,164	40,758
<i>Net investment income</i>	2,404,316	4,431,926
Other:		
<i>Other Income</i>	3,317	3,258
Total additions	<u>\$ 6,699,084</u>	<u>\$ 8,675,702</u>
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	5,202,251	5,152,588
Payments to other retirement systems	9,087	9,769
Amount transferred to Variable Supplements Funds	10,111	10,489
Transferable earnings due from QPP to COVSF	31,704	103,411
Administrative expenses	<u>77,667</u>	<u>82,073</u>
Total deductions	<u>\$ 5,330,820</u>	<u>\$ 5,358,330</u>
<b>INCREASE IN PLAN NET POSITION</b>	1,368,264	3,317,372
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 68,524,124	\$ 65,206,752
End of year	\$ 69,892,388	\$ 68,524,124

**NEW YORK CITY CORRECTION OFFICERS' VARIABLE SUPPLEMENTS FUND**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position**  
**June 30, 2020**  
(Dollar amounts in thousands)

	<u>COVSF</u>	<u>HPOVSF</u>	<u>HPSOVSF</u>	<u>TPOVSF</u>	<u>TPSOVSF</u>
<b>ADDITIONS</b>					
Investment income:					
Interest income	\$ 5,400	\$ 0	\$ 0	\$ 0	\$ 0
Net appreciation (depreciation) in fair value	0	0	0	0	0
<i>Total investment income</i>	\$ 5,400	\$ 0	\$ 0	\$ 0	\$ 0
<i>Reimbursement of benefit payments from QPP</i>	0	1,662	2,428	3,290	2,731
<i>Transferable earnings due from QPP to COVSF</i>	31,704	NA	NA	NA	NA
<i>Other Income</i>	0	0	0	0	0
Total additions	<u>\$ 37,104</u>	<u>\$ 1,662</u>	<u>\$ 2,428</u>	<u>\$ 3,290</u>	<u>\$ 2,731</u>
<b>DEDUCTIONS</b>					
Benefit payments and withdrawals	100,084	1,662	2,428	3,290	2,731
Total deductions	<u>\$ 100,084</u>	<u>\$ 1,662</u>	<u>\$ 2,428</u>	<u>\$ 3,290</u>	<u>\$ 2,731</u>
<b>INCREASE IN PLAN NET POSITION</b>	(62,980)	0	0	0	0
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>					
Beginning of year	\$ 416,228	\$ 0	\$ 0	\$ 0	\$ 0
End of year	\$ 353,248	\$ 0	\$ 0	\$ 0	\$ 0

**Statement of Changes in Fiduciary Net Position**  
**June 30, 2019**  
(Dollar amounts in thousands)

	<u>COVSF</u>	<u>HPOVSF</u>	<u>HPSOVSF</u>	<u>TPOVSF</u>	<u>TPSOVSF</u>
<b>ADDITIONS</b>					
Investment income:					
Interest income	\$ 6,304	\$ 0	\$ 0	\$ 0	\$ 0
Net appreciation (depreciation) in fair value	0	0	0	0	0
<i>Total investment income</i>	\$ 6,304	\$ 0	\$ 0	\$ 0	\$ 0
<i>Reimbursement of benefit payments from QPP</i>	0	1,722	2,522	3,446	2,799
<i>Transferable earnings due from QPP to COVSF</i>	103,411	NA	NA	NA	NA
<i>Other Income</i>	0	0	0	0	0
Total additions	<u>\$ 109,715</u>	<u>\$ 1,722</u>	<u>\$ 2,522</u>	<u>\$ 3,446</u>	<u>\$ 2,799</u>
<b>DEDUCTIONS</b>					
Benefit payments and withdrawals	95,729	1,722	2,522	3,446	2,799
Total deductions	<u>\$ 95,729</u>	<u>\$ 1,722</u>	<u>\$ 2,522</u>	<u>\$ 3,446</u>	<u>\$ 2,799</u>
<b>INCREASE IN PLAN NET POSITION</b>	13,986	0	0	0	0
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>					
Beginning of year	\$ 402,242	\$ 0	\$ 0	\$ 0	\$ 0
End of year	\$ 416,228	\$ 0	\$ 0	\$ 0	\$ 0



**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Market Values of Assets**

	<b>QPP</b>	<b>COVSF</b>	<b>HPOVSF</b>	<b>HPSOVSF</b>	<b>TPOVSF</b>	<b>TPSOVSF</b>	<b>Total</b>
<b>1. Plan Net Position @ 6/30/2018</b>	\$ 65,411,752,000	\$ 244,771,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 65,656,523,000
<b>2. Net Accrued Benefits Payable</b>	4,995,000	0	134,000	121,000	171,000	139,000	5,560,000
<b>3. Accrued Transfers from NYCERS to COVSF</b>	(205,000,000)	205,000,000	0	0	0	0	0
<b>4. Adjusted Market Value @ 6/30/2018</b>	\$ 65,211,747,000	\$ 449,771,000	\$ 134,000	\$ 121,000	\$ 171,000	\$ 139,000	\$ 65,662,083,000
<b>5. Changes for the year:</b>							
a. ER Contributions	3,692,711,000	0	0	0	0	0	3,692,711,000
b. EE Contributions	547,807,000	0	0	0	0	0	547,807,000
c. Net Investment Income	4,431,926,000	6,304,000	0	0	0	0	4,438,230,000
d. Benefit Payments <sup>1</sup>	(5,153,002,000)	(94,459,000)	(1,641,000)	(2,465,000)	(3,364,000)	(2,748,000)	(5,257,679,000)
e. Payments to Other Retirement Systems	(9,769,000)	0	0	0	0	0	(9,769,000)
f. Transfers to Variable Supplements Funds	(10,489,000)	0	1,722,000	2,522,000	3,446,000	2,799,000	0
g. Administrative Expenses	(82,073,000)	0	0	0	0	0	(82,073,000)
h. Other	3,258,000	0	0	0	0	0	3,258,000
i. Net Changes	\$ 3,420,369,000	\$ (88,155,000)	\$ 81,000	\$ 57,000	\$ 82,000	\$ 51,000	\$ 3,332,485,000
<b>6. Plan Net Position @ 6/30/2019</b>	\$ 68,627,535,000	\$ 361,616,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 68,989,151,000
<b>7. Net Accrued Benefits Payable</b>	4,581,000	0	215,000	178,000	253,000	190,000	5,417,000
<b>8. Accrued Transfers from NYCERS to COVSF</b>	(103,411,000)	103,411,000	0	0	0	0	0
<b>9. Adjusted Market Value @ 6/30/2019</b>	\$ 68,528,705,000	\$ 465,027,000	\$ 215,000	\$ 178,000	\$ 253,000	\$ 190,000	\$ 68,994,568,000
<b>10. Changes for the year:</b>							
a. ER Contributions	3,727,558,000	0	0	0	0	0	3,727,558,000
b. EE Contributions	563,893,000	0	0	0	0	0	563,893,000
c. Net Investment Income	2,404,316,000	5,400,000	0	0	0	0	2,409,716,000
d. Benefit Payments <sup>2</sup>	(5,201,781,000)	(98,421,000)	(1,840,000)	(2,543,000)	(3,459,000)	(2,869,000)	(5,310,913,000)
e. Payments to Other Retirement Systems	(9,087,000)	0	0	0	0	0	(9,087,000)
f. Transfers to Variable Supplements Funds	(10,111,000)	0	1,662,000	2,428,000	3,290,000	2,731,000	0
g. Administrative Expenses	(77,667,000)	0	0	0	0	0	(77,667,000)
h. Other	3,317,000	0	0	0	0	0	3,317,000
i. Net Changes	\$ 1,400,438,000	\$ (93,021,000)	\$ (178,000)	\$ (115,000)	\$ (169,000)	\$ (138,000)	\$ 1,306,817,000
<b>11. Plan Net Position @ 6/30/2020</b>	\$ 69,924,092,000	\$ 372,006,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 70,296,098,000
<b>12. Net Accrued Benefits Payable</b>	5,051,000	0	37,000	63,000	84,000	52,000	5,287,000
<b>13. Accrued Transfers from NYCERS to COVSF</b>	(31,704,000)	31,704,000	0	0	0	0	0
<b>14. Adjusted Market Value @ 6/30/2020</b>	\$ 69,897,439,000	\$ 403,710,000	\$ 37,000	\$ 63,000	\$ 84,000	\$ 52,000	\$ 70,301,385,000

<sup>1</sup> Includes Net Accrued Benefits Payable of \$(414,000) for QPP, \$1,270,000 for COVSF, \$81,000 for HPOVSF, \$57,000 for HPSOVSF, \$82,000 for TPOVSF, and \$51,000 for TPSOVSF.

<sup>2</sup> Includes Net Accrued Benefits Payable of \$470,000 for QPP, \$1,663,000 for COVSF, \$(178,000) for HPOVSF, \$(115,000) for HPSOVSF, \$(169,000) for TPOVSF, and \$(138,000) for TPSOVSF.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

## Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

### Long-Term Expected Rate of Return

The Long-Term Expected Rate of Return (LTEROR) assumption on pension fund investments was determined using a Building-Block Method in which best-estimate ranges of Expected Real Rates of Return (i.e. Expected Returns, net of pension fund investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the LTEROR by weighting the Expected Real Rates of Return (RROR) by the Target Asset Allocation percentage and by adding Expected Inflation. The Target Asset Allocation, and best estimates of Arithmetic Real Rates of Return are presented in the following table:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rates of Return</u>
<b><u>Public Markets:</u></b>		
U.S. Public Market Equities	27.0%	7.6%
Developed Public Market Equities	12.0%	7.7%
Emerging Public Market Equities	5.0%	10.6%
Fixed Income	30.5%	3.1%
<b><u>Private Markets (Alternative Investments):</u></b>		
Private Equity	8.0%	11.2%
Private Real Estate	7.5%	7.0%
Infrastructure	4.0%	6.8%
Opportunistic Fixed Income	6.0%	6.5%
Total	100.0%	

The Discount Rate used to measure the Total Pension Liability was 7.0% per annum. The projection of Cash Flows used to determine the Discount Rate assumes that employee contributions will be made at the rates applicable to the current Tier for each member and that employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the pension fund's Fiduciary Net Position is projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the Long-Term Expected Rate of Return on pension fund investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss  
June 30, 2019**

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Total
<b>1. Assets</b>							
a. Market Value 6/30/2018*	\$ 65,416,747,000	\$ 244,771,000	\$ 134,000	\$ 121,000	\$ 171,000	\$ 139,000	\$ 65,662,083,000
b. 2018 Accrued Transfers from NYCERS to COVSF	(205,000,000)	205,000,000	0	0	0	0	0
c. Adjusted Market Value @6/30/2018	65,211,747,000	449,771,000	134,000	121,000	171,000	139,000	65,662,083,000
d. Market Value 6/30/2019**	68,632,116,000	361,616,000	215,000	178,000	253,000	190,000	68,994,568,000
e. 2019 Accrued Transfers from NYCERS to COVSF	(103,411,000)	103,411,000	0	0	0	0	0
f. Adjusted Market Value @6/30/2019	68,528,705,000	465,027,000	215,000	178,000	253,000	190,000	68,994,568,000
<b>2. Net Investment Income</b>	4,431,926,000	6,304,000	0	0	0	0	4,438,230,000
<b>3. Cash Flow</b> (1.d. - 1.a. - 2.)	(1,216,557,000)	110,541,000	81,000	57,000	82,000	51,000	(1,105,745,000)
<b>4. Expected Earnings</b> (7% * 1.a. + 3.441% * 3.)	4,537,310,564	20,937,686	12,167	10,431	14,792	11,485	4,558,297,125
<b>5. (Gain) / Loss</b> (4. - 2.)	105,384,564	14,633,686	12,167	10,431	14,792	11,485	120,067,125
<b>6. Recognition Period</b>	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years
<b>7. Amount Recognized in Pension Expense</b> (5. / 6.)	21,076,913	2,926,737	2,433	2,086	2,958	2,297	24,013,424
<b>8. Deferred (Inflow) / Outflow of Resources</b> (5. - 7.)	\$ 84,307,651	\$ 11,706,949	\$ 9,734	\$ 8,345	\$ 11,834	\$ 9,188	\$ 96,053,701

\* Before Reflecting 2018 Accrued Transfers to VSFs.

\*\* Before Reflecting 2019 Accrued Transfers to VSFs.

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss  
June 30, 2020**

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Total
<b>1. Assets</b>							
a. Market Value 6/30/2019*	\$ 68,632,116,000	\$ 361,616,000	\$ 215,000	\$ 178,000	\$ 253,000	\$ 190,000	\$ 68,994,568,000
b. 2019 Accrued Transfers from NYCERS to COVSF	(103,411,000)	103,411,000	0	0	0	0	0
c. Adjusted Market Value @6/30/2019	68,528,705,000	465,027,000	215,000	178,000	253,000	190,000	68,994,568,000
d. Market Value 6/30/2020**	69,929,143,000	372,006,000	37,000	63,000	84,000	52,000	70,301,385,000
e. 2020 Accrued Transfers from NYCERS to COVSF	(31,704,000)	31,704,000	0	0	0	0	0
f. Adjusted Market Value @6/30/2020	69,897,439,000	403,710,000	37,000	63,000	84,000	52,000	70,301,385,000
<b>2. Net Investment Income</b>	2,404,316,000	5,400,000	0	0	0	0	2,409,716,000
<b>3. Cash Flow</b> (1.d. - 1.a. - 2.)	(1,107,289,000)	4,990,000	(178,000)	(115,000)	(169,000)	(138,000)	(1,102,899,000)
<b>4. Expected Earnings</b> (7% * 1.a. + 3.441% * 3.)	4,766,146,306	25,484,826	8,925	8,503	11,895	8,551	4,791,669,006
<b>5. (Gain) / Loss</b> (4. - 2.)	2,361,830,306	20,084,826	8,925	8,503	11,895	8,551	2,381,953,006
<b>6. Recognition Period</b>	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years
<b>7. Amount Recognized in Pension Expense</b> (5. / 6.)	472,366,061	4,016,965	1,785	1,701	2,379	1,710	476,390,601
<b>8. Deferred (Inflow) / Outflow of Resources</b> (5. - 7.)	\$ 1,889,464,245	\$ 16,067,861	\$ 7,140	\$ 6,802	\$ 9,516	\$ 6,841	\$ 1,905,562,405

\* Before Reflecting 2019 Accrued Transfers to VSFs.

\*\* Before Reflecting 2020 Accrued Transfers to VSFs.

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Roll-Forward of Entry Age Accrued Liabilities<sup>1</sup>**

	<b>QPP</b>	<b>COVSF</b>	<b>HPOVSF</b>	<b>HPSOVSF</b>	<b>TPOVSF</b>	<b>TPSOVSF</b>	<b>Total</b>
1. Disclosed EA Accrued Liability at 6/30/2019	\$ 86,034,568,529	\$ 1,400,098,744	\$ 13,554,332	\$ 19,505,441	\$ 27,076,919	\$ 21,671,115	\$ 87,516,475,080
2. EA Normal Cost at 6/30/2019	2,017,383,484	20,315,438	0	0	0	0	2,037,698,922
3. Benefit Payments-FY 2020	(5,201,781,000)	(98,421,000)	(1,840,000)	(2,543,000)	(3,459,000)	(2,869,000)	(5,310,913,000)
4. Interest	5,984,643,357	96,042,326	885,489	1,277,876	1,776,360	1,418,256	6,086,043,664
5. Experience (Gain)/Loss-FY 2020	1,050,130,886	1,822,173	(470,549)	312,057	(346,414)	(176,933)	1,051,271,220
6. Roll-Forward EAAL at 6/30/2020	\$ 89,884,945,256	\$ 1,419,857,681	\$ 12,129,272	\$ 18,552,374	\$ 25,047,865	\$ 20,043,438	\$ 91,380,575,886

<sup>1</sup> VSFs liabilities are discounted at 7.0% per annum, consistent with the Assumptions and Methodology used to determine employer contributions.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Schedule of Employer Allocations  
June 30, 2019

Employer	2019 Employer Contributions	Employer Allocation Percentage
Transit Authority	\$ 859,328,961	23.270946554%
Transit Authority Transit Police	26,231,545	0.710359955%
Housing Authority	163,903,745	4.438574124%
Health and Hospitals Corporation	515,453,890	13.958682262%
Off - Track Betting (City)	11,791,156	0.319308872%
Off - Track Betting (State) <sup>1</sup>	11,791,156	0.319308872%
Housing Development Corporation / REMIC	2,003,454	0.054254276%
State Courts	1,357,011	0.036748361%
School Construction Authority	3,017,923	0.081726473%
Water Finance Authority	78,400	0.002123101%
Senior Colleges	45,285,139	1.226338337%
Triborough Bridge and Tunnel Authority	45,114,858	1.221727065%
City Other	2,007,354,440	54.359901748%
Total	\$ 3,692,711,678	100.000000000%

<sup>1</sup> The actual contribution made was \$0.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source  
June 30, 2019

Total Pension Liability

	TRANSIT Authority	TA TP	HOUSING Authority	HHC	OTB (City)	OTB (State)	HDC/REMIC	State Courts
Balances at June 30, 2018 (Revised)	\$ 18,918,125,107	\$ 630,688,337	\$ 4,102,412,181	\$ 12,616,281,727	\$ 228,424,897	\$ 228,424,898	\$ 42,829,887	\$ 34,431,909
<b>Changes for the Year:</b>								
Service Cost	472,631,217	14,427,359	90,147,115	283,499,812	6,485,139	6,485,140	1,101,900	746,357
Interest	1,358,985,405	41,483,865	259,205,505	815,164,326	18,647,118	18,647,119	3,168,361	2,146,044
Changes of Benefit Terms	0	0	0	0	0	0	0	0
Differences b/t Expected and Actual Experience	431,088,461	13,159,240	82,223,475	258,581,096	5,915,117	5,915,117	1,005,047	680,754
Changes of Assumptions	(216,170,644)	(6,598,742)	(41,231,216)	(129,666,292)	(2,966,153)	(2,966,154)	(503,984)	(341,366)
Benefit Payments	(1,223,511,670)	(37,348,446)	(233,365,980)	(733,902,706)	(16,788,235)	(16,788,236)	(2,852,516)	(1,932,111)
<b>Net Changes</b>	\$ 823,022,769	\$ 25,123,276	\$ 156,978,899	\$ 493,676,236	\$ 11,292,986	\$ 11,292,986	\$ 1,918,808	\$ 1,299,678
<b>SubTotal</b>	\$ 19,741,147,876	\$ 655,811,613	\$ 4,259,391,080	\$ 13,109,957,963	\$ 239,717,883	\$ 239,717,884	\$ 44,748,695	\$ 35,731,587
<b>Changes in Proportionate Share</b>	624,764,266	(34,129,620)	(374,907,464)	(893,811,279)	39,729,986	39,729,986	2,732,735	(3,570,717)
<b>Balances at June 30, 2019</b>	\$ 20,365,912,142	\$ 621,681,993	\$ 3,884,483,616	\$ 12,216,146,684	\$ 279,447,869	\$ 279,447,870	\$ 47,481,430	\$ 32,160,870

Plan Fiduciary Net Position<sup>1</sup>

	TRANSIT Authority	TA TP	HOUSING Authority	HHC	OTB (City)	OTB (State)	HDC/REMIC	State Courts
Balances at June 30, 2018 (Revised)	\$ 14,791,708,394	\$ 493,140,989	\$ 3,207,594,337	\$ 9,864,407,354	\$ 178,607,291	\$ 178,607,291	\$ 33,504,490	\$ 26,926,409
<b>Changes for the Year:</b>								
Contributions - Employer	859,328,961	26,231,545	163,903,745	515,453,890	11,791,156	11,791,156	2,003,454	1,357,011
Contributions - Employee	127,479,874	3,891,402	24,314,820	76,466,639	1,749,196	1,749,197	297,209	201,310
Net Investment Income	1,032,818,131	31,527,409	196,994,128	619,518,424	14,171,662	14,171,662	2,407,930	1,630,977
Benefit Payments	(1,223,511,670)	(37,348,446)	(233,365,980)	(733,902,706)	(16,788,235)	(16,788,236)	(2,852,516)	(1,932,111)
Payments to Other Retirement Systems	(2,273,339)	(69,395)	(433,604)	(1,363,624)	(31,193)	(31,194)	(5,300)	(3,590)
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0	0
Administrative Expenses	(19,099,164)	(583,014)	(3,642,871)	(11,456,309)	(262,067)	(262,066)	(44,528)	(30,160)
Other Changes	758,167	23,144	144,609	454,774	10,403	10,403	1,768	1,197
<b>Net Changes</b>	\$ 775,500,960	\$ 23,672,645	\$ 147,914,847	\$ 465,171,088	\$ 10,640,922	\$ 10,640,922	\$ 1,808,017	\$ 1,224,634
<b>SubTotal</b>	\$ 15,567,209,354	\$ 516,813,634	\$ 3,355,509,184	\$ 10,329,578,442	\$ 189,248,213	\$ 189,248,213	\$ 35,312,507	\$ 28,151,043
<b>Changes in Proportionate Share</b>	488,479,691	(26,703,852)	(293,134,142)	(698,845,917)	31,057,563	31,057,564	2,119,997	(2,796,670)
<b>Balances at June 30, 2019</b>	\$ 16,055,689,045	\$ 490,109,782	\$ 3,062,375,042	\$ 9,630,732,525	\$ 220,305,776	\$ 220,305,777	\$ 37,432,504	\$ 25,354,373

Net Pension Liability

	TRANSIT Authority	TA TP	HOUSING Authority	HHC	OTB (City)	OTB (State)	HDC/REMIC	State Courts
Balances at June 30, 2018 (Revised)	\$ 4,126,416,713	\$ 137,547,348	\$ 894,817,844	\$ 2,751,874,373	\$ 49,817,606	\$ 49,817,607	\$ 9,325,397	\$ 7,505,500
<b>Changes for the Year:</b>								
Service Cost	472,631,217	14,427,359	90,147,115	283,499,812	6,485,139	6,485,140	1,101,900	746,357
Interest	1,358,985,405	41,483,865	259,205,505	815,164,326	18,647,118	18,647,119	3,168,361	2,146,044
Changes of Benefit Terms	0	0	0	0	0	0	0	0
Differences b/t Expected and Actual experience	431,088,461	13,159,240	82,223,475	258,581,096	5,915,117	5,915,117	1,005,047	680,754
Changes of Assumptions	(216,170,644)	(6,598,742)	(41,231,216)	(129,666,292)	(2,966,153)	(2,966,154)	(503,984)	(341,366)
Contributions - Employer	(859,328,961)	(26,231,545)	(163,903,745)	(515,453,890)	(11,791,156)	(11,791,156)	(2,003,454)	(1,357,011)
Contributions - Employee	(127,479,874)	(3,891,402)	(24,314,820)	(76,466,639)	(1,749,196)	(1,749,197)	(297,209)	(201,310)
Net Investment Income	(1,032,818,131)	(31,527,409)	(196,994,128)	(619,518,424)	(14,171,662)	(14,171,662)	(2,407,930)	(1,630,977)
Benefit Payments	0	0	0	0	0	0	0	0
Payments to Other Retirement Systems	2,273,339	69,395	433,604	1,363,624	31,193	31,194	5,300	3,590
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0	0
Administrative Expenses	19,099,164	583,014	3,642,871	11,456,309	262,067	262,066	44,528	30,160
Other Changes	(758,167)	(23,144)	(144,609)	(454,774)	(10,403)	(10,403)	(1,768)	(1,197)
<b>Net Changes</b>	\$ 47,521,809	\$ 1,450,631	\$ 9,064,052	\$ 28,505,148	\$ 652,064	\$ 652,064	\$ 110,791	\$ 75,044
<b>SubTotal</b>	\$ 4,173,938,522	\$ 138,997,979	\$ 903,881,896	\$ 2,780,379,521	\$ 50,469,670	\$ 50,469,671	\$ 9,436,188	\$ 7,580,544
<b>Changes in Proportionate Share</b>	136,284,575	(7,425,768)	(81,773,322)	(194,965,362)	8,672,423	8,672,422	612,738	(774,047)
<b>Balances at June 30, 2019</b>	\$ 4,310,223,097	\$ 131,572,211	\$ 822,108,574	\$ 2,585,414,159	\$ 59,142,093	\$ 59,142,093	\$ 10,048,926	\$ 6,806,497

<sup>1</sup> Balances at 6/30/2018 and 6/30/2019 are Adjusted Market Values - See Page 3.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source  
June 30, 2019

Total Pension Liability							
	SCA	WFA	Senior Colleges	TBTA	City Other	Subtotal City	TOTAL
Balances at June 30, 2018 (Revised)	\$ 41,989,889	\$ 2,518,993	\$ 1,114,412,061	\$ 969,966,442	\$ 45,049,272,189	\$ 45,950,375,312	\$ 83,979,778,517
<b>Changes for the Year:</b>							
Service Cost	1,659,859	43,120	24,906,842	24,813,187	1,104,045,612	1,126,617,969	2,030,992,659
Interest	4,772,693	123,986	71,616,163	71,346,872	3,174,529,791	3,239,433,467	5,839,837,248
Changes of Benefit Terms	0	0	0	0	0	0	0
Differences b/t Expected and Actual Experience	1,513,962	39,330	22,717,611	22,632,188	1,007,003,576	1,027,591,895	1,852,474,974
Changes of Assumptions	(759,181)	(19,722)	(11,391,816)	(11,348,981)	(504,965,067)	(515,289,143)	(928,929,318)
Benefit Payments	(4,296,916)	(111,626)	(64,476,933)	(64,234,487)	(2,858,069,138)	(2,916,502,735)	(5,257,679,000)
<b>Net Changes</b>	\$ 2,890,417	\$ 75,088	\$ 43,371,867	\$ 43,208,779	\$ 1,922,544,774	\$ 1,961,851,453	\$ 3,536,696,563
<b>SubTotal</b>	\$ 44,880,306	\$ 2,594,081	\$ 1,157,783,928	\$ 1,013,175,221	\$ 46,971,816,963	\$ 47,912,226,765	\$ 87,516,475,080
<b>Changes in Proportionate Share</b>	26,643,822	(736,018)	(84,535,842)	56,037,241	602,052,904	634,297,092	0
<b>Balances at June 30, 2019</b>	\$ 71,524,128	\$ 1,858,063	\$ 1,073,248,086	\$ 1,069,212,462	\$ 47,573,869,867	\$ 48,546,523,857	\$ 87,516,475,080

Plan Fiduciary Net Position<sup>1</sup>

	SCA	WFA	Senior Colleges	TBTA	City Other	Subtotal City	TOTAL
Balances at June 30, 2018 (Revised)	\$ 32,814,954	\$ 1,983,024	\$ 871,348,991	\$ 758,403,928	\$ 35,223,035,548	\$ 35,927,598,782	\$ 65,662,083,000
<b>Changes for the Year:</b>							
Contributions - Employer	3,017,923	78,400	45,285,139	45,114,858	2,007,353,762	2,048,394,386	3,692,711,000
Contributions - Employee	447,703	11,630	6,717,967	6,692,706	297,787,347	303,875,648	547,807,000
Net Investment Income	3,627,209	94,228	54,427,716	54,223,057	2,412,617,467	2,461,943,747	4,438,230,000
Benefit Payments	(4,296,916)	(111,626)	(64,476,933)	(64,234,487)	(2,858,069,138)	(2,916,502,735)	(5,257,679,000)
Payments to Other Retirement Systems	(7,984)	(207)	(119,801)	(119,351)	(5,310,418)	(5,418,990)	(9,769,000)
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0
Administrative Expenses	(67,075)	(1,742)	(1,006,493)	(1,002,708)	(44,614,803)	(45,526,959)	(82,073,000)
Other Changes	2,663	69	39,954	39,804	1,771,045	1,807,255	3,258,000
<b>Net Changes</b>	\$ 2,723,523	\$ 70,752	\$ 40,867,549	\$ 40,713,879	\$ 1,811,535,262	\$ 1,848,572,352	\$ 3,332,485,000
<b>SubTotal</b>	\$ 35,538,477	\$ 2,053,776	\$ 912,216,540	\$ 799,117,807	\$ 37,034,570,810	\$ 37,776,171,134	\$ 68,994,568,000
<b>Changes in Proportionate Share</b>	20,848,350	(588,952)	(66,109,702)	43,807,504	470,808,566	496,010,627	0
<b>Balances at June 30, 2019</b>	\$ 56,386,827	\$ 1,464,824	\$ 846,106,838	\$ 842,925,311	\$ 37,505,379,376	\$ 38,272,181,761	\$ 68,994,568,000

Net Pension Liability

	SCA	WFA	Senior Colleges	TBTA	City Other	Subtotal City	TOTAL
Balances at June 30, 2018 (Revised)	\$ 9,174,935	\$ 535,969	\$ 243,063,070	\$ 211,562,514	\$ 9,826,236,641	\$ 10,022,776,530	\$ 18,317,695,517
<b>Changes for the Year:</b>							
Service Cost	1,659,859	43,120	24,906,842	24,813,187	1,104,045,612	1,126,617,969	2,030,992,659
Interest	4,772,693	123,986	71,616,163	71,346,872	3,174,529,791	3,239,433,467	5,839,837,248
Changes of Benefit Terms	0	0	0	0	0	0	0
Differences b/t Expected and Actual experience	1,513,962	39,330	22,717,611	22,632,188	1,007,003,576	1,027,591,895	1,852,474,974
Changes of Assumptions	(759,181)	(19,722)	(11,391,816)	(11,348,981)	(504,965,067)	(515,289,143)	(928,929,318)
Contributions - Employer	(3,017,923)	(78,400)	(45,285,139)	(45,114,858)	(2,007,353,762)	(2,048,394,386)	(3,692,711,000)
Contributions - Employee	(447,703)	(11,630)	(6,717,967)	(6,692,706)	(297,787,347)	(303,875,648)	(547,807,000)
Net Investment Income	(3,627,209)	(94,228)	(54,427,716)	(54,223,057)	(2,412,617,467)	(2,461,943,747)	(4,438,230,000)
Benefit Payments	0	0	0	0	0	0	0
Payments to Other Retirement Systems	7,984	207	119,801	119,351	5,310,418	5,418,990	9,769,000
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0
Administrative Expenses	67,075	1,742	1,006,493	1,002,708	44,614,803	45,526,959	82,073,000
Other Changes	(2,663)	(69)	(39,954)	(39,804)	(1,771,045)	(1,807,255)	(3,258,000)
<b>Net Changes</b>	\$ 166,894	\$ 4,336	\$ 2,504,318	\$ 2,494,900	\$ 111,009,512	\$ 113,279,101	\$ 204,211,563
<b>SubTotal</b>	\$ 9,341,829	\$ 540,305	\$ 245,567,388	\$ 214,057,414	\$ 9,937,246,153	\$ 10,136,055,631	\$ 18,521,907,080
<b>Changes in Proportionate Share</b>	5,795,472	(147,066)	(18,426,140)	12,229,737	131,244,338	138,286,465	0
<b>Balances at June 30, 2019</b>	\$ 15,137,301	\$ 393,239	\$ 227,141,248	\$ 226,287,151	\$ 10,068,490,491	\$ 10,274,342,096	\$ 18,521,907,080

<sup>1</sup> Balances at 6/30/2018 and 6/30/2019 are Adjusted Market Values - See Page 3.



NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Schedule of Employer Allocations  
June 30, 2020

Employer	2020 Employer Contributions	Employer Allocation Percentage
Transit Authority	\$ 865,063,590	23.2072475468%
Transit Authority Transit Police	25,584,279	0.6863549720%
Housing Authority	161,530,939	4.3334253472%
Health and Hospitals Corporation	505,624,076	13.5644861638%
Off - Track Betting (City)	12,005,188	0.3220657683%
Off - Track Betting (State) <sup>1</sup>	13,732,943	0.3684166244%
Housing Development Corporation / REMIC	2,108,188	0.0565568143%
State Courts	1,466,062	0.0393303615%
School Construction Authority	3,295,959	0.0884214031%
Water Finance Authority	74,683	0.0020035370%
Senior Colleges	46,237,666	1.2404278405%
Triborough Bridge and Tunnel Authority	45,189,608	1.2123113625%
City Other	2,045,644,722	54.8789522586%
Total	\$ 3,727,557,903	100.0000000000%

<sup>1</sup> The actual contribution made was \$0.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source  
June 30, 2020

Total Pension Liability

	TRANSIT Authority	TA TP	HOUSING Authority	HHC	OTB (City)	OTB (State)	HDC/REMIC	State Courts
Balances at June 30, 2019	\$ 20,365,912,142	\$ 621,681,993	\$ 3,884,483,616	\$ 12,216,146,684	\$ 279,447,869	\$ 279,447,870	\$ 47,481,430	\$ 32,160,870
<b>Changes for the Year:</b>								
Service Cost	472,893,833	13,985,848	88,302,162	276,403,388	6,562,731	7,507,222	1,152,458	801,434
Interest	1,412,403,219	41,771,863	263,734,159	825,540,551	19,601,063	22,421,997	3,442,072	2,393,663
Changes of Benefit Terms	0	0	0	0	0	0	0	0
Differences b/t Expected and Actual Experience	243,971,114	7,215,452	45,556,054	142,599,539	3,385,785	3,873,058	594,566	413,469
Changes of Assumptions	0	0	0	0	0	0	0	0
Benefit Payments	(1,232,516,727)	(36,451,715)	(230,144,450)	(720,398,059)	(17,104,633)	(19,566,286)	(3,003,683)	(2,088,801)
<b>Net Changes</b>	\$ 896,751,439	\$ 26,521,448	\$ 167,447,925	\$ 524,145,419	\$ 12,444,946	\$ 14,235,991	\$ 2,185,413	\$ 1,519,765
<b>SubTotal</b>	\$ 21,262,663,581	\$ 648,203,441	\$ 4,051,931,541	\$ 12,740,292,103	\$ 291,892,815	\$ 293,683,861	\$ 49,666,843	\$ 33,680,635
<b>Changes in Proportionate Share</b>	(55,747,125)	(21,008,315)	(92,022,503)	(344,986,531)	2,412,739	42,977,372	2,015,100	2,259,676
<b>Balances at June 30, 2020</b>	\$ 21,206,916,456	\$ 627,195,126	\$ 3,959,909,038	\$ 12,395,305,572	\$ 294,305,554	\$ 336,661,233	\$ 51,681,943	\$ 35,940,311

Plan Fiduciary Net Position<sup>1</sup>

	TRANSIT Authority	TA TP	HOUSING Authority	HHC	OTB (City)	OTB (State)	HDC/REMIC	State Courts
Balances at June 30, 2019	\$ 16,055,689,045	\$ 490,109,782	\$ 3,062,375,042	\$ 9,630,732,525	\$ 220,305,776	\$ 220,305,777	\$ 37,432,504	\$ 25,354,373
<b>Changes for the Year:</b>								
Contributions - Employer	865,063,590	25,584,279	161,530,939	505,624,076	12,005,188	13,732,943	2,108,188	1,466,062
Contributions - Employee	130,864,044	3,870,308	24,435,882	76,489,188	1,816,106	2,077,476	318,920	221,781
Net Investment Income	559,228,757	16,539,206	104,423,244	326,865,593	7,760,870	8,877,794	1,362,859	947,750
Benefit Payments	(1,232,516,727)	(36,451,715)	(230,144,450)	(720,398,059)	(17,104,633)	(19,566,286)	(3,003,683)	(2,088,801)
Payments to Other Retirement Systems	(2,108,843)	(62,369)	(393,778)	(1,232,605)	(29,266)	(33,478)	(5,139)	(3,574)
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0	0
Administrative Expenses	(18,024,373)	(533,071)	(3,365,641)	(10,535,129)	(250,139)	(286,138)	(43,926)	(30,547)
Other Changes	769,784	22,766	143,740	449,934	10,683	12,220	1,876	1,305
<b>Net Changes</b>	\$ 303,276,232	\$ 8,969,404	\$ 56,629,936	\$ 177,262,998	\$ 4,208,809	\$ 4,814,531	\$ 739,095	\$ 513,976
<b>SubTotal</b>	\$ 16,358,965,277	\$ 499,079,186	\$ 3,119,004,978	\$ 9,807,995,523	\$ 224,514,585	\$ 225,120,308	\$ 38,171,599	\$ 25,868,349
<b>Changes in Proportionate Share</b>	(43,948,831)	(16,562,135)	(72,546,941)	(271,973,882)	1,902,111	33,881,682	1,588,625	1,781,440
<b>Balances at June 30, 2020</b>	\$ 16,315,016,446	\$ 482,517,051	\$ 3,046,458,037	\$ 9,536,021,641	\$ 226,416,696	\$ 259,001,990	\$ 39,760,224	\$ 27,649,789

Net Pension Liability

	TRANSIT Authority	TA TP	HOUSING Authority	HHC	OTB (City)	OTB (State)	HDC/REMIC	State Courts
Balances at June 30, 2019	\$ 4,310,223,097	\$ 131,572,211	\$ 822,108,574	\$ 2,585,414,159	\$ 59,142,093	\$ 59,142,093	\$ 10,048,926	\$ 6,806,497
<b>Changes for the Year:</b>								
Service Cost	472,893,833	13,985,848	88,302,162	276,403,388	6,562,731	7,507,222	1,152,458	801,434
Interest	1,412,403,219	41,771,863	263,734,159	825,540,551	19,601,063	22,421,997	3,442,072	2,393,663
Changes of Benefit Terms	0	0	0	0	0	0	0	0
Differences b/t Expected and Actual experience	243,971,114	7,215,452	45,556,054	142,599,539	3,385,785	3,873,058	594,566	413,469
Changes of Assumptions	0	0	0	0	0	0	0	0
Contributions - Employer	(865,063,590)	(25,584,279)	(161,530,939)	(505,624,076)	(12,005,188)	(13,732,943)	(2,108,188)	(1,466,062)
Contributions - Employee	(130,864,044)	(3,870,308)	(24,435,882)	(76,489,188)	(1,816,106)	(2,077,476)	(318,920)	(221,781)
Net Investment Income	(559,228,757)	(16,539,206)	(104,423,244)	(326,865,593)	(7,760,870)	(8,877,794)	(1,362,859)	(947,750)
Benefit Payments	0	0	0	0	0	0	0	0
Payments to Other Retirement Systems	2,108,843	62,369	393,778	1,232,605	29,266	33,478	5,139	3,574
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0	0
Administrative Expenses	18,024,373	533,071	3,365,641	10,535,129	250,139	286,138	43,926	30,547
Other Changes	(769,784)	(22,766)	(143,740)	(449,934)	(10,683)	(12,220)	(1,876)	(1,305)
<b>Net Changes</b>	\$ 593,475,207	\$ 17,552,044	\$ 110,817,989	\$ 346,882,421	\$ 8,236,137	\$ 9,421,460	\$ 1,446,318	\$ 1,005,789
<b>SubTotal</b>	\$ 4,903,698,304	\$ 149,124,255	\$ 932,926,563	\$ 2,932,296,580	\$ 67,378,230	\$ 68,563,553	\$ 11,495,244	\$ 7,812,286
<b>Changes in Proportionate Share</b>	(11,798,294)	(4,446,180)	(19,475,562)	(73,012,649)	510,628	9,095,690	426,475	478,236
<b>Balances at June 30, 2020</b>	\$ 4,891,900,010	\$ 144,678,075	\$ 913,451,001	\$ 2,859,283,931	\$ 67,888,858	\$ 77,659,243	\$ 11,921,719	\$ 8,290,522

<sup>1</sup> Balances at 6/30/2019 and 6/30/2020 are Adjusted Market Values - See Page 3.

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source  
June 30, 2020

**Total Pension Liability**

	<u>SCA</u>	<u>WFA</u>	<u>Senior Colleges</u>	<u>TBTA</u>	<u>City Other</u>	<u>Subtotal City</u>	<u>TOTAL</u>
Balances at June 30, 2019	\$ 71,524,128	\$ 1,858,063	\$ 1,073,248,086	\$ 1,069,212,462	\$ 47,573,869,867	\$ 48,546,523,857	\$ 87,516,475,080
<b>Changes for the Year:</b>							
Service Cost	1,801,762	40,826	25,276,185	24,703,256	1,118,267,817	1,140,618,158	2,037,698,922
Interest	5,381,365	121,936	75,492,980	73,781,799	3,339,956,997	3,406,711,288	6,086,043,664
Changes of Benefit Terms	0	0	0	0	0	0	0
Differences b/t Expected and Actual Experience	929,549	21,063	13,040,261	12,744,680	576,926,630	588,457,416	1,051,271,220
Changes of Assumptions	0	0	0	0	0	0	0
Benefit Payments	(4,695,984)	(106,406)	(65,878,043)	(64,384,802)	(2,914,573,411)	(2,972,825,743)	(5,310,913,000)
<b>Net Changes</b>	<b>\$ 3,416,692</b>	<b>\$ 77,419</b>	<b>\$ 47,931,383</b>	<b>\$ 46,844,933</b>	<b>\$ 2,120,578,033</b>	<b>\$ 2,162,961,119</b>	<b>\$ 3,864,100,806</b>
<b>SubTotal</b>	<b>\$ 74,940,820</b>	<b>\$ 1,935,482</b>	<b>\$ 1,121,179,469</b>	<b>\$ 1,116,057,395</b>	<b>\$ 49,694,447,900</b>	<b>\$ 50,709,484,976</b>	<b>\$ 91,380,575,886</b>
<b>Changes in Proportionate Share</b>	<b>5,859,167</b>	<b>(104,638)</b>	<b>12,330,635</b>	<b>(8,240,290)</b>	<b>454,254,713</b>	<b>441,518,304</b>	<b>0</b>
<b>Balances at June 30, 2020</b>	<b>\$ 80,799,987</b>	<b>\$ 1,830,844</b>	<b>\$ 1,133,510,104</b>	<b>\$ 1,107,817,105</b>	<b>\$ 50,148,702,613</b>	<b>\$ 51,151,003,280</b>	<b>\$ 91,380,575,886</b>

**Plan Fiduciary Net Position<sup>1</sup>**

	<u>SCA</u>	<u>WFA</u>	<u>Senior Colleges</u>	<u>TBTA</u>	<u>City Other</u>	<u>Subtotal City</u>	<u>TOTAL</u>
Balances at June 30, 2019	\$ 56,386,827	\$ 1,464,824	\$ 846,106,838	\$ 842,925,311	\$ 37,505,379,376	\$ 38,272,181,761	\$ 68,994,568,000
<b>Changes for the Year:</b>							
Contributions - Employer	3,295,959	74,683	46,237,666	45,189,608	2,045,644,819	2,086,530,245	3,727,558,000
Contributions - Employee	498,602	11,298	6,994,686	6,836,139	309,458,570	315,643,586	563,893,000
Net Investment Income	2,130,705	48,280	29,890,788	29,213,261	1,322,426,893	1,348,857,674	2,409,716,000
Benefit Payments	(4,695,984)	(106,406)	(65,878,043)	(64,384,802)	(2,914,573,411)	(2,972,825,743)	(5,310,913,000)
Payments to Other Retirement Systems	(8,035)	(182)	(112,718)	(110,163)	(4,986,850)	(5,086,520)	(9,087,000)
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0
Administrative Expenses	(68,674)	(1,556)	(963,403)	(941,566)	(42,622,837)	(43,474,721)	(77,667,000)
Other Changes	2,933	66	41,145	40,212	1,820,336	1,856,718	3,317,000
<b>Net Changes</b>	<b>\$ 1,155,506</b>	<b>\$ 26,183</b>	<b>\$ 16,210,121</b>	<b>\$ 15,842,689</b>	<b>\$ 717,167,520</b>	<b>\$ 731,501,239</b>	<b>\$ 1,306,817,000</b>
<b>SubTotal</b>	<b>\$ 57,542,333</b>	<b>\$ 1,491,007</b>	<b>\$ 862,316,959</b>	<b>\$ 858,768,000</b>	<b>\$ 38,222,546,896</b>	<b>\$ 39,003,683,000</b>	<b>\$ 70,301,385,000</b>
<b>Changes in Proportionate Share</b>	<b>4,619,138</b>	<b>(82,493)</b>	<b>9,720,993</b>	<b>(6,496,322)</b>	<b>358,116,615</b>	<b>348,075,729</b>	<b>0</b>
<b>Balances at June 30, 2020</b>	<b>\$ 62,161,471</b>	<b>\$ 1,408,514</b>	<b>\$ 872,037,952</b>	<b>\$ 852,271,678</b>	<b>\$ 38,580,663,511</b>	<b>\$ 39,351,758,729</b>	<b>\$ 70,301,385,000</b>

**Net Pension Liability**

	<u>SCA</u>	<u>WFA</u>	<u>Senior Colleges</u>	<u>TBTA</u>	<u>City Other</u>	<u>Subtotal City</u>	<u>TOTAL</u>
Balances at June 30, 2019	\$ 15,137,301	\$ 393,239	\$ 227,141,248	\$ 226,287,151	\$ 10,068,490,491	\$ 10,274,342,096	\$ 18,521,907,080
<b>Changes for the Year:</b>							
Service Cost	1,801,762	40,826	25,276,185	24,703,256	1,118,267,817	1,140,618,158	2,037,698,922
Interest	5,381,365	121,936	75,492,980	73,781,799	3,339,956,997	3,406,711,288	6,086,043,664
Changes of Benefit Terms	0	0	0	0	0	0	0
Differences b/t Expected and Actual experience	929,549	21,063	13,040,261	12,744,680	576,926,630	588,457,416	1,051,271,220
Changes of Assumptions	0	0	0	0	0	0	0
Contributions - Employer	(3,295,959)	(74,683)	(46,237,666)	(45,189,608)	(2,045,644,819)	(2,086,530,245)	(3,727,558,000)
Contributions - Employee	(498,602)	(11,298)	(6,994,686)	(6,836,139)	(309,458,570)	(315,643,586)	(563,893,000)
Net Investment Income	(2,130,705)	(48,280)	(29,890,788)	(29,213,261)	(1,322,426,893)	(1,348,857,674)	(2,409,716,000)
Benefit Payments	0	0	0	0	0	0	0
Payments to Other Retirement Systems	8,035	182	112,718	110,163	4,986,850	5,086,520	9,087,000
Transfers to Variable Supplements Funds	0	0	0	0	0	0	0
Administrative Expenses	68,674	1,556	963,403	941,566	42,622,837	43,474,721	77,667,000
Other Changes	(2,933)	(66)	(41,145)	(40,212)	(1,820,336)	(1,856,718)	(3,317,000)
<b>Net Changes</b>	<b>\$ 2,261,186</b>	<b>\$ 51,236</b>	<b>\$ 31,721,262</b>	<b>\$ 31,002,244</b>	<b>\$ 1,403,410,513</b>	<b>\$ 1,431,459,880</b>	<b>\$ 2,557,283,806</b>
<b>SubTotal</b>	<b>\$ 17,398,487</b>	<b>\$ 444,475</b>	<b>\$ 258,862,510</b>	<b>\$ 257,289,395</b>	<b>\$ 11,471,901,004</b>	<b>\$ 11,705,801,976</b>	<b>\$ 21,079,190,886</b>
<b>Changes in Proportionate Share</b>	<b>1,240,029</b>	<b>(22,145)</b>	<b>2,609,642</b>	<b>(1,743,968)</b>	<b>96,138,098</b>	<b>93,442,575</b>	<b>0</b>
<b>Balances at June 30, 2020</b>	<b>\$ 18,638,516</b>	<b>\$ 422,330</b>	<b>\$ 261,472,152</b>	<b>\$ 255,545,427</b>	<b>\$ 11,568,039,102</b>	<b>\$ 11,799,244,551</b>	<b>\$ 21,079,190,886</b>

<sup>1</sup> Balances at 6/30/2019 and 6/30/2020 are Adjusted Market Values - See Page 3.

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Changes in Net Pension Liability and Related Ratios**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>1. Total Pension Liability</b>								
a. Service Cost	\$ 2,037,698,922	\$ 2,030,992,659	\$ 1,947,712,394	\$ 1,920,457,666	\$ 1,899,994,413	\$ 1,832,487,270	\$ 1,807,063,169	\$ 1,754,430,261
b. Interest	6,086,043,664	5,839,837,248	5,615,290,255	5,546,608,362	5,372,603,831	5,071,014,309	4,910,458,886	4,728,226,227
c. Changes of Benefit Terms	0	0	43,998,752	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	1,051,271,220	1,852,474,974	(1,762,549,696)	(238,253,928)	(817,971,278)	(288,598,641)	0	0
e. Changes of Assumptions	0	(928,929,318)	17,732,814	0	2,563,091,847	0	0	0
f. Benefit Payments	(5,310,913,000)	(5,257,679,000)	(4,983,874,000)	(4,646,479,000)	(4,494,146,000)	(4,324,135,000)	(4,002,681,000)	(3,863,595,000)
<b>g. Net Changes in Total Pension Liability</b>	<b>\$ 3,864,100,806</b>	<b>\$ 3,536,696,563</b>	<b>\$ 878,310,519</b>	<b>\$ 2,582,333,100</b>	<b>\$ 4,523,572,813</b>	<b>\$ 2,290,767,938</b>	<b>\$ 2,714,841,055</b>	<b>\$ 2,619,061,488</b>
<b>2. Total Pension Liability - Beginning<sup>1</sup></b>	<b>\$ 87,516,475,080</b>	<b>\$ 83,979,778,517</b>	<b>\$ 82,421,467,998</b>	<b>\$ 79,839,134,898</b>	<b>\$ 75,315,562,085</b>	<b>\$ 73,024,794,147</b>	<b>\$ 70,309,953,092</b>	<b>\$ 67,690,891,604</b>
<b>3. Total Pension Liability - Ending</b>	<b>\$ 91,380,575,886</b>	<b>\$ 87,516,475,080</b>	<b>\$ 83,299,778,517</b>	<b>\$ 82,421,467,998</b>	<b>\$ 79,839,134,898</b>	<b>\$ 75,315,562,085</b>	<b>\$ 73,024,794,147</b>	<b>\$ 70,309,953,092</b>
<b>4. Plan Fiduciary Net Position</b>								
a. Contributions - Employer	\$ 3,727,558,000	\$ 3,692,711,000	\$ 3,377,024,000	\$ 3,328,193,000	\$ 3,365,454,000	\$ 3,160,258,000	\$ 3,114,068,000	\$ 3,046,845,000
b. Contributions - Employee	563,893,000	547,807,000	523,535,000	513,514,000	485,508,000	467,129,000	447,689,000	437,775,000
c. Net Investment Income	2,409,716,000	4,438,230,000	5,155,519,000	6,982,152,000	1,171,904,000	1,175,109,000	8,262,487,000	4,967,056,000
d. Benefit Payments	(5,310,913,000)	(5,257,679,000)	(4,983,874,000)	(4,646,479,000)	(4,494,146,000)	(4,324,135,000)	(4,002,681,000)	(3,863,595,000)
e. Payments to Other Retirement Systems	(9,087,000)	(9,769,000)	(9,055,000)	(8,087,000)	(7,440,000)	(7,142,000)	(7,228,000)	(5,250,000)
f. Transfers to Variable Supplements Fund	0	0	0	0	0	0	0	0
g. Administrative Expenses	(77,667,000)	(82,073,000)	(59,689,000)	(59,671,000)	(56,683,000)	(54,635,000)	(50,431,000)	(48,666,000)
h. Other Changes	3,317,000	3,258,000	3,422,000	3,266,000	2,928,000	(347,323,000)	4,881,000	5,072,000
<b>i. Net Changes in Fiduciary Net Position</b>	<b>\$ 1,306,817,000</b>	<b>\$ 3,332,485,000</b>	<b>\$ 4,006,882,000</b>	<b>\$ 6,112,888,000</b>	<b>\$ 467,525,000</b>	<b>\$ 69,261,000</b>	<b>\$ 7,768,785,000</b>	<b>\$ 4,539,237,000</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 68,994,568,000</b>	<b>\$ 65,662,083,000</b>	<b>\$ 61,655,201,000</b>	<b>\$ 55,542,313,000</b>	<b>\$ 55,074,788,000</b>	<b>\$ 55,005,527,000</b>	<b>\$ 47,236,742,000</b>	<b>\$ 42,697,505,000</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 70,301,385,000</b>	<b>\$ 68,994,568,000</b>	<b>\$ 65,662,083,000</b>	<b>\$ 61,655,201,000</b>	<b>\$ 55,542,313,000</b>	<b>\$ 55,074,788,000</b>	<b>\$ 55,005,527,000</b>	<b>\$ 47,236,742,000</b>
<b>7. NYCERS' Net Pension Liability</b>	<b>\$ 21,079,190,886</b>	<b>\$ 18,521,907,080</b>	<b>\$ 17,637,695,517</b>	<b>\$ 20,766,266,998</b>	<b>\$ 24,296,821,898</b>	<b>\$ 20,240,774,085</b>	<b>\$ 18,019,267,147</b>	<b>\$ 23,073,211,092</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>76.9%</b>	<b>78.8%</b>	<b>78.8%</b>	<b>74.8%</b>	<b>69.6%</b>	<b>73.1%</b>	<b>75.3%</b>	<b>67.2%</b>
<b>9. Covered Employee Payroll<sup>2</sup></b>	<b>\$ 14,981,461,175</b>	<b>\$ 14,459,118,057</b>	<b>\$ 12,834,129,514</b>	<b>\$ 12,555,241,827</b>	<b>\$ 12,336,979,280</b>	<b>\$ 12,314,958,283</b>	<b>\$ 12,183,010,903</b>	<b>\$ 11,955,093,092</b>
<b>10. NYCERS' Net Pension Liability as a Percentage of Covered Employee Payroll</b>	<b>140.7%</b>	<b>128.1%</b>	<b>137.4%</b>	<b>165.4%</b>	<b>196.9%</b>	<b>164.4%</b>	<b>147.9%</b>	<b>193.0%</b>

<sup>1</sup> Revised Total Pension Liability at June 30, 2018 due to census data fix.

<sup>2</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Contributions (\$ in thousands)**

<b>Fiscal Year Ending June 30</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
1. Actuarially Determined Contribution	\$ 3,726,701	\$ 3,694,365	\$ 3,377,024	\$ 3,328,193	\$ 3,365,454	\$ 3,160,258	\$ 3,114,068	\$ 3,046,845	\$ 3,017,004	\$ 2,387,216
2. Actual/Funding Contributions Made	<u>\$ 3,713,825</u>	<u>\$ 3,681,747</u>	<u>\$ 3,377,024</u>	<u>\$ 3,328,193</u>	<u>\$ 3,365,454</u>	<u>\$ 3,160,258</u>	<u>\$ 3,114,068</u>	<u>\$ 3,046,845</u>	<u>\$ 3,017,004</u>	<u>\$ 2,387,216</u>
3. Contribution Deficiency (Excess) Actual/Funding Contributions Made basis (1. - 2.)	12,876	12,618	0	0	0	0	0	0	0	0
4. Contributions as a percentage of Covered employee payroll <sup>1</sup> Actual/Funding Contributions Made basis	24.789%	25.463%	26.313%	26.508%	27.279%	25.662%	25.561%	25.486%	25.540%	20.820%
5. Receivable Contributions	13,733	10,964	0	0	0	0	0	0	0	0
6. Accounting Contributions (2. + 5.)	<u>\$ 3,727,558</u>	<u>\$ 3,692,711</u>	<u>\$ 3,377,024</u>	<u>\$ 3,328,193</u>	<u>\$ 3,365,454</u>	<u>\$ 3,160,258</u>	<u>\$ 3,114,068</u>	<u>\$ 3,046,845</u>	<u>\$ 3,017,004</u>	<u>\$ 2,387,216</u>
7. Contribution Deficiency (Excess) Accounting Contributions basis (1. - 6.)	(857)	1,654	0	0	0	0	0	0	0	0
8. Contributions as a percentage of Covered employee payroll <sup>1</sup> Accounting Contributions basis	24.881%	25.539%	26.313%	26.508%	27.279%	25.662%	25.561%	25.486%	25.540%	20.820%

<sup>1</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

## Average Expected Remaining Service Lives

<u>Group</u>	<u># Count</u>	Average Expected Remaining Service Life <u>@ 6/30/2019</u>
Active	191,501	12.73
Active Off Payroll	31,273	0
Terminated Vested	21,788	0
Retired	<u>157,153</u>	<u>0</u>
Total	<b>401,715</b>	<b>6.07</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Expected and Actual Experience</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
2016	\$ (817,971,278)	3.33	(81,060,218)							
2017	\$ (238,253,928)	5.60	(42,545,344)	(42,545,344)	(42,545,344)	(25,527,208)				
2018	\$ (1,762,549,696)	6.01	(293,269,500)	(293,269,500)	(293,269,500)	(293,269,500)	(293,269,500)	(2,932,696)		
2019	\$ 1,852,474,974	6.10	303,684,422	303,684,422	303,684,422	303,684,422	303,684,422	303,684,422	30,368,442	
2020	\$ 1,051,271,220	6.07		173,191,305	173,191,305	173,191,305	173,191,305	173,191,305	173,191,305	12,123,390
Net increase (decrease) in Pension Expense			<b>\$ (113,190,640)</b>	<b>\$ 141,060,883</b>	<b>\$ 141,060,883</b>	<b>\$ 158,079,019</b>	<b>\$ 183,606,227</b>	<b>\$ 473,943,031</b>	<b>\$ 203,559,747</b>	<b>\$ 12,123,390</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
2016	\$ 2,563,091,847	3.33	254,000,094						
2017	0	0.00	0						
2018	17,732,814	6.01	2,950,551	2,950,551	2,950,551	2,950,551	2,950,551	29,508	
2019	(928,929,318)	6.10	(152,283,495)	(152,283,495)	(152,283,495)	(152,283,495)	(152,283,495)	(152,283,495)	(15,228,348)
Net increase (decrease) in Pension Expense			<b>\$ 104,667,150</b>	<b>\$ (149,332,944)</b>	<b>\$ (149,332,944)</b>	<b>\$ (149,332,944)</b>	<b>\$ (149,332,944)</b>	<b>\$ (152,253,987)</b>	<b>\$ (15,228,348)</b>



**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Projected and Actual Earnings on Pension Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2015	\$ 2,624,717,092	5	524,943,416					
2016	\$ 2,659,093,478	5	531,818,694	531,818,702				
2017	\$ (3,124,101,464)	5	(624,820,294)	(624,820,294)	(624,820,288)			
2018	\$ (879,179,528)	5	(175,835,906)	(175,835,906)	(175,835,906)	(175,835,904)		
2019	\$ 120,067,125	5	24,013,424	24,013,424	24,013,424	24,013,424	24,013,429	
2020	\$ 2,381,953,006	5		476,390,601	476,390,601	476,390,601	476,390,601	476,390,602
Net increase (decrease) in Pension Expense			<b>\$ 280,119,334</b>	<b>\$ 231,566,527</b>	<b>\$ (300,252,169)</b>	<b>\$ 324,568,121</b>	<b>\$ 500,404,030</b>	<b>\$ 476,390,602</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2016**

Transit Authority	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 22.380%	Proportionate Share at 6/30/2016 22.227%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(469,929,348)	(466,716,694)	3,212,654	3.33	964,761	964,761	964,761	318,371
Deferred Inflows of Resources	3,983,883,832	891,593,201	885,497,859	(6,095,342)	3.33	(1,830,433)	(1,830,433)	(1,830,433)	(604,043)
Net Pension Liability	20,240,774,085	4,529,885,240	4,498,916,855	(30,968,385)	3.33	(9,299,815)	(9,299,815)	(9,299,815)	(3,068,940)
<b>Total</b>	<b>22,124,884,244</b>	<b>4,951,549,093</b>	<b>4,917,698,020</b>	<b>(33,851,073)</b>		<b>(10,165,487)</b>	<b>(10,165,487)</b>	<b>(10,165,487)</b>	<b>(3,354,612)</b>
TA TP	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.660%	Proportionate Share at 6/30/2016 0.672%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(13,858,506)	(14,110,479)	(251,973)	3.33	(75,668)	(75,668)	(75,668)	(24,969)
Deferred Inflows of Resources	3,983,883,832	26,293,633	26,771,699	478,066	3.33	143,563	143,563	143,563	47,377
Net Pension Liability	20,240,774,085	133,589,109	136,018,002	2,428,893	3.33	729,397	729,397	729,397	240,702
<b>Total</b>	<b>22,124,884,244</b>	<b>146,024,236</b>	<b>148,679,222</b>	<b>2,654,986</b>		<b>797,292</b>	<b>797,292</b>	<b>797,292</b>	<b>263,110</b>
Housing Authority	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 5.072%	Proportionate Share at 6/30/2016 4.997%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(106,500,520)	(104,925,691)	1,574,829	3.33	472,922	472,922	472,922	156,063
Deferred Inflows of Resources	3,983,883,832	202,062,588	199,074,675	(2,987,913)	3.33	(897,271)	(897,271)	(897,271)	(296,100)
Net Pension Liability	20,240,774,085	1,026,612,062	1,011,431,481	(15,180,581)	3.33	(4,558,733)	(4,558,733)	(4,558,733)	(1,504,382)
<b>Total</b>	<b>22,124,884,244</b>	<b>1,122,174,130</b>	<b>1,105,580,465</b>	<b>(16,593,665)</b>		<b>(4,983,082)</b>	<b>(4,983,082)</b>	<b>(4,983,082)</b>	<b>(1,644,419)</b>
HHC	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 14.030%	Proportionate Share at 6/30/2016 14.789%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(294,598,246)	(310,535,528)	(15,937,282)	3.33	(4,785,971)	(4,785,971)	(4,785,971)	(1,579,369)
Deferred Inflows of Resources	3,983,883,832	558,938,902	589,176,580	30,237,678	3.33	9,080,384	9,080,384	9,080,384	2,996,526
Net Pension Liability	20,240,774,085	2,839,780,604	2,993,408,079	153,627,475	3.33	46,134,377	46,134,377	46,134,377	15,224,344
<b>Total</b>	<b>22,124,884,244</b>	<b>3,104,121,260</b>	<b>3,272,049,131</b>	<b>167,927,871</b>		<b>50,428,790</b>	<b>50,428,790</b>	<b>50,428,790</b>	<b>16,641,501</b>
OTB (City)	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.181%	Proportionate Share at 6/30/2016 0.307%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(3,800,591)	(6,435,807)	(2,635,216)	3.33	(791,356)	(791,356)	(791,356)	(261,148)
Deferred Inflows of Resources	3,983,883,832	7,210,830	12,210,604	4,999,775	3.33	1,501,434	1,501,434	1,501,434	495,473
Net Pension Liability	20,240,774,085	36,635,801	62,037,973	25,402,172	3.33	7,628,280	7,628,280	7,628,280	2,517,333
<b>Total</b>	<b>22,124,884,244</b>	<b>40,046,040</b>	<b>67,812,770</b>	<b>27,766,730</b>		<b>8,338,358</b>	<b>8,338,358</b>	<b>8,338,358</b>	<b>2,751,658</b>
OTB (State)	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.181%	Proportionate Share at 6/30/2016 0.307%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(3,800,591)	(6,435,807)	(2,635,216)	3.33	(791,356)	(791,356)	(791,356)	(261,148)
Deferred Inflows of Resources	3,983,883,832	7,210,830	12,210,604	4,999,775	3.33	1,501,434	1,501,434	1,501,434	495,473
Net Pension Liability	20,240,774,085	36,635,801	62,037,973	25,402,172	3.33	7,628,280	7,628,280	7,628,280	2,517,333
<b>Total</b>	<b>22,124,884,244</b>	<b>40,046,040</b>	<b>67,812,770</b>	<b>27,766,730</b>		<b>8,338,358</b>	<b>8,338,358</b>	<b>8,338,358</b>	<b>2,751,658</b>

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share at 6/30/2016

HDC/REMIC	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.053%	Proportionate Share at 6/30/2016 0.053%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(1,112,880)	(1,112,880)	0	3.33	0	0	0	0
Deferred Inflows of Resources	3,983,883,832	2,111,458	2,111,458	0	3.33	0	0	0	0
Net Pension Liability	20,240,774,085	10,727,610	10,727,610	0	3.33	0	0	0	0
<b>Total</b>	<b>22,124,884,244</b>	<b>11,726,188</b>	<b>11,726,188</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
State Courts	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.032%	Proportionate Share at 6/30/2016 0.031%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(671,928)	(650,930)	20,998	3.33	6,306	6,306	6,306	2,080
Deferred Inflows of Resources	3,983,883,832	1,274,843	1,235,004	(39,839)	3.33	(11,964)	(11,964)	(11,964)	(3,947)
Net Pension Liability	20,240,774,085	6,477,048	6,274,640	(202,408)	3.33	(60,783)	(60,783)	(60,783)	(20,059)
<b>Total</b>	<b>22,124,884,244</b>	<b>7,079,963</b>	<b>6,858,714</b>	<b>(221,249)</b>		<b>(66,441)</b>	<b>(66,441)</b>	<b>(66,441)</b>	<b>(21,926)</b>
SCA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.042%	Proportionate Share at 6/30/2016 0.055%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(881,905)	(1,154,876)	(272,971)	3.33	(81,973)	(81,973)	(81,973)	(27,052)
Deferred Inflows of Resources	3,983,883,832	1,673,231	2,191,136	517,905	3.33	155,527	155,527	155,527	51,324
Net Pension Liability	20,240,774,085	8,501,125	11,132,426	2,631,301	3.33	790,180	790,180	790,180	260,761
<b>Total</b>	<b>22,124,884,244</b>	<b>9,292,451</b>	<b>12,168,686</b>	<b>2,876,235</b>		<b>863,734</b>	<b>863,734</b>	<b>863,734</b>	<b>285,033</b>
WFA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.005%	Proportionate Share at 6/30/2016 0.005%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(104,989)	(104,989)	0	3.33	0	0	0	0
Deferred Inflows of Resources	3,983,883,832	199,194	199,194	0	3.33	0	0	0	0
Net Pension Liability	20,240,774,085	1,012,039	1,012,039	0	3.33	0	0	0	0
<b>Total</b>	<b>22,124,884,244</b>	<b>1,106,244</b>	<b>1,106,244</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Senior College	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 1.221%	Proportionate Share at 6/30/2016 1.247%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(25,638,237)	(26,184,178)	(545,941)	3.33	(163,946)	(163,946)	(163,946)	(54,103)
Deferred Inflows of Resources	3,983,883,832	48,643,222	49,679,031	1,035,809	3.33	311,054	311,054	311,054	102,647
Net Pension Liability	20,240,774,085	247,139,852	252,402,453	5,262,601	3.33	1,580,361	1,580,361	1,580,361	521,518
<b>Total</b>	<b>22,124,884,244</b>	<b>270,144,837</b>	<b>275,897,306</b>	<b>5,752,469</b>		<b>1,727,469</b>	<b>1,727,469</b>	<b>1,727,469</b>	<b>570,062</b>
TBTA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 1.205%	Proportionate Share at 6/30/2016 1.266%	Change in Proportionate Share		2016	2017	2018	2019
Deferred Outflows of Resources	(2,099,773,673)	(25,302,273)	(26,583,135)	(1,280,862)	3.33	(384,643)	(384,643)	(384,643)	(126,933)
Deferred Inflows of Resources	3,983,883,832	48,005,800	50,435,969	2,430,169	3.33	729,780	729,780	729,780	240,829
Net Pension Liability	20,240,774,085	243,901,328	256,248,200	12,346,872	3.33	3,707,769	3,707,769	3,707,769	1,223,565
<b>Total</b>	<b>22,124,884,244</b>	<b>266,604,855</b>	<b>280,101,034</b>	<b>13,496,179</b>		<b>4,052,906</b>	<b>4,052,906</b>	<b>4,052,906</b>	<b>1,337,461</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2016**

City Other	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 54.938%	Proportionate Share at 6/30/2016 54.045%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(2,099,773,673)	(1,153,573,660)	(1,134,822,680)	18,750,980	3.33	5,630,924	5,630,924	5,630,924	1,858,208
<b>Deferred Inflows of Resources</b>	3,983,883,832	2,188,666,100	2,153,090,018	(35,576,082)	3.33	(10,683,508)	(10,683,508)	(10,683,508)	(3,525,558)
<b>Net Pension Liability</b>	20,240,774,085	11,119,876,467	10,939,126,356	(180,750,111)	3.33	(54,279,312)	(54,279,312)	(54,279,312)	(17,912,175)
<b>Total</b>	22,124,884,244	12,154,968,907	11,957,393,694	(197,575,213)		(59,331,896)	(59,331,896)	(59,331,896)	(19,579,525)
<b>Subtotal City</b>	(1)	(2)	(3)	(3) - (2)		Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 55.821%	Proportionate Share at 6/30/2016 55.079%	Change in Proportionate Share	Recognition Period (Years)	2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(2,099,773,673)	(1,172,114,662)	(1,156,523,842)	15,590,820	3.33	4,681,927	4,681,927	4,681,927	1,545,039
<b>Deferred Inflows of Resources</b>	3,983,883,832	2,223,843,794	2,194,263,457	(29,580,337)	3.33	(8,882,984)	(8,882,984)	(8,882,984)	(2,931,385)
<b>Net Pension Liability</b>	20,240,774,085	11,298,602,502	11,148,314,757	(150,287,746)	3.33	(45,131,456)	(45,131,456)	(45,131,456)	(14,893,379)
<b>Total</b>	22,124,884,244	12,350,331,634	12,186,054,372	(164,277,262)		(49,332,513)	(49,332,513)	(49,332,513)	(16,279,725)

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2017**

Transit Authority	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 22.227%	Proportionate Share at 6/30/2017 22.788%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(1,221,484,703)	(1,252,314,456)	(30,829,753)	5.60	(5,505,313)	(5,505,313)	(5,505,313)	(5,505,313)	(5,505,313)	(3,303,188)
Deferred Inflows of Resources	3,077,409,462	684,015,802	701,280,068	17,264,266	5.60	3,082,904	3,082,904	3,082,904	3,082,904	3,082,904	1,849,746
Net Pension Liability	24,296,821,898	5,400,454,603	5,536,759,774	136,305,171	5.60	24,340,209	24,340,209	24,340,209	24,340,209	24,340,209	14,604,126
<b>Total</b>	<b>21,878,731,726</b>	<b>4,862,985,702</b>	<b>4,985,725,386</b>	<b>122,739,684</b>		<b>21,917,800</b>	<b>21,917,800</b>	<b>21,917,800</b>	<b>21,917,800</b>	<b>21,917,800</b>	<b>13,150,684</b>
TA TP	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.672%	Proportionate Share at 6/30/2017 0.696%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(36,929,758)	(38,248,677)	(1,318,919)	5.60	(235,521)	(235,521)	(235,521)	(235,521)	(235,521)	(141,314)
Deferred Inflows of Resources	3,077,409,462	20,680,192	21,418,770	738,578	5.60	131,889	131,889	131,889	131,889	131,889	79,133
Net Pension Liability	24,296,821,898	163,274,643	169,105,880	5,831,237	5.60	1,041,292	1,041,292	1,041,292	1,041,292	1,041,292	624,777
<b>Total</b>	<b>21,878,731,726</b>	<b>147,025,077</b>	<b>152,275,973</b>	<b>5,250,896</b>		<b>937,660</b>	<b>937,660</b>	<b>937,660</b>	<b>937,660</b>	<b>937,660</b>	<b>562,596</b>
Housing Authority	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 4.997%	Proportionate Share at 6/30/2017 4.973%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(274,610,117)	(273,291,197)	1,318,920	5.60	235,521	235,521	235,521	235,521	235,521	141,315
Deferred Inflows of Resources	3,077,409,462	153,778,151	153,039,572	(738,579)	5.60	(131,889)	(131,889)	(131,889)	(131,889)	(131,889)	(79,134)
Net Pension Liability	24,296,821,898	1,214,112,190	1,208,280,953	(5,831,237)	5.60	(1,041,292)	(1,041,292)	(1,041,292)	(1,041,292)	(1,041,292)	(624,777)
<b>Total</b>	<b>21,878,731,726</b>	<b>1,093,280,224</b>	<b>1,088,029,328</b>	<b>(5,250,896)</b>		<b>(937,660)</b>	<b>(937,660)</b>	<b>(937,660)</b>	<b>(937,660)</b>	<b>(937,660)</b>	<b>(562,596)</b>
HHC	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 14.789%	Proportionate Share at 6/30/2017 14.788%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(812,729,441)	(812,674,486)	54,955	5.60	9,813	9,813	9,813	9,813	9,813	5,890
Deferred Inflows of Resources	3,077,409,462	455,118,085	455,087,311	(30,774)	5.60	(5,495)	(5,495)	(5,495)	(5,495)	(5,495)	(3,299)
Net Pension Liability	24,296,821,898	3,593,256,990	3,593,014,022	(242,968)	5.60	(43,387)	(43,387)	(43,387)	(43,387)	(43,387)	(26,033)
<b>Total</b>	<b>21,878,731,726</b>	<b>3,235,645,634</b>	<b>3,235,426,847</b>	<b>(218,787)</b>		<b>(39,069)</b>	<b>(39,069)</b>	<b>(39,069)</b>	<b>(39,069)</b>	<b>(39,069)</b>	<b>(23,442)</b>
OTB (City)	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.307%	Proportionate Share at 6/30/2017 0.278%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(16,843,707)	(15,277,489)	1,566,218	5.60	279,682	279,682	279,682	279,682	279,682	167,810
Deferred Inflows of Resources	3,077,409,462	9,432,260	8,555,199	(877,062)	5.60	(156,618)	(156,618)	(156,618)	(156,618)	(156,618)	(93,972)
Net Pension Liability	24,296,821,898	74,469,759	67,545,165	(6,924,594)	5.60	(1,236,535)	(1,236,535)	(1,236,535)	(1,236,535)	(1,236,535)	(741,922)
<b>Total</b>	<b>21,878,731,726</b>	<b>67,058,313</b>	<b>60,822,875</b>	<b>(6,235,438)</b>		<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(668,083)</b>
OTB (State)	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.307%	Proportionate Share at 6/30/2017 0.278%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(16,843,707)	(15,277,489)	1,566,218	5.60	279,682	279,682	279,682	279,682	279,682	167,810
Deferred Inflows of Resources	3,077,409,462	9,432,260	8,555,199	(877,062)	5.60	(156,618)	(156,618)	(156,618)	(156,618)	(156,618)	(93,972)
Net Pension Liability	24,296,821,898	74,469,759	67,545,165	(6,924,594)	5.60	(1,236,535)	(1,236,535)	(1,236,535)	(1,236,535)	(1,236,535)	(741,922)
<b>Total</b>	<b>21,878,731,726</b>	<b>67,058,313</b>	<b>60,822,875</b>	<b>(6,235,438)</b>		<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(1,113,471)</b>	<b>(668,083)</b>

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share at 6/30/2017

HDC/REMIC	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.053%	Proportionate Share at 6/30/2017 0.053%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(2,912,615)	(2,912,615)	0	5.60	0	0	0	0	0	0
Deferred Inflows of Resources	3,077,409,462	1,631,027	1,631,027	0	5.60	0	0	0	0	0	0
Net Pension Liability	24,296,821,898	12,877,316	12,877,316	0	5.60	0	0	0	0	0	0
<b>Total</b>	<b>21,878,731,726</b>	<b>11,595,728</b>	<b>11,595,728</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
State Courts	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.031%	Proportionate Share at 6/30/2017 0.036%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(1,703,605)	(1,978,380)	(274,775)	5.60	(49,067)	(49,067)	(49,067)	(49,067)	(49,067)	(29,440)
Deferred Inflows of Resources	3,077,409,462	953,997	1,107,867	153,870	5.60	27,477	27,477	27,477	27,477	27,477	16,485
Net Pension Liability	24,296,821,898	7,532,015	8,746,856	1,214,841	5.60	216,936	216,936	216,936	216,936	216,936	130,161
<b>Total</b>	<b>21,878,731,726</b>	<b>6,782,407</b>	<b>7,876,343</b>	<b>1,093,936</b>		<b>195,346</b>	<b>195,346</b>	<b>195,346</b>	<b>195,346</b>	<b>195,346</b>	<b>117,206</b>
SCA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.055%	Proportionate Share at 6/30/2017 0.040%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(3,022,525)	(2,198,200)	824,325	5.60	147,201	147,201	147,201	147,201	147,201	88,320
Deferred Inflows of Resources	3,077,409,462	1,692,575	1,230,964	(461,611)	5.60	(82,431)	(82,431)	(82,431)	(82,431)	(82,431)	(49,456)
Net Pension Liability	24,296,821,898	13,363,252	9,718,729	(3,644,523)	5.60	(650,808)	(650,808)	(650,808)	(650,808)	(650,808)	(390,483)
<b>Total</b>	<b>21,878,731,726</b>	<b>12,033,302</b>	<b>8,751,493</b>	<b>(3,281,809)</b>		<b>(586,038)</b>	<b>(586,038)</b>	<b>(586,038)</b>	<b>(586,038)</b>	<b>(586,038)</b>	<b>(351,619)</b>
WFA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.005%	Proportionate Share at 6/30/2017 0.004%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(274,775)	(219,820)	54,955	5.60	9,813	9,813	9,813	9,813	9,813	5,890
Deferred Inflows of Resources	3,077,409,462	153,870	123,096	(30,774)	5.60	(5,495)	(5,495)	(5,495)	(5,495)	(5,495)	(3,299)
Net Pension Liability	24,296,821,898	1,214,841	971,873	(242,968)	5.60	(43,387)	(43,387)	(43,387)	(43,387)	(43,387)	(26,033)
<b>Total</b>	<b>21,878,731,726</b>	<b>1,093,936</b>	<b>875,149</b>	<b>(218,787)</b>		<b>(39,069)</b>	<b>(39,069)</b>	<b>(39,069)</b>	<b>(39,069)</b>	<b>(39,069)</b>	<b>(23,442)</b>
Senior College	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 1.247%	Proportionate Share at 6/30/2017 1.167%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(68,528,880)	(64,132,481)	4,396,399	5.60	785,071	785,071	785,071	785,071	785,071	471,044
Deferred Inflows of Resources	3,077,409,462	38,375,296	35,913,368	(2,461,928)	5.60	(439,630)	(439,630)	(439,630)	(439,630)	(439,630)	(263,778)
Net Pension Liability	24,296,821,898	302,981,369	283,543,912	(19,437,457)	5.60	(3,470,974)	(3,470,974)	(3,470,974)	(3,470,974)	(3,470,974)	(2,082,587)
<b>Total</b>	<b>21,878,731,726</b>	<b>272,827,785</b>	<b>255,324,799</b>	<b>(17,502,986)</b>		<b>(3,125,533)</b>	<b>(3,125,533)</b>	<b>(3,125,533)</b>	<b>(3,125,533)</b>	<b>(3,125,533)</b>	<b>(1,875,321)</b>
TBTA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 1.266%	Proportionate Share at 6/30/2017 1.308%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
Deferred Outflows of Resources	(5,495,499,634)	(69,573,025)	(71,881,135)	(2,308,110)	5.60	(412,163)	(412,163)	(412,163)	(412,163)	(412,163)	(247,295)
Deferred Inflows of Resources	3,077,409,462	38,960,004	40,252,516	1,292,512	5.60	230,806	230,806	230,806	230,806	230,806	138,482
Net Pension Liability	24,296,821,898	307,597,765	317,802,430	10,204,665	5.60	1,822,262	1,822,262	1,822,262	1,822,262	1,822,262	1,093,355
<b>Total</b>	<b>21,878,731,726</b>	<b>276,984,744</b>	<b>286,173,811</b>	<b>9,189,067</b>		<b>1,640,905</b>	<b>1,640,905</b>	<b>1,640,905</b>	<b>1,640,905</b>	<b>1,640,905</b>	<b>984,542</b>

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share at 6/30/2017

City Other	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 54.045%	Proportionate Share at 6/30/2017 53.591%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
<b>Deferred Outflows of Resources</b>	(5,495,499,634)	(2,970,042,777)	(2,945,093,209)	24,949,568	5.60	4,455,282	4,455,282	4,455,282	4,455,282	4,455,282	2,673,158
<b>Deferred Inflows of Resources</b>	3,077,409,462	1,663,185,944	1,649,214,505	(13,971,437)	5.60	(2,494,900)	(2,494,900)	(2,494,900)	(2,494,900)	(2,494,900)	(1,496,937)
<b>Net Pension Liability</b>	24,296,821,898	13,131,217,395	13,020,909,823	(110,307,573)	5.60	(19,697,782)	(19,697,782)	(19,697,782)	(19,697,782)	(19,697,782)	(11,818,663)
<b>Total</b>	21,878,731,726	11,824,360,562	11,725,031,119	(99,329,442)		(17,737,400)	(17,737,400)	(17,737,400)	(17,737,400)	(17,737,400)	(10,642,442)
<b>Subtotal City</b>	(1)	(2)	(3)	(3) - (2)		Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 55.079%	Proportionate Share at 6/30/2017 54.605%	Change in Proportionate Share	Recognition Period (Years)	2017	2018	2019	2020	2021	2022
<b>Deferred Outflows of Resources</b>	(5,495,499,634)	(3,026,838,767)	(3,000,817,575)	26,021,192	5.60	4,646,644	4,646,644	4,646,644	4,646,644	4,646,644	2,787,974
<b>Deferred Inflows of Resources</b>	3,077,409,462	1,694,990,971	1,680,419,438	(14,571,532)	5.60	(2,602,060)	(2,602,060)	(2,602,060)	(2,602,060)	(2,602,060)	(1,561,232)
<b>Net Pension Liability</b>	24,296,821,898	13,382,325,049	13,267,279,597	(115,045,453)	5.60	(20,543,833)	(20,543,833)	(20,543,833)	(20,543,833)	(20,543,833)	(12,326,291)
<b>Total</b>	21,878,731,726	12,050,477,254	11,946,881,460	(103,595,793)		(18,499,249)	(18,499,249)	(18,499,249)	(18,499,249)	(18,499,249)	(11,099,548)

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2018**

Transit Authority	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 22.788%	Proportionate Share at 6/30/2018 22.527%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(233,280,151)	(230,608,300)		2,671,851	6.01	444,567	444,567	444,567	444,567	444,567
Deferred Inflows of Resources	1,402,610,637	319,626,913	315,966,098	(3,660,815)	6.01	(609,121)	(609,121)	(609,121)	(609,121)	(609,121)	(609,121)	(6,089)
Net Pension Liability	20,766,266,998	4,732,216,923	4,678,016,967	(54,199,956)	6.01	(9,018,295)	(9,018,295)	(9,018,295)	(9,018,295)	(9,018,295)	(9,018,295)	(90,186)
<b>Total</b>	<b>21,145,180,290</b>	<b>4,818,563,685</b>	<b>4,763,374,765</b>	<b>(55,188,920)</b>		<b>(9,182,849)</b>	<b>(9,182,849)</b>	<b>(9,182,849)</b>	<b>(9,182,849)</b>	<b>(9,182,849)</b>	<b>(9,182,849)</b>	<b>(91,826)</b>
TA TP	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.696%	Proportionate Share at 6/30/2018 0.751%	Change in Proportionate Share	2018		2019	2020	2021	2022	2023	2024	
Deferred Outflows of Resources	(1,023,697,345)	(7,124,934)	(7,687,967)	(563,033)		6.01	(93,683)	(93,683)	(93,683)	(93,683)	(93,683)	(93,683)
Deferred Inflows of Resources	1,402,610,637	9,762,170	10,533,606	771,436	6.01	128,359	128,359	128,359	128,359	128,359	128,359	1,282
Net Pension Liability	20,766,266,998	144,533,218	155,954,665	11,421,447	6.01	1,900,407	1,900,407	1,900,407	1,900,407	1,900,407	1,900,407	19,005
<b>Total</b>	<b>21,145,180,290</b>	<b>147,170,454</b>	<b>158,800,304</b>	<b>11,629,850</b>		<b>1,935,083</b>	<b>1,935,083</b>	<b>1,935,083</b>	<b>1,935,083</b>	<b>1,935,083</b>	<b>1,935,083</b>	<b>19,352</b>
Housing Authority	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 4.973%	Proportionate Share at 6/30/2018 4.885%	Change in Proportionate Share	2018		2019	2020	2021	2022	2023	2024	
Deferred Outflows of Resources	(1,023,697,345)	(50,908,469)	(50,007,616)	900,853		6.01	149,893	149,893	149,893	149,893	149,893	149,893
Deferred Inflows of Resources	1,402,610,637	69,751,827	68,517,529	(1,234,298)	6.01	(205,374)	(205,374)	(205,374)	(205,374)	(205,374)	(205,374)	(2,054)
Net Pension Liability	20,766,266,998	1,032,706,458	1,014,432,143	(18,274,315)	6.01	(3,040,652)	(3,040,652)	(3,040,652)	(3,040,652)	(3,040,652)	(3,040,652)	(30,403)
<b>Total</b>	<b>21,145,180,290</b>	<b>1,051,549,816</b>	<b>1,032,942,056</b>	<b>(18,607,760)</b>		<b>(3,096,133)</b>	<b>(3,096,133)</b>	<b>(3,096,133)</b>	<b>(3,096,133)</b>	<b>(3,096,133)</b>	<b>(3,096,133)</b>	<b>(30,962)</b>
HHC	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 14.788%	Proportionate Share at 6/30/2018 15.023%	Change in Proportionate Share	2018		2019	2020	2021	2022	2023	2024	
Deferred Outflows of Resources	(1,023,697,345)	(151,384,363)	(153,790,052)	(2,405,689)		6.01	(400,281)	(400,281)	(400,281)	(400,281)	(400,281)	(400,281)
Deferred Inflows of Resources	1,402,610,637	207,418,061	210,714,196	3,296,135	6.01	548,442	548,442	548,442	548,442	548,442	548,442	5,483
Net Pension Liability	20,766,266,998	3,070,915,564	3,119,716,291	48,800,727	6.01	8,119,921	8,119,921	8,119,921	8,119,921	8,119,921	8,119,921	81,201
<b>Total</b>	<b>21,145,180,290</b>	<b>3,126,949,262</b>	<b>3,176,640,435</b>	<b>49,691,173</b>		<b>8,268,082</b>	<b>8,268,082</b>	<b>8,268,082</b>	<b>8,268,082</b>	<b>8,268,082</b>	<b>8,268,082</b>	<b>82,681</b>
OTB (City)	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.278%	Proportionate Share at 6/30/2018 0.272%	Change in Proportionate Share	2018		2019	2020	2021	2022	2023	2024	
Deferred Outflows of Resources	(1,023,697,345)	(2,845,879)	(2,784,457)	61,422		6.01	10,220	10,220	10,220	10,220	10,220	10,220
Deferred Inflows of Resources	1,402,610,637	3,899,258	3,815,101	(84,157)	6.01	(14,003)	(14,003)	(14,003)	(14,003)	(14,003)	(14,003)	(142)
Net Pension Liability	20,766,266,998	57,730,223	56,484,246	(1,245,977)	6.01	(207,317)	(207,317)	(207,317)	(207,317)	(207,317)	(207,317)	(2,075)
<b>Total</b>	<b>21,145,180,290</b>	<b>58,783,602</b>	<b>57,514,890</b>	<b>(1,268,712)</b>		<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(2,115)</b>
OTB (State)	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.278%	Proportionate Share at 6/30/2018 0.272%	Change in Proportionate Share	2018		2019	2020	2021	2022	2023	2024	
Deferred Outflows of Resources	(1,023,697,345)	(2,845,879)	(2,784,457)	61,422		6.01	10,220	10,220	10,220	10,220	10,220	10,220
Deferred Inflows of Resources	1,402,610,637	3,899,258	3,815,101	(84,157)	6.01	(14,003)	(14,003)	(14,003)	(14,003)	(14,003)	(14,003)	(142)
Net Pension Liability	20,766,266,998	57,730,223	56,484,246	(1,245,977)	6.01	(207,317)	(207,317)	(207,317)	(207,317)	(207,317)	(207,317)	(2,075)
<b>Total</b>	<b>21,145,180,290</b>	<b>58,783,602</b>	<b>57,514,890</b>	<b>(1,268,712)</b>		<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(211,100)</b>	<b>(2,115)</b>



**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2018**

HDC/REMIC	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.053%	Proportionate Share at 6/30/2018 0.051%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(542,560)	(522,086)		20,474	6.01	3,407	3,407	3,407	3,407	3,407
Deferred Inflows of Resources	1,402,610,637	743,384	715,331	(28,053)	6.01	(4,668)	(4,668)	(4,668)	(4,668)	(4,668)	(4,668)	(45)
Net Pension Liability	20,766,266,998	11,006,122	10,590,796	(415,326)	6.01	(69,106)	(69,106)	(69,106)	(69,106)	(69,106)	(69,106)	(690)
<b>Total</b>	<b>21,145,180,290</b>	<b>11,206,946</b>	<b>10,784,041</b>	<b>(422,905)</b>		<b>(70,367)</b>	<b>(70,367)</b>	<b>(70,367)</b>	<b>(70,367)</b>	<b>(70,367)</b>	<b>(70,367)</b>	<b>(703)</b>
State Courts	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.036%	Proportionate Share at 6/30/2018 0.041%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(368,531)	(419,716)		(51,185)	6.01	(8,517)	(8,517)	(8,517)	(8,517)	(8,517)
Deferred Inflows of Resources	1,402,610,637	504,940	575,070	70,130	6.01	11,669	11,669	11,669	11,669	11,669	11,669	116
Net Pension Liability	20,766,266,998	7,475,856	8,514,169	1,038,313	6.01	172,764	172,764	172,764	172,764	172,764	172,764	1,729
<b>Total</b>	<b>21,145,180,290</b>	<b>7,612,265</b>	<b>8,669,523</b>	<b>1,057,258</b>		<b>175,916</b>	<b>175,916</b>	<b>175,916</b>	<b>175,916</b>	<b>175,916</b>	<b>175,916</b>	<b>1,762</b>
SCA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.040%	Proportionate Share at 6/30/2018 0.050%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(409,479)	(511,849)		(102,370)	6.01	(17,033)	(17,033)	(17,033)	(17,033)	(17,033)
Deferred Inflows of Resources	1,402,610,637	561,044	701,305	140,261	6.01	23,338	23,338	23,338	23,338	23,338	23,338	233
Net Pension Liability	20,766,266,998	8,306,507	10,383,133	2,076,626	6.01	345,528	345,528	345,528	345,528	345,528	345,528	3,458
<b>Total</b>	<b>21,145,180,290</b>	<b>8,458,072</b>	<b>10,572,589</b>	<b>2,114,517</b>		<b>351,833</b>	<b>351,833</b>	<b>351,833</b>	<b>351,833</b>	<b>351,833</b>	<b>351,833</b>	<b>3,519</b>
WFA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.004%	Proportionate Share at 6/30/2018 0.003%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(40,948)	(30,711)		10,237	6.01	1,703	1,703	1,703	1,703	1,703
Deferred Inflows of Resources	1,402,610,637	56,104	42,078	(14,026)	6.01	(2,334)	(2,334)	(2,334)	(2,334)	(2,334)	(2,334)	(22)
Net Pension Liability	20,766,266,998	830,651	622,988	(207,663)	6.01	(34,553)	(34,553)	(34,553)	(34,553)	(34,553)	(34,553)	(345)
<b>Total</b>	<b>21,145,180,290</b>	<b>845,807</b>	<b>634,355</b>	<b>(211,452)</b>		<b>(35,184)</b>	<b>(35,184)</b>	<b>(35,184)</b>	<b>(35,184)</b>	<b>(35,184)</b>	<b>(35,184)</b>	<b>(348)</b>
Senior College	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 1.167%	Proportionate Share at 6/30/2018 1.327%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(11,946,548)	(13,584,464)		(1,637,916)	6.01	(272,532)	(272,532)	(272,532)	(272,532)	(272,532)
Deferred Inflows of Resources	1,402,610,637	16,368,466	18,612,643	2,244,177	6.01	373,407	373,407	373,407	373,407	373,407	373,407	3,735
Net Pension Liability	20,766,266,998	242,342,336	275,568,363	33,226,027	6.01	5,528,457	5,528,457	5,528,457	5,528,457	5,528,457	5,528,457	55,285
<b>Total</b>	<b>21,145,180,290</b>	<b>246,764,254</b>	<b>280,596,542</b>	<b>33,832,288</b>		<b>5,629,332</b>	<b>5,629,332</b>	<b>5,629,332</b>	<b>5,629,332</b>	<b>5,629,332</b>	<b>5,629,332</b>	<b>56,296</b>
TBTA	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 1.308%	Proportionate Share at 6/30/2018 1.155%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
	Deferred Outflows of Resources	(1,023,697,345)	(13,389,961)	(11,823,704)		1,566,257	6.01	260,608	260,608	260,608	260,608	260,608
Deferred Inflows of Resources	1,402,610,637	18,346,147	16,200,153	(2,145,994)	6.01	(357,071)	(357,071)	(357,071)	(357,071)	(357,071)	(357,071)	(3,568)
Net Pension Liability	20,766,266,998	271,622,772	239,850,384	(31,772,388)	6.01	(5,286,587)	(5,286,587)	(5,286,587)	(5,286,587)	(5,286,587)	(5,286,587)	(52,866)
<b>Total</b>	<b>21,145,180,290</b>	<b>276,578,958</b>	<b>244,226,833</b>	<b>(32,352,125)</b>		<b>(5,383,050)</b>	<b>(5,383,050)</b>	<b>(5,383,050)</b>	<b>(5,383,050)</b>	<b>(5,383,050)</b>	<b>(5,383,050)</b>	<b>(53,825)</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2018**

City Other	(1)	(2)	(3)	(3) - (2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 53.591%	Proportionate Share at 6/30/2018 53.643%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024
<b>Deferred Outflows of Resources</b>	(1,023,697,345)	(548,609,644)	(549,141,966)	(532,322)	6.01	(88,572)	(88,572)	(88,572)	(88,572)	(88,572)	(88,572)	(890)
<b>Deferred Inflows of Resources</b>	1,402,610,637	751,673,066	752,402,426	729,360	6.01	121,358	121,358	121,358	121,358	121,358	121,358	1,212
<b>Net Pension Liability</b>	20,766,266,998	11,128,850,147	11,139,648,608	10,798,461	6.01	1,796,750	1,796,750	1,796,750	1,796,750	1,796,750	1,796,750	17,961
<b>Total</b>	21,145,180,290	11,331,913,569	11,342,909,068	10,995,499		1,829,536	1,829,536	1,829,536	1,829,536	1,829,536	1,829,536	18,283
<b>Subtotal City</b>	(1)	(2)	(3)	(3) - (2)		Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 54.605%	Proportionate Share at 6/30/2018 54.716%	Change in Proportionate Share	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024
<b>Deferred Outflows of Resources</b>	(1,023,697,345)	(558,989,936)	(560,126,239)	(1,136,304)	6.01	(189,068)	(189,068)	(189,068)	(189,068)	(189,068)	(189,068)	(1,896)
<b>Deferred Inflows of Resources</b>	1,402,610,637	765,895,538	767,452,438	1,556,901	6.01	259,053	259,053	259,053	259,053	259,053	259,053	2,586
<b>Net Pension Liability</b>	20,766,266,998	11,339,420,095	11,362,470,652	23,050,558	6.01	3,835,368	3,835,368	3,835,368	3,835,368	3,835,368	3,835,368	38,350
<b>Total</b>	21,145,180,290	11,546,325,697	11,569,796,851	23,471,155		3,905,353	3,905,353	3,905,353	3,905,353	3,905,353	3,905,353	39,040

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share at 6/30/2019

Transit Authority	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 22.527%	Proportionate Share at 6/30/2019 25.271%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(60,548,602)	(62,548,199)		(1,999,597)	6.10	(327,803)	(327,803)	(327,803)	(327,803)	(327,803)	(327,803)	(32,779)
Deferred Inflows of Resources	2,692,727,340	606,590,688	626,623,141		20,032,453	6.10	3,284,009	3,284,009	3,284,009	3,284,009	3,284,009	3,284,009	328,399
Net Pension Liability	18,317,695,517	4,126,427,270	4,262,701,134	10,711	136,284,575	6.10	22,341,734	22,341,734	22,341,734	22,341,734	22,341,734	22,341,734	2,234,171
Total	20,741,640,500	4,672,469,356	4,826,776,076	10,711	154,317,431		25,297,940	25,297,940	25,297,940	25,297,940	25,297,940	25,297,940	2,529,791
T A TP	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.751%	Proportionate Share at 6/30/2019 0.710%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	2019		2020	2021	2022	2023	2024	2025	
Deferred Outflows of Resources	(268,782,357)	(2,018,556)	(1,909,322)		109,234	6.10	17,907	17,907	17,907	17,907	17,907	17,907	1,792
Deferred Inflows of Resources	2,692,727,340	20,222,382	19,128,057		(1,094,325)	6.10	(179,398)	(179,398)	(179,398)	(179,398)	(179,398)	(179,398)	(17,937)
Net Pension Liability	18,317,695,517	137,565,893	130,121,574	18,551	(7,425,768)	6.10	(1,217,339)	(1,217,339)	(1,217,339)	(1,217,339)	(1,217,339)	(1,217,339)	(121,734)
Total	20,741,640,500	155,769,719	147,340,309	18,551	(8,410,859)		(1,378,830)	(1,378,830)	(1,378,830)	(1,378,830)	(1,378,830)	(1,378,830)	(137,879)
Housing Authority	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 4.885%	Proportionate Share at 6/30/2019 4.439%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	2019		2020	2021	2022	2023	2024	2025	
Deferred Outflows of Resources	(268,782,357)	(13,130,018)	(11,930,104)		1,199,914	6.10	196,707	196,707	196,707	196,707	196,707	196,707	19,672
Deferred Inflows of Resources	2,692,727,340	131,539,731	119,518,699		(12,021,032)	6.10	(1,970,661)	(1,970,661)	(1,970,661)	(1,970,661)	(1,970,661)	(1,970,661)	(197,066)
Net Pension Liability	18,317,695,517	894,819,426	813,044,493	1,611	(81,773,322)	6.10	(13,405,463)	(13,405,463)	(13,405,463)	(13,405,463)	(13,405,463)	(13,405,463)	(1,340,544)
Total	20,741,640,500	1,013,229,139	920,633,088	1,611	(92,594,440)		(15,179,417)	(15,179,417)	(15,179,417)	(15,179,417)	(15,179,417)	(15,179,417)	(1,517,938)
HHC	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 15.023%	Proportionate Share at 6/30/2019 13.959%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	2019		2020	2021	2022	2023	2024	2025	
Deferred Outflows of Resources	(268,782,357)	(40,379,173)	(37,518,475)		2,860,698	6.10	468,967	468,967	468,967	468,967	468,967	468,967	46,896
Deferred Inflows of Resources	2,692,727,340	404,528,428	375,869,254		(28,659,174)	6.10	(4,698,225)	(4,698,225)	(4,698,225)	(4,698,225)	(4,698,225)	(4,698,225)	(469,824)
Net Pension Liability	18,317,695,517	2,751,867,398	2,556,908,915	(6,879)	(194,965,362)	6.10	(31,961,535)	(31,961,535)	(31,961,535)	(31,961,535)	(31,961,535)	(31,961,535)	(3,196,152)
Total	20,741,640,500	3,116,016,653	2,895,259,694	(6,879)	(220,763,838)		(36,190,793)	(36,190,793)	(36,190,793)	(36,190,793)	(36,190,793)	(36,190,793)	(3,619,080)
OTB (City)	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.272%	Proportionate Share at 6/30/2019 0.319%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	2019		2020	2021	2022	2023	2024	2025	
Deferred Outflows of Resources	(268,782,357)	(731,088)	(858,246)		(127,158)	6.10	(20,846)	(20,846)	(20,846)	(20,846)	(20,846)	(20,846)	(2,085)
Deferred Inflows of Resources	2,692,727,340	7,324,218	8,598,117		1,273,899	6.10	208,836	208,836	208,836	208,836	208,836	208,836	20,883
Net Pension Liability	18,317,695,517	49,824,132	58,490,027	6,528	8,672,423	6.10	1,421,709	1,421,709	1,421,709	1,421,709	1,421,709	1,421,709	142,172
Total	20,741,640,500	56,417,262	66,229,898	6,528	9,819,164		1,609,699	1,609,699	1,609,699	1,609,699	1,609,699	1,609,699	160,970
OTB (State)	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.272%	Proportionate Share at 6/30/2019 0.319%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	2019		2020	2021	2022	2023	2024	2025	
Deferred Outflows of Resources	(268,782,357)	(731,088)	(858,246)		(127,158)	6.10	(20,846)	(20,846)	(20,846)	(20,846)	(20,846)	(20,846)	(2,085)
Deferred Inflows of Resources	2,692,727,340	7,324,218	8,598,117		1,273,899	6.10	208,836	208,836	208,836	208,836	208,836	208,836	20,883
Net Pension Liability	18,317,695,517	49,824,132	58,490,027	6,528	8,672,423	6.10	1,421,709	1,421,709	1,421,709	1,421,709	1,421,709	1,421,709	142,172
Total	20,741,640,500	56,417,262	66,229,898	6,528	9,819,164		1,609,699	1,609,699	1,609,699	1,609,699	1,609,699	1,609,699	160,970

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**  
**Changes in Proportionate Share at 6/30/2019**

HDC/REMIC	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.051%	Proportionate Share at 6/30/2019 0.054%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(137,079)	(145,826)		(8,747)	6.10	(1,434)	(1,434)	(1,434)	(1,434)	(1,434)	(1,434)	(143)
Deferred Inflows of Resources	2,692,727,340	1,373,291	1,460,920		87,629	6.10	14,365	14,365	14,365	14,365	14,365	14,365	1,439
Net Pension Liability	18,317,695,517	9,342,025	9,938,133	16,630	612,738	6.10	100,449	100,449	100,449	100,449	100,449	100,449	10,044
<b>Total</b>	<b>20,741,640,500</b>	<b>10,578,237</b>	<b>11,253,227</b>	<b>16,630</b>	<b>691,620</b>		<b>113,380</b>	<b>113,380</b>	<b>113,380</b>	<b>113,380</b>	<b>113,380</b>	<b>113,380</b>	<b>11,340</b>
State Courts	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.041%	Proportionate Share at 6/30/2019 0.037%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(110,201)	(98,773)		11,428	6.10	1,873	1,873	1,873	1,873	1,873	1,873	190
Deferred Inflows of Resources	2,692,727,340	1,104,018	989,533		(114,485)	6.10	(18,768)	(18,768)	(18,768)	(18,768)	(18,768)	(18,768)	(1,877)
Net Pension Liability	18,317,695,517	7,510,255	6,731,453	4,755	(774,047)	6.10	(126,893)	(126,893)	(126,893)	(126,893)	(126,893)	(126,893)	(12,689)
<b>Total</b>	<b>20,741,640,500</b>	<b>8,504,072</b>	<b>7,622,213</b>	<b>4,755</b>	<b>(877,104)</b>		<b>(143,788)</b>	<b>(143,788)</b>	<b>(143,788)</b>	<b>(143,788)</b>	<b>(143,788)</b>	<b>(143,788)</b>	<b>(14,376)</b>
SCA	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.050%	Proportionate Share at 6/30/2019 0.082%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(134,391)	(219,666)		(85,275)	6.10	(13,980)	(13,980)	(13,980)	(13,980)	(13,980)	(13,980)	(1,395)
Deferred Inflows of Resources	2,692,727,340	1,346,364	2,200,671		854,307	6.10	140,050	140,050	140,050	140,050	140,050	140,050	14,007
Net Pension Liability	18,317,695,517	9,158,848	14,970,406	(16,086)	5,795,472	6.10	950,077	950,077	950,077	950,077	950,077	950,077	95,010
<b>Total</b>	<b>20,741,640,500</b>	<b>10,370,821</b>	<b>16,951,411</b>	<b>(16,086)</b>	<b>6,564,504</b>		<b>1,076,147</b>	<b>1,076,147</b>	<b>1,076,147</b>	<b>1,076,147</b>	<b>1,076,147</b>	<b>1,076,147</b>	<b>107,622</b>
WFA	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.003%	Proportionate Share at 6/30/2019 0.002%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(8,063)	(5,707)		2,356	6.10	386	386	386	386	386	386	40
Deferred Inflows of Resources	2,692,727,340	80,782	57,169		(23,613)	6.10	(3,871)	(3,871)	(3,871)	(3,871)	(3,871)	(3,871)	(387)
Net Pension Liability	18,317,695,517	549,531	388,903	13,562	(147,066)	6.10	(24,109)	(24,109)	(24,109)	(24,109)	(24,109)	(24,109)	(2,412)
<b>Total</b>	<b>20,741,640,500</b>	<b>622,250</b>	<b>440,365</b>	<b>13,562</b>	<b>(168,323)</b>		<b>(27,594)</b>	<b>(27,594)</b>	<b>(27,594)</b>	<b>(27,594)</b>	<b>(27,594)</b>	<b>(27,594)</b>	<b>(2,759)</b>
Senior College	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 1.327%	Proportionate Share at 6/30/2019 1.226%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(3,566,742)	(3,296,181)		270,561	6.10	44,354	44,354	44,354	44,354	44,354	44,354	4,437
Deferred Inflows of Resources	2,692,727,340	35,732,492	33,021,948		(2,710,544)	6.10	(444,351)	(444,351)	(444,351)	(444,351)	(444,351)	(444,351)	(44,438)
Net Pension Liability	18,317,695,517	243,075,820	224,636,923	12,757	(18,426,140)	6.10	(3,020,679)	(3,020,679)	(3,020,679)	(3,020,679)	(3,020,679)	(3,020,679)	(302,066)
<b>Total</b>	<b>20,741,640,500</b>	<b>275,241,570</b>	<b>254,362,690</b>	<b>12,757</b>	<b>(20,866,123)</b>		<b>(3,420,676)</b>	<b>(3,420,676)</b>	<b>(3,420,676)</b>	<b>(3,420,676)</b>	<b>(3,420,676)</b>	<b>(3,420,676)</b>	<b>(342,067)</b>
TBTA	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 1.155%	Proportionate Share at 6/30/2019 1.222%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(268,782,357)	(3,104,436)	(3,283,787)		(179,351)	6.10	(29,402)	(29,402)	(29,402)	(29,402)	(29,402)	(29,402)	(2,939)
Deferred Inflows of Resources	2,692,727,340	31,101,001	32,897,779		1,796,778	6.10	294,554	294,554	294,554	294,554	294,554	294,554	29,454
Net Pension Liability	18,317,695,517	211,569,383	223,792,244	6,876	12,229,737	6.10	2,004,875	2,004,875	2,004,875	2,004,875	2,004,875	2,004,875	200,487
<b>Total</b>	<b>20,741,640,500</b>	<b>239,565,948</b>	<b>253,406,236</b>	<b>6,876</b>	<b>13,847,164</b>		<b>2,270,027</b>	<b>2,270,027</b>	<b>2,270,027</b>	<b>2,270,027</b>	<b>2,270,027</b>	<b>2,270,027</b>	<b>227,002</b>

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share at 6/30/2019

City Other	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 53.643%	Proportionate Share at 6/30/2019 54.360%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
<b>Deferred Outflows of Resources</b>	(268,782,357)	(144,182,920)	(146,109,825)		(1,926,905)	6.10	(315,884)	(315,884)	(315,884)	(315,884)	(315,884)	(315,884)	(31,601)
<b>Deferred Inflows of Resources</b>	2,692,727,340	1,444,459,727	1,463,763,935		19,304,208	6.10	3,164,624	3,164,624	3,164,624	3,164,624	3,164,624	3,164,624	316,464
<b>Net Pension Liability</b>	18,317,695,517	9,826,161,406	9,957,481,287	(75,543)	131,244,338	6.10	21,515,466	21,515,466	21,515,466	21,515,466	21,515,466	21,515,466	2,151,542
<b>Total</b>	20,741,640,500	11,126,438,213	11,275,135,397	(75,543)	148,621,641		24,364,206	24,364,206	24,364,206	24,364,206	24,364,206	24,364,206	2,436,405
<b>Subtotal City</b>	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 54.716%	Proportionate Share at 6/30/2019 55.471%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025
<b>Deferred Outflows of Resources</b>	(268,782,357)	(147,066,955)	(149,097,059)		(2,030,104)	6.10	(332,803)	(332,803)	(332,803)	(332,803)	(332,803)	(332,803)	(33,286)
<b>Deferred Inflows of Resources</b>	2,692,727,340	1,473,352,691	1,493,690,780		20,338,089	6.10	3,334,112	3,334,112	3,334,112	3,334,112	3,334,112	3,334,112	333,417
<b>Net Pension Liability</b>	18,317,695,517	10,022,710,279	10,161,063,294	(66,550)	138,286,465	6.10	22,669,913	22,669,913	22,669,913	22,669,913	22,669,913	22,669,913	2,266,987
<b>Total</b>	20,741,640,500	11,348,996,015	11,505,657,015	(66,550)	156,594,450		25,671,222	25,671,222	25,671,222	25,671,222	25,671,222	25,671,222	2,567,118

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**  
**Changes in Proportionate Share at 6/30/2020**

Transit Authority	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 23.271%	Proportionate Share at 6/30/2020 23.207%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(363,171,573)	(362,177,472)		994,101	6.07	163,773	163,773	163,773	163,773	163,773	163,773	11,463
Deferred Inflows of Resources	3,212,550,310	747,590,866	745,544,503		(2,046,363)	6.07	(337,127)	(337,127)	(337,127)	(337,127)	(337,127)	(337,127)	(23,601)
Net Pension Liability	18,521,907,080	4,310,223,097	4,298,424,826	(23)	(11,798,294)	6.07	(1,943,706)	(1,943,706)	(1,943,706)	(1,943,706)	(1,943,706)	(1,943,706)	(136,058)
<b>Total</b>	<b>20,173,835,127</b>	<b>4,694,642,390</b>	<b>4,681,791,857</b>	<b>(23)</b>	<b>(12,850,556)</b>		<b>(2,117,060)</b>	<b>(2,117,060)</b>	<b>(2,117,060)</b>	<b>(2,117,060)</b>	<b>(2,117,060)</b>	<b>(2,117,060)</b>	<b>(148,196)</b>
<b>TA TP</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3) - (2) + (4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.710%	Proportionate Share at 6/30/2020 0.686%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(11,086,036)	(10,711,409)		374,627	6.07	61,718	61,718	61,718	61,718	61,718	61,718	4,319
Deferred Inflows of Resources	3,212,550,310	22,820,671	22,049,499		(771,172)	6.07	(127,046)	(127,046)	(127,046)	(127,046)	(127,046)	(127,046)	(8,896)
Net Pension Liability	18,521,907,080	131,572,211	127,126,030	1	(4,446,180)	6.07	(732,484)	(732,484)	(732,484)	(732,484)	(732,484)	(732,484)	(51,276)
<b>Total</b>	<b>20,173,835,127</b>	<b>143,306,846</b>	<b>138,464,120</b>	<b>1</b>	<b>(4,842,725)</b>		<b>(797,812)</b>	<b>(797,812)</b>	<b>(797,812)</b>	<b>(797,812)</b>	<b>(797,812)</b>	<b>(797,812)</b>	<b>(55,853)</b>
<b>Housing Authority</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3) - (2) + (4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 4.439%	Proportionate Share at 6/30/2020 4.333%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(69,269,376)	(67,628,401)		1,640,975	6.07	270,342	270,342	270,342	270,342	270,342	270,342	18,923
Deferred Inflows of Resources	3,212,550,310	142,591,427	139,213,469		(3,377,958)	6.07	(556,500)	(556,500)	(556,500)	(556,500)	(556,500)	(556,500)	(38,958)
Net Pension Liability	18,521,907,080	822,108,575	802,633,016	(3)	(19,475,562)	6.07	(3,208,495)	(3,208,495)	(3,208,495)	(3,208,495)	(3,208,495)	(3,208,495)	(224,592)
<b>Total</b>	<b>20,173,835,127</b>	<b>895,430,626</b>	<b>874,218,084</b>	<b>(3)</b>	<b>(21,212,545)</b>		<b>(3,494,653)</b>	<b>(3,494,653)</b>	<b>(3,494,653)</b>	<b>(3,494,653)</b>	<b>(3,494,653)</b>	<b>(3,494,653)</b>	<b>(244,627)</b>
<b>HHC</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3) - (2) + (4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 13.959%	Proportionate Share at 6/30/2020 13.564%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(217,842,303)	(211,690,391)		6,151,912	6.07	1,013,495	1,013,495	1,013,495	1,013,495	1,013,495	1,013,495	70,942
Deferred Inflows of Resources	3,212,550,310	448,429,690	435,765,942		(12,663,748)	6.07	(2,086,285)	(2,086,285)	(2,086,285)	(2,086,285)	(2,086,285)	(2,086,285)	(146,038)
Net Pension Liability	18,521,907,080	2,585,414,158	2,512,401,523	(14)	(73,012,649)	6.07	(12,028,443)	(12,028,443)	(12,028,443)	(12,028,443)	(12,028,443)	(12,028,443)	(841,991)
<b>Total</b>	<b>20,173,835,127</b>	<b>2,816,001,545</b>	<b>2,736,477,074</b>	<b>(14)</b>	<b>(79,524,485)</b>		<b>(13,101,233)</b>	<b>(13,101,233)</b>	<b>(13,101,233)</b>	<b>(13,101,233)</b>	<b>(13,101,233)</b>	<b>(13,101,233)</b>	<b>(917,087)</b>
<b>OTB (City)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3) - (2) + (4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.319%	Proportionate Share at 6/30/2020 0.322%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(4,983,205)	(5,026,230)		(43,025)	6.07	(7,088)	(7,088)	(7,088)	(7,088)	(7,088)	(7,088)	(497)
Deferred Inflows of Resources	3,212,550,310	10,257,958	10,346,525		88,567	6.07	14,591	14,591	14,591	14,591	14,591	14,591	1,021
Net Pension Liability	18,521,907,080	59,142,093	59,652,722	(1)	510,628	6.07	84,123	84,123	84,123	84,123	84,123	84,123	5,890
<b>Total</b>	<b>20,173,835,127</b>	<b>64,416,846</b>	<b>64,973,017</b>	<b>(1)</b>	<b>556,170</b>		<b>91,626</b>	<b>91,626</b>	<b>91,626</b>	<b>91,626</b>	<b>91,626</b>	<b>91,626</b>	<b>6,414</b>
<b>OTB (State)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3) - (2) + (4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.319%	Proportionate Share at 6/30/2020 0.368%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(4,983,205)	(5,749,592)		(766,387)	6.07	(126,258)	(126,258)	(126,258)	(126,258)	(126,258)	(126,258)	(8,839)
Deferred Inflows of Resources	3,212,550,310	10,257,958	11,835,569		1,577,611	6.07	259,903	259,903	259,903	259,903	259,903	259,903	18,193
Net Pension Liability	18,521,907,080	59,142,093	68,237,785	(2)	9,095,690	6.07	1,498,466	1,498,466	1,498,466	1,498,466	1,498,466	1,498,466	104,894
<b>Total</b>	<b>20,173,835,127</b>	<b>64,416,846</b>	<b>74,323,762</b>	<b>(2)</b>	<b>9,906,914</b>		<b>1,632,111</b>	<b>1,632,111</b>	<b>1,632,111</b>	<b>1,632,111</b>	<b>1,632,111</b>	<b>1,632,111</b>	<b>114,248</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**  
**Changes in Proportionate Share at 6/30/2020**

HDC/REMIC	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.054%	Proportionate Share at 6/30/2020 0.057%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(846,704)	(882,638)		(35,934)	6.07	(5,920)	(5,920)	(5,920)	(5,920)	(5,920)	(5,920)	(414)
Deferred Inflows of Resources	3,212,550,310	1,742,946	1,816,916		73,970	6.07	12,186	12,186	12,186	12,186	12,186	12,186	854
Net Pension Liability	18,521,907,080	10,048,927	10,475,401	1	426,475	6.07	70,259	70,259	70,259	70,259	70,259	70,259	4,921
<b>Total</b>	<b>20,173,835,127</b>	<b>10,945,169</b>	<b>11,409,679</b>	<b>1</b>	<b>464,511</b>		<b>76,525</b>	<b>76,525</b>	<b>76,525</b>	<b>76,525</b>	<b>76,525</b>	<b>76,525</b>	<b>5,361</b>
<b>State Courts</b>													
	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.037%	Proportionate Share at 6/30/2020 0.039%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(573,503)	(613,798)		(40,295)	6.07	(6,638)	(6,638)	(6,638)	(6,638)	(6,638)	(6,638)	(467)
Deferred Inflows of Resources	3,212,550,310	1,180,560	1,263,508		82,948	6.07	13,665	13,665	13,665	13,665	13,665	13,665	958
Net Pension Liability	18,521,907,080	6,806,497	7,284,733	0	478,236	6.07	78,787	78,787	78,787	78,787	78,787	78,787	5,514
<b>Total</b>	<b>20,173,835,127</b>	<b>7,413,554</b>	<b>7,934,443</b>	<b>0</b>	<b>520,889</b>		<b>85,814</b>	<b>85,814</b>	<b>85,814</b>	<b>85,814</b>	<b>85,814</b>	<b>85,814</b>	<b>6,005</b>
<b>SCA</b>													
	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.082%	Proportionate Share at 6/30/2020 0.088%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(1,275,442)	(1,379,924)		(104,482)	6.07	(17,213)	(17,213)	(17,213)	(17,213)	(17,213)	(17,213)	(1,204)
Deferred Inflows of Resources	3,212,550,310	2,625,504	2,840,582		215,078	6.07	35,433	35,433	35,433	35,433	35,433	35,433	2,480
Net Pension Liability	18,521,907,080	15,137,301	16,377,330	0	1,240,029	6.07	204,288	204,288	204,288	204,288	204,288	204,288	14,301
<b>Total</b>	<b>20,173,835,127</b>	<b>16,487,363</b>	<b>17,837,988</b>	<b>0</b>	<b>1,350,625</b>		<b>222,508</b>	<b>222,508</b>	<b>222,508</b>	<b>222,508</b>	<b>222,508</b>	<b>222,508</b>	<b>15,577</b>
<b>WFA</b>													
	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.002%	Proportionate Share at 6/30/2020 0.002%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(33,134)	(31,268)		1,866	6.07	307	307	307	307	307	307	24
Deferred Inflows of Resources	3,212,550,310	68,206	64,365		(3,841)	6.07	(633)	(633)	(633)	(633)	(633)	(633)	(43)
Net Pension Liability	18,521,907,080	393,239	371,093	1	(22,145)	6.07	(3,648)	(3,648)	(3,648)	(3,648)	(3,648)	(3,648)	(257)
<b>Total</b>	<b>20,173,835,127</b>	<b>428,311</b>	<b>404,190</b>	<b>1</b>	<b>(24,120)</b>		<b>(3,974)</b>	<b>(3,974)</b>	<b>(3,974)</b>	<b>(3,974)</b>	<b>(3,974)</b>	<b>(3,974)</b>	<b>(276)</b>
<b>Senior College</b>													
	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 1.226%	Proportionate Share at 6/30/2020 1.240%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(19,138,509)	(19,358,393)		(219,884)	6.07	(36,225)	(36,225)	(36,225)	(36,225)	(36,225)	(36,225)	(2,534)
Deferred Inflows of Resources	3,212,550,310	39,396,736	39,849,368		452,632	6.07	74,569	74,569	74,569	74,569	74,569	74,569	5,218
Net Pension Liability	18,521,907,080	227,141,247	229,750,892	(3)	2,609,642	6.07	429,925	429,925	429,925	429,925	429,925	429,925	30,092
<b>Total</b>	<b>20,173,835,127</b>	<b>247,399,474</b>	<b>250,241,867</b>	<b>(3)</b>	<b>2,842,390</b>		<b>468,269</b>	<b>468,269</b>	<b>468,269</b>	<b>468,269</b>	<b>468,269</b>	<b>468,269</b>	<b>32,776</b>
<b>TBTA</b>													
	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 1.222%	Proportionate Share at 6/30/2020 1.212%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(19,066,545)	(18,919,601)		146,944	6.07	24,208	24,208	24,208	24,208	24,208	24,208	1,696
Deferred Inflows of Resources	3,212,550,310	39,248,597	38,946,112		(302,485)	6.07	(49,833)	(49,833)	(49,833)	(49,833)	(49,833)	(49,833)	(3,487)
Net Pension Liability	18,521,907,080	226,287,152	224,543,184	0	(1,743,968)	6.07	(287,309)	(287,309)	(287,309)	(287,309)	(287,309)	(287,309)	(20,114)
<b>Total</b>	<b>20,173,835,127</b>	<b>246,469,204</b>	<b>244,569,695</b>	<b>0</b>	<b>(1,899,509)</b>		<b>(312,934)</b>	<b>(312,934)</b>	<b>(312,934)</b>	<b>(312,934)</b>	<b>(312,934)</b>	<b>(312,934)</b>	<b>(21,905)</b>

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**  
**Changes in Proportionate Share at 6/30/2020**

City Other	(1)	(2)	(3)	(4)	(3) - (2) + (4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 54.360%	Proportionate Share at 6/30/2020 54.879%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(848,352,729)	(856,453,147)		(8,100,418)	6.07	(1,334,501)	(1,334,501)	(1,334,501)	(1,334,501)	(1,334,501)	(1,334,501)	(93,412)
Deferred Inflows of Resources	3,212,550,310	1,746,339,192	1,763,013,951		16,674,761	6.07	2,747,077	2,747,077	2,747,077	2,747,077	2,747,077	2,747,077	192,299
Net Pension Liability	18,521,907,080	10,068,490,489	10,164,628,544	43	96,138,098	6.07	15,838,237	15,838,237	15,838,237	15,838,237	15,838,237	15,838,237	1,108,676
<b>Total</b>	<b>20,173,835,127</b>	<b>10,966,476,952</b>	<b>11,071,189,348</b>	<b>43</b>	<b>104,712,441</b>		<b>17,250,813</b>	<b>17,250,813</b>	<b>17,250,813</b>	<b>17,250,813</b>	<b>17,250,813</b>	<b>17,250,813</b>	<b>1,207,563</b>
<b>Subtotal City</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3) - (2) + (4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>						
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 55.471%	Proportionate Share at 6/30/2020 55.976%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026
Deferred Outflows of Resources	(1,560,622,264)	(865,697,412)	(873,570,710)		(7,873,298)	6.07	(1,297,084)	(1,297,084)	(1,297,084)	(1,297,084)	(1,297,084)	(1,297,084)	(90,794)
Deferred Inflows of Resources	3,212,550,310	1,782,043,325	1,798,250,557		16,207,232	6.07	2,670,055	2,670,055	2,670,055	2,670,055	2,670,055	2,670,055	186,902
Net Pension Liability	18,521,907,080	10,274,342,094	10,367,784,626	43	93,442,575	6.07	15,394,164	15,394,164	15,394,164	15,394,164	15,394,164	15,394,164	1,077,591
<b>Total</b>	<b>20,173,835,127</b>	<b>11,190,688,007</b>	<b>11,292,464,473</b>	<b>43</b>	<b>101,776,509</b>		<b>16,767,135</b>	<b>16,767,135</b>	<b>16,767,135</b>	<b>16,767,135</b>	<b>16,767,135</b>	<b>16,767,135</b>	<b>1,173,699</b>



NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Components of Pension Expense for the Fiscal Year Ending June 30, 2019

<u>Component</u>	<u>Transit Authority</u>	<u>TA TP</u>	<u>Housing Authority</u>	<u>HHC</u>	<u>OTB (City)</u>
a. Service Cost <sup>1</sup>	\$ 625,815,217	\$ 19,534,359	\$ 90,147,115	\$ 385,655,812	\$ 8,334,639
b. Interest on the Total Pension Liability	1,358,985,405	41,483,865	259,205,505	815,164,326	18,647,118
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences between Expected and Actual Experience	(26,340,534)	(804,061)	(5,024,050)	(15,799,922)	(361,428)
e. Changes of Assumptions	24,357,037	743,514	4,645,729	14,610,155	334,211
f. Employee Contributions	(127,479,874)	(3,891,402)	(24,314,820)	(76,466,639)	(1,749,196)
g. Projected Earnings on Pension Plan Investments	(1,060,758,887)	(32,380,317)	(202,323,397)	(636,278,212)	(14,555,047)
h. Differences between Projected and Actual Earnings on Plan Investments	65,186,421	1,989,856	12,433,304	39,100,968	894,446
i. Pension Plan Administrative Expenses	19,099,164	583,014	3,642,871	11,456,309	262,067
j. Other Changes in Fiduciary Net Position <sup>2</sup>	1,515,171	46,252	288,995	908,850	20,790
k. Changes in Proportionate Share	34,678,279	1,757,023	(20,857,629)	(11,320,279)	3,036,786
<b>Total Pension Expense</b>	<b>\$ 915,057,399</b>	<b>\$ 29,062,103</b>	<b>\$ 117,843,623</b>	<b>\$ 527,031,368</b>	<b>\$ 14,864,386</b>

<u>Component</u>	<u>OTB (State)</u>	<u>HDC/REMIC</u>	<u>State Courts</u>	<u>SCA</u>	<u>WEA</u>
a. Service Cost <sup>1</sup>	\$ 8,334,640	\$ 1,101,900	\$ 1,025,357	\$ 1,999,859	\$ 63,120
b. Interest on the Total Pension Liability	18,647,119	3,168,361	2,146,044	4,772,693	123,986
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences between Expected and Actual Experience	(361,428)	(61,411)	(41,596)	(92,507)	(2,403)
e. Changes of Assumptions	334,212	56,786	38,463	85,541	2,222
f. Employee Contributions	(1,749,197)	(297,209)	(201,310)	(447,703)	(11,630)
g. Projected Earnings on Pension Plan Investments	(14,555,047)	(2,473,071)	(1,675,099)	(3,725,335)	(96,777)
h. Differences between Projected and Actual Earnings on Plan Investments	894,446	151,977	102,939	228,932	5,947
i. Pension Plan Administrative Expenses	262,066	44,528	30,160	67,075	1,742
j. Other Changes in Fiduciary Net Position <sup>2</sup>	20,790	3,532	2,393	5,321	138
k. Changes in Proportionate Share	3,036,786	43,013	205,548	1,126,975	(101,847)
<b>Total Pension Expense</b>	<b>\$ 14,864,387</b>	<b>\$ 1,738,406</b>	<b>\$ 1,632,899</b>	<b>\$ 4,020,851</b>	<b>\$ (15,502)</b>

<u>Component</u>	<u>Senior Colleges</u>	<u>TBTA</u>	<u>City Other</u>	<u>Subtotal City</u>	<u>Total</u>
a. Service Cost <sup>1</sup>	\$ 33,930,842	\$ 32,667,187	\$ 1,104,045,612	\$ 1,133,914,469	\$ 2,312,655,659
b. Interest on the Total Pension Liability	71,616,163	71,346,872	3,174,529,791	3,239,433,467	5,839,837,248
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences between Expected and Actual Experience	(1,388,100)	(1,382,881)	(61,530,319)	(62,788,315)	(113,190,640)
e. Changes of Assumptions	1,283,573	1,278,747	56,896,960	58,060,226	104,667,150
f. Employee Contributions	(6,717,967)	(6,692,706)	(297,787,347)	(303,875,648)	(547,807,000)
g. Projected Earnings on Pension Plan Investments	(55,900,145)	(55,689,950)	(2,477,885,841)	(2,528,546,540)	(4,558,297,125)
h. Differences between Projected and Actual Earnings on Plan Investments	3,435,211	3,422,294	152,272,593	155,385,827	280,119,334
i. Pension Plan Administrative Expenses	1,006,493	1,002,708	44,614,803	45,526,959	82,073,000
j. Other Changes in Fiduciary Net Position <sup>2</sup>	79,847	79,547	3,539,374	3,611,737	6,511,000
k. Changes in Proportionate Share	(346,815)	(134,657)	(11,123,183)	(5,202,399)	0
<b>Total Pension Expense</b>	<b>\$ 46,999,102</b>	<b>\$ 45,897,161</b>	<b>\$ 1,687,572,443</b>	<b>\$ 1,735,519,783</b>	<b>\$ 3,406,568,626</b>

<sup>1</sup> Includes adjustment for census data fix for those obligors that did not recognize the liabilities in their pension expense last year. Housing Regular, Housing Police, HDC and City already recognized this liability in Fiscal Year 2018.

<sup>2</sup> Includes Payments to Other Retirement Systems.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Components of Pension Expense for the Fiscal Year Ending June 30, 2020

<u>Component</u>	<u>Transit Authority</u>	<u>TA TP</u>	<u>Housing Authority</u>	<u>HHC</u>	<u>OTB (City)</u>
a. Service Cost	\$ 472,893,833	\$ 13,985,848	\$ 88,302,162	\$ 276,403,388	\$ 6,562,731
b. Interest on the Total Pension Liability	1,412,403,219	41,771,863	263,734,159	825,540,551	19,601,063
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences between Expected and Actual Experience	32,736,348	968,178	6,112,768	19,134,184	454,309
e. Changes of Assumptions	(34,656,066)	(1,024,954)	(6,471,232)	(20,256,247)	(480,950)
f. Employee Contributions	(130,864,044)	(3,870,308)	(24,435,882)	(76,489,188)	(1,816,106)
g. Projected Earnings on Pension Plan Investments	(1,112,014,488)	(32,887,858)	(207,643,399)	(649,965,279)	(15,432,326)
h. Differences between Projected and Actual Earnings on Plan Investments	53,740,217	1,589,368	10,034,763	31,410,810	745,797
i. Pension Plan Administrative Expenses	18,024,373	533,071	3,365,641	10,535,129	250,139
j. Other Changes in Fiduciary Net Position <sup>1</sup>	1,339,058	39,603	250,039	782,671	18,583
k. Changes in Proportionate Share	35,915,831	696,101	(22,707,863)	(41,063,013)	376,754
<b>Total Pension Expense</b>	<b>\$ 749,518,281</b>	<b>\$ 21,800,912</b>	<b>\$ 110,541,156</b>	<b>\$ 376,033,006</b>	<b>\$ 10,279,994</b>

<u>Component</u>	<u>OTB (State)</u>	<u>HDC/REMIC</u>	<u>State Courts</u>	<u>SCA</u>	<u>WEA</u>
a. Service Cost	\$ 7,507,222	\$ 1,152,458	\$ 801,434	\$ 1,801,762	\$ 40,826
b. Interest on the Total Pension Liability	22,421,997	3,442,072	2,393,663	5,381,365	121,936
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences between Expected and Actual Experience	519,692	79,780	55,480	124,728	2,826
e. Changes of Assumptions	(550,167)	(84,458)	(58,733)	(132,042)	(2,992)
f. Employee Contributions	(2,077,476)	(318,920)	(221,781)	(498,602)	(11,298)
g. Projected Earnings on Pension Plan Investments	(17,653,305)	(2,710,015)	(1,884,581)	(4,236,861)	(96,003)
h. Differences between Projected and Actual Earnings on Plan Investments	853,130	130,967	91,076	204,754	4,640
i. Pension Plan Administrative Expenses	286,138	43,926	30,547	68,674	1,556
j. Other Changes in Fiduciary Net Position <sup>1</sup>	21,258	3,263	2,269	5,102	116
k. Changes in Proportionate Share	1,917,240	119,538	313,288	1,064,450	(105,821)
<b>Total Pension Expense</b>	<b>\$ 13,245,729</b>	<b>\$ 1,858,611</b>	<b>\$ 1,522,662</b>	<b>\$ 3,783,330</b>	<b>\$ (44,214)</b>

<u>Component</u>	<u>Senior Colleges</u>	<u>TBTA</u>	<u>City Other</u>	<u>Subtotal City</u>	<u>Total</u>
a. Service Cost	\$ 25,276,185	\$ 24,703,256	\$ 1,118,267,817	\$ 1,140,618,158	\$ 2,037,698,922
b. Interest on the Total Pension Liability	75,492,980	73,781,799	3,339,956,997	3,406,711,288	6,086,043,664
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences between Expected and Actual Experience	1,749,758	1,710,097	77,412,735	78,959,950	141,060,883
e. Changes of Assumptions	(1,852,367)	(1,810,380)	(81,952,356)	(83,590,302)	(149,332,944)
f. Employee Contributions	(6,994,686)	(6,836,139)	(309,458,570)	(315,643,586)	(563,893,000)
g. Projected Earnings on Pension Plan Investments	(59,437,196)	(58,089,948)	(2,629,617,747)	(2,682,174,792)	(4,791,669,006)
h. Differences between Projected and Actual Earnings on Plan Investments	2,872,416	2,807,307	127,081,282	129,621,201	231,566,527
i. Pension Plan Administrative Expenses	963,403	941,566	42,622,837	43,474,721	77,667,000
j. Other Changes in Fiduciary Net Position <sup>1</sup>	71,573	69,950	3,166,515	3,229,803	5,770,000
k. Changes in Proportionate Share	(448,608)	(1,785,052)	25,707,155	27,844,460	0
<b>Total Pension Expense</b>	<b>\$ 37,693,458</b>	<b>\$ 35,492,456</b>	<b>\$ 1,713,186,665</b>	<b>\$ 1,749,050,901</b>	<b>\$ 3,074,912,046</b>

<sup>1</sup> Includes Payments to Other Retirement Systems.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Pension Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

	Fiscal Year Ending June 30, 2015		Fiscal Year Ending June 30, 2016		Fiscal Year Ending June 30, 2017		Fiscal Year Ending June 30, 2018		Fiscal Year Ending June 30, 2019		Fiscal Year Ending June 30, 2020	
	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows
<b>Recognized Pension Expense</b>	<b>\$2,091,781,278</b>		<b>\$3,119,301,482</b>		<b>\$2,594,641,564</b>		<b>\$2,293,484,210</b>		<b>\$3,406,568,626</b>		<b>\$3,074,912,046</b>	
<b>Deferred Resources</b>												
Differences between Expected and Actual Experience	\$ 0	\$ 202,961,062	\$ 0	\$ 572,334,258	\$ 0	\$ 195,708,584	\$ 0	\$ 1,469,280,196	\$ 1,548,790,552	\$ 0	\$ 878,079,915	\$ 0
Changes of Assumptions	0	0	1,793,394,596	0	0	0	14,782,263	0	0	776,645,823	0	0
Net Difference between Projected and Actual Earnings on Pension Plan Investments	2,099,773,673	0	2,127,274,784	0	0	2,499,281,170	0	703,343,622	96,053,701	0	1,905,562,405	0
<b>Total</b>	\$ 2,099,773,673	\$ 202,961,062	\$ 3,920,669,380	\$ 572,334,258	\$ 0	\$ 2,694,989,754	\$ 14,782,263	\$ 2,172,623,818	\$ 1,644,844,253	\$ 776,645,823	\$ 2,783,642,320	\$ 0

Reported amounts will be recognized in Pension Expense during Fiscal Year Ending June 30

2015	\$439,305,840											
2016	\$439,305,840		\$1,055,878,925									
2017	\$439,305,840		\$1,055,878,925		(\$667,365,638)							
2018	\$493,257,515		\$1,055,878,925		(\$667,365,638)		(\$466,154,855)					
2019	\$524,943,416		\$704,758,570		(\$667,365,638)		(\$466,154,855)		\$175,414,351			
2020			\$531,818,702		(\$667,365,638)		(\$466,154,855)		\$175,414,351			\$649,581,906
2021					(\$667,365,632)		(\$466,154,855)		\$175,414,351			\$649,581,906
2022					(\$25,527,208)		(\$466,154,853)		\$175,414,351			\$649,581,906
2023							(\$290,318,949)		\$175,414,356			\$649,581,906
2024							(\$2,903,188)		\$151,400,927			\$649,581,907
2025									\$15,140,094			\$173,191,305
2026												\$12,123,390

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

For the Fiscal Year ending June 30, 2020, the Obligors recognized Pension Expense for NYCERS of \$3,074,912,046.

At June 30, 2020, the Obligors reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for NYCERS from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 2,123,186,045	\$ 950,813,748
Changes of Assumptions	8,881,161	624,362,328
Net Difference between Projected and Actual Earnings on Pension Plan Investments	<u>1,001,110,584</u>	<u>0</u>
Total	\$ 3,133,177,790	\$ 1,575,176,076

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions for NYCERS will be recognized in Pension Expense as follows:

Fiscal Year Ending <u>June 30</u>	<u>Amount</u>
2020	\$ 223,294,466
2021	(308,524,230)
2022	333,314,196
2023	534,677,313
2024	798,079,646
2025	188,331,399
2026	12,123,390

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Pension Amounts by Employer  
As of and for the year ending June 30, 2019**

Entity*	Deferred Outflows of Resources					Deferred Inflows of Resources					Pension Expense			
	Net Pension Liability	Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Transit Authority	\$ 4,310,223,097	\$ 360,418,222	\$ 2,753,352	\$ 0	\$ 163,385,444	\$ 526,557,018	\$ 299,410,652	\$ 180,732,834	\$ 267,447,379	\$ 14,202,891	\$ 761,793,756	\$ 880,379,120	\$ 34,678,279	\$ 915,057,399
TA TP	131,572,211	11,001,988	84,048	0	4,062,267	15,148,303	9,139,694	5,516,981	8,163,996	896,696	23,717,367	27,305,080	1,757,023	\$ 29,062,103
Housing Authority	822,108,574	68,744,216	525,159	0	(94,485,064)	(25,215,689)	57,107,964	34,472,001	51,011,463	(2,216,631)	140,374,797	138,701,252	(20,857,629)	\$ 117,843,623
HHC	2,585,414,159	216,190,752	1,651,551	0	(152,331,736)	65,510,567	179,596,397	108,409,523	160,423,771	(812,120)	447,617,571	538,351,647	(11,320,279)	\$ 527,031,368
OTB (City)	59,142,093	4,945,425	37,780	0	3,806,085	8,789,290	4,108,319	2,479,899	3,669,740	(661,842)	9,596,116	11,827,600	3,036,786	\$ 14,864,386
OTB (State)	59,142,093	4,945,426	37,779	0	3,806,085	8,789,290	4,108,319	2,479,899	3,669,740	(661,842)	9,596,116	11,827,601	3,036,786	\$ 14,864,387
HDC/REMIC	10,048,926	840,285	6,419	0	289,722	1,136,426	698,051	421,364	623,531	(6,347)	1,736,599	1,695,393	43,013	\$ 1,738,406
State Courts	6,806,497	569,155	4,348	0	632,178	1,205,681	472,815	285,405	422,340	152,170	1,332,730	1,427,351	205,548	\$ 1,632,899
SCA	15,137,301	1,265,772	9,670	0	5,132,390	6,407,832	1,051,516	634,725	939,263	(243,123)	2,382,381	2,893,876	1,126,975	\$ 4,020,851
WFA	393,239	32,882	251	0	(417,710)	(384,577)	27,316	16,489	24,400	(34,317)	33,888	86,345	(101,847)	\$ (15,502)
Senior Colleges	227,141,248	18,993,412	145,097	0	(4,172,751)	14,965,758	15,778,420	9,524,305	14,094,011	(1,174,541)	38,222,195	47,345,917	(346,815)	\$ 46,999,102
TBTA	226,287,151	18,921,993	144,551	0	(5,566,007)	13,500,537	15,719,090	9,488,492	14,041,015	176,529	39,425,126	46,031,818	(134,657)	\$ 45,897,161
City Other	10,068,490,491	841,921,024	6,431,707	0	75,859,097	924,211,828	699,410,039	422,183,906	624,745,246	(9,617,523)	1,736,721,668	1,698,695,626	(11,123,183)	\$ 1,687,572,443
Subtotal City	10,274,342,096	859,134,209	6,563,205	0	88,859,839	954,557,253	713,709,568	430,815,511	637,518,245	(9,625,792)	1,772,417,532	1,740,722,182	(5,202,399)	1,735,519,783
Total	\$ 18,521,907,080	\$ 1,548,790,552	\$ 11,831,712	\$ 0	\$ 0	\$ 1,560,622,264	\$ 1,286,628,592	\$ 776,645,823	\$ 1,149,275,895	\$ 0	\$ 3,212,550,310	\$ 3,406,568,626	\$ 0	\$ 3,406,568,626

\* Transit Authority - Transit Operating, Transit Non-Operating, and Transit Capital Project Engineers  
 TA TP - Transit Authority Transit Police  
 Housing Authority - Regular, and Housing Police  
 HHC - Health and Hospitals Corporation  
 OTB (City) - Off-Track Betting (City)  
 OTB (State) - Off-Track Betting (State)  
 HDC/REMIC - Housing Development Corporation / REMIC  
 State Courts - State Courts  
 SCA - School Construction Authority  
 WFA - Water Finance Authority  
 Senior Colleges - Senior Colleges  
 TBTA - Triborough Bridge and Tunnel Authority  
 City Other - City of New York  
 Subtotal City - City Other, Transit Authority Transit Police, School Construction Authority, and Off-Track Betting (City)

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Pension Amounts by Employer  
As of and for the year ending June 30, 2020**

Entity*	Deferred Outflows of Resources					Deferred Inflows of Resources					Pension Expense			
	Net Pension Liability	Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Transit Authority	\$ 4,891,900,010	\$ 492,733,041	\$ 2,061,073	\$ 232,330,211	\$ 108,400,180	\$ 835,524,505	\$ 220,657,700	\$ 144,897,311	\$ 0	\$ 7,984,014	\$ 373,539,025	\$ 713,602,450	\$ 35,915,831	\$ 749,518,281
TA TP	144,678,075	14,572,593	60,956	6,871,172	(2,100,765)	19,403,956	6,525,957	4,285,342	0	272,490	11,083,789	21,104,811	696,101	21,800,912
Housing Authority	913,451,001	92,006,682	384,858	43,382,380	(93,778,258)	41,995,662	41,202,804	27,056,275	0	(3,005,143)	65,253,936	133,249,019	(22,707,863)	110,541,156
HHC	2,859,283,931	287,999,277	1,204,684	135,795,507	(195,853,126)	229,146,342	128,972,999	84,691,542	0	(5,872,038)	207,792,503	417,096,019	(41,063,013)	376,033,006
OTB (City)	67,888,858	6,838,055	28,603	3,224,234	4,290,494	14,381,386	3,062,246	2,010,857	0	(356,849)	4,716,254	9,903,240	376,754	10,279,994
OTB (State)	77,659,243	7,822,170	32,720	3,688,258	12,704,945	24,248,093	3,502,956	2,300,255	0	247,343	6,050,554	11,328,489	1,917,240	13,245,729
HDC/REMIC	11,921,719	1,200,806	5,023	566,196	666,682	2,438,707	537,750	353,119	0	25,640	916,509	1,739,073	119,538	1,858,611
State Courts	8,290,522	835,057	3,493	393,740	817,725	2,050,015	373,958	245,564	0	130,116	749,638	1,209,374	313,288	1,522,662
SCA	18,638,516	1,877,351	7,853	885,196	5,622,022	8,392,422	840,723	552,070	0	(39,666)	1,353,127	2,718,880	1,064,450	3,783,330
WFA	422,330	42,539	178	20,058	(325,666)	(262,891)	19,050	12,509	0	(23,974)	7,585	61,607	(105,821)	(44,214)
Senior Colleges	261,472,152	26,336,591	110,164	12,418,054	(141,201)	38,723,608	11,794,158	7,744,764	0	(433,989)	19,104,933	38,142,066	(448,608)	37,693,458
TBTA	255,545,427	25,739,626	107,667	12,136,577	(5,984,157)	31,999,713	11,526,823	7,569,215	0	(127,164)	18,968,874	37,277,508	(1,785,052)	35,492,456
City Other	11,568,039,102	1,165,182,257	4,873,889	549,399,001	165,681,126	1,885,136,273	521,796,624	342,643,505	0	1,199,220	865,639,349	1,687,479,510	25,707,155	1,713,186,665
Subtotal City	11,799,244,551	1,188,470,256	4,971,301	560,379,603	173,492,877	1,927,314,037	532,225,550	349,491,774	0	1,075,195	882,792,519	1,721,206,441	27,844,460	1,749,050,901
Total	\$ 21,079,190,886	\$ 2,123,186,045	\$ 8,881,161	\$ 1,001,110,584	\$ 0	\$ 3,133,177,790	\$ 950,813,748	\$ 624,362,328	\$ 0	\$ 0	\$ 1,575,176,076	\$ 3,074,912,046	\$ 0	\$ 3,074,912,046

\* Transit Authority - Transit Operating, Transit Non-Operating, and Transit Capital Project Engineers  
 TA TP - Transit Authority Transit Police  
 Housing Authority - Regular, and Housing Police  
 HHC - Health and Hospitals Corporation  
 OTB (City) - Off-Track Betting (City)  
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 Senior Colleges - Senior Colleges  
 TBTA - Triborough Bridge and Tunnel Authority  
 City Other - City of New York  
 Subtotal City - City Other, Transit Authority Transit Police, School Construction Authority, and Off-Track Betting (City)

**NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM (NYCERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Collective Pension Amounts  
As of and for the year ending June 30, 2020**

<b>Deferred Outflows of Resources</b>					<b>Deferred Inflows of Resources</b>				
<b>Net Pension Liability</b>	<b>Differences Between Expected and Actual Experience</b>	<b>Change of Assumptions</b>	<b>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</b>	<b>Total Deferred Outflows of Resources Excluding Employer Specific Amounts</b>	<b>Differences Between Expected and Actual Experience</b>	<b>Change of Assumptions</b>	<b>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</b>	<b>Total Deferred Inflows of Resources Excluding Employer Specific Amounts</b>	<b>Plan Pension Expense</b>
\$ 21,079,190,886	\$ 2,123,186,045	\$ 8,881,161	\$ 1,001,110,584	\$ 3,133,177,790	\$ 950,813,748	\$ 624,362,328	\$ 0	\$ 1,575,176,076	\$ 3,074,912,046

# Appendix B



## APPENDIX B

### NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

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## NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

## Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Statement of Fiduciary Net Position - QPP Only  
June 30, 2020 and June 30, 2019

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 48,488	\$ 76,796
Receivables:		
Investment securities sold	1,889,299	2,305,855
Member loans	323,805	320,976
Accrued interest and dividends	289,845	290,228
Total receivables	\$ 2,502,949	\$ 2,917,059
Investments - at fair value		
Pooled NYC Pension Fund Assets:		
Short-term investments:		
Short-term investment fund	747,639	779,479
Commercial paper	381,195	567,394
Discount notes	0	203,555
U.S. Treasury bills and agencies	2,149,709	100,011
Debt securities:		
U.S. Government	9,911,190	11,074,088
Corporate	14,707,801	11,914,295
Treasury inflation protected securities	3,126,355	3,387,131
Equities:		
Domestic	25,363,162	24,374,505
International equity	14,990,424	15,224,013
Alternative Investments	10,765,147	10,069,086
Diversified Equity Fund:		
Short-term investments	119,761	123,852
Equity Securities	5,366,777	5,826,298
Corporate Bonds	129,398	120,152
Bond Fund:		
Short-term investments	1,086	775
Equity Securities	57,937	62,502
International Equity Fund:		
Short-term investments	104	65
Equity Securities	9,422	11,131
Inflation Protection Fund:		
Short-term investments	0	13
Equity Securities	0	3,930
Socially Responsive Equity Fund:		
Short-term investments	315	410
Equity Securities	12,691	10,975
International - equity	0	985
U.S. Equity Index Fund:		
Equity Securities	2,568	0
International Equity Index Fund:		
Equity Securities	59	0
Collateral from securities lending (Fixed and Variable-Return Funds)	1,391,240	1,222,314
Total Investments	\$ 89,233,980	\$ 85,076,959
Other assets	63,899	42,615
Total assets	\$ 91,849,316	\$ 88,113,429
<b>LIABILITIES</b>		
Accounts payable	299,648	646,918
Payables for investment securities purchased	3,096,888	2,574,584
Accrued benefits payable	88,957	77,154
Due to TDA Program	27,653,633	25,602,248
Securities lending	1,391,240	1,222,314
Total liabilities	\$ 32,530,366	\$ 30,123,218
<b>Plan Net Position Held in Trust for Benefits</b>	\$ 59,318,950	\$ 57,990,211

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Statement of Changes in Fiduciary Net Position - QPP Only  
June 30, 2020 and June 30, 2019  
(Dollar amounts in thousands)

	June 30, 2020		June 30, 2019	
	Fixed	Variable	Fixed	Variable
<b>ADDITIONS</b>				
Contributions:				
Member Contributions	\$ 226,673	\$ 247	\$ 216,875	\$ 330
Employer Contributions	3,590,822	0	3,696,686	0
Other Employer Contributions <sup>1</sup>	61,734	14	62,495	18
<i>Total contributions</i>	<u>\$ 3,879,229</u>	<u>\$ 261</u>	<u>\$ 3,976,056</u>	<u>\$ 348</u>
Investment income:				
Interest income	1,091,255	2,885	1,144,517	4,272
Dividend income	996,781	128,399	964,931	147,800
Net appreciation (depreciation) in fair value	1,949,874	22,354	3,478,612	270,483
<i>Total investment income</i>	<u>\$ 4,037,910</u>	<u>\$ 153,638</u>	<u>\$ 5,588,060</u>	<u>\$ 422,555</u>
Less:				
Investment expenses	288,080	2,791	299,763	1,674
<i>Net income</i>	<u>3,749,830</u>	<u>150,847</u>	<u>5,288,297</u>	<u>420,881</u>
Securities lending transactions:				
Securities lending income	11,038	847	12,452	964
Securities lending fees	(1,291)	(84)	(1,188)	(96)
<i>Net securities lending income</i>	<u>9,747</u>	<u>763</u>	<u>11,264</u>	<u>868</u>
<i>Net investment income</i>	<u>3,759,577</u>	<u>151,610</u>	<u>5,299,561</u>	<u>421,749</u>
Other:				
Net receipts from/(to) other retirement systems	(2,798)	0	1,222	0
Transfers between Funds	7,201	(7,201)	127,717	(127,717)
Litigation income	0	0	0	0
<i>Total Other</i>	<u>4,403</u>	<u>(7,201)</u>	<u>128,939</u>	<u>(127,717)</u>
<i>Total additions</i>	<u>\$ 7,643,209</u>	<u>\$ 144,670</u>	<u>\$ 9,404,556</u>	<u>\$ 294,380</u>
<b>DEDUCTIONS</b>				
Benefit payments and withdrawals	4,005,502	585,584	3,888,293	599,387
Interest to TDA Fixed Funds	1,846,173	0	1,716,679	0
TDA Rebalance	(42,651)	0	(27,449)	0
Administrative expenses	51,059	13,473	50,184	14,107
<i>Total deductions</i>	<u>\$ 5,860,083</u>	<u>\$ 599,057</u>	<u>\$ 5,627,707</u>	<u>\$ 613,494</u>
<b>INCREASE IN PLAN NET POSITION</b>	<b>1,783,126</b>	<b>(454,387)</b>	<b>3,776,849</b>	<b>(319,114)</b>
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>				
Beginning of year	\$ 51,949,650	\$ 6,040,561	\$ 48,172,801	\$ 6,359,675
End of year	\$ 53,732,776	\$ 5,586,174	\$ 51,949,650	\$ 6,040,561

<sup>1</sup> Includes amounts for employer's portion of Additional Member Contributions and supplemental contributions for the ASAF and ASF Funds.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Market Values of Assets - QPP Only**

	<b>Fixed</b>	<b>Variable</b>	<b>Total</b>
<b>1. Plan Net Position @ 6/30/2018</b>	\$ 48,172,801,000	\$ 6,359,675,000	\$ 54,532,476,000
<b>2. Changes for the year:</b>			
a. ER Contributions	3,696,686,000	0	3,696,686,000
b. Other Employer Contributions <sup>1</sup>	62,495,000	18,000	62,513,000
c. EE Contributions	216,875,000	330,000	217,205,000
d. Net Investment Income	5,299,561,000	421,749,000	5,721,310,000
e. Benefit Payments	(3,888,293,000)	(599,387,000)	(4,487,680,000)
f. Payment of Interest on TDA Fixed Funds	(1,716,679,000)	0	(1,716,679,000)
g. Administrative Expenses	(50,184,000)	(14,107,000)	(64,291,000)
h. Other <sup>2</sup>	156,388,000	(127,717,000)	28,671,000
i. Net Changes	<u>3,776,849,000</u>	<u>(319,114,000)</u>	<u>3,457,735,000</u>
<b>3. Plan Net Position @ 6/30/2019</b>	<u>\$ 51,949,650,000</u>	<u>\$ 6,040,561,000</u>	<u>\$ 57,990,211,000</u>
<b>4. Changes for the year:</b>			
a. ER Contributions	3,590,822,000	0	3,590,822,000
b. Other Employer Contributions <sup>1</sup>	61,734,000	14,000	61,748,000
c. EE Contributions	226,673,000	247,000	226,920,000
d. Net Investment Income	3,759,577,000	151,610,000	3,911,187,000
e. Benefit Payments	(4,005,502,000)	(585,584,000)	(4,591,086,000)
f. Payment of Interest on TDA Fixed Funds	(1,846,173,000)	0	(1,846,173,000)
g. Administrative Expenses	(51,059,000)	(13,473,000)	(64,532,000)
h. Other <sup>2</sup>	47,054,000	(7,201,000)	39,853,000
i. Net Changes	<u>\$ 1,783,126,000</u>	<u>\$ (454,387,000)</u>	<u>\$ 1,328,739,000</u>
<b>5. Plan Net Position @ 6/30/2020</b>	<u>\$ 53,732,776,000</u>	<u>\$ 5,586,174,000</u>	<u>\$ 59,318,950,000</u>

<sup>1</sup> Includes amounts for employer's portion of Additional Member Contributions and supplemental contributions for the ASAF and ASF Funds.

<sup>2</sup> Includes TDA rebalance amount of (\$27,449,000) and (\$42,651,000) for the Fixed Fund for Fiscal Years 2019 and 2020, respectively.

## NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

#### Long-Term Expected Rate of Return

The Long-Term Expected Rate of Return (LTEROR) assumption on pension fund investments was determined using a Building-Block Method in which best-estimate ranges of Expected Real Rates of Return (i.e. Expected Returns, net of pension fund investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the LTEROR by weighting the Expected Real Rates of Return (RROR) by the Target Asset Allocation percentage and by adding Expected Inflation. The Target Asset Allocation and best estimates of Arithmetic Real Rates of Return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
<b><u>Public Markets:</u></b>		
U.S. Public Market Equities	25.0%	5.7%
Developed Public Market Equities	10.0%	7.5%
Emerging Public Market Equities	9.5%	10.2%
Fixed Income	32.5%	1.6%
<b><u>Private Markets (Alternative Investments):</u></b>		
Private Equity	7.0%	10.6%
Private Real Estate	7.0%	6.7%
Infrastructure	4.0%	5.1%
Opportunistic Fixed Income	<u>5.0%</u>	6.3%
	100.0%	

The Discount Rate used to measure the Total Pension Liability was 7.0% per annum. The projection of Cash Flows used to determine the Discount Rate assumes that employee contributions will be made at the rates applicable to the current Tier for each member and that employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the pension fund's Fiduciary Net Position is projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the Long-Term Expected Rate of Return on pension fund investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss - QPP Only  
June 30, 2019**

	Fixed	Variable	Total
<b>1. Market Value 6/30/2018</b>	\$ 48,172,801,000	\$ 6,359,675,000	\$ 54,532,476,000
<b>2. Market Value 6/30/2019</b>	51,949,650,000	6,040,561,000	57,990,211,000
<b>3. Net Investment Income</b>	5,299,561,000	421,749,000	5,721,310,000
<b>4. Cash Flow (2. - 1. - 3.)</b>	(1,522,712,000)	(740,863,000)	(2,263,575,000)
<b>5. Projected Earnings<sup>1</sup> (7% * 1. + 3.441% * 4.)</b>	3,319,699,550	421,749,000	3,741,448,550
<b>6. (Gain) / Loss (5. - 3.)</b>	(1,979,861,450)	0	(1,979,861,450)
<b>7. Recognition Period</b>	5 Years	5 Years	5 Years
<b>8. Amount Recognized in Pension Expense (6. / 7.)</b>	(395,972,290)	0	(395,972,290)
<b>9. Deferred (Inflow) / Outflow of Resources (6. - 8.)</b>	\$ (1,583,889,160)	\$ 0	\$ (1,583,889,160)

<sup>1</sup> Variable Funds Projected Earnings set equal to Variable Funds Net Investment Income.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss - QPP Only  
June 30, 2020**

	Fixed	Variable	Total
<b>1. Market Value 6/30/2019</b>	\$ 51,949,650,000	\$ 6,040,561,000	\$ 57,990,211,000
<b>2. Market Value 6/30/2020</b>	53,732,776,000	5,586,174,000	59,318,950,000
<b>3. Net Investment Income</b>	3,759,577,000	151,610,000	3,911,187,000
<b>4. Cash Flow (2. - 1. - 3.)</b>	(1,976,451,000)	(605,997,000)	(2,582,448,000)
<b>5. Projected Earnings<sup>1</sup> (7% * 1. + 3.441% * 4.)</b>	3,568,465,821	151,610,000	3,720,075,821
<b>6. (Gain) / Loss (5. - 3.)</b>	(191,111,179)	0	(191,111,179)
<b>7. Recognition Period</b>	5 Years	5 Years	5 Years
<b>8. Amount Recognized in Pension Expense (6. / 7.)</b>	(38,222,236)	0	(38,222,236)
<b>9. Deferred (Inflow) / Outflow of Resources (6. - 8.)</b>	\$ (152,888,943)	\$ 0	\$ (152,888,943)

<sup>1</sup> Variable Funds Projected Earnings set equal to Variable Funds Net Investment Income.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Roll-Forward of Entry Age Accrued Liabilities to June 30, 2020**

	<b>Fixed</b>	<b>Variable</b>	<b>Total</b>
1. Disclosed EA Accrued Liability at 6/30/2019	\$ 67,373,107,081	\$ 5,973,743,385	\$ 73,346,850,466
2. EA Normal Cost at 6/30/2019	1,555,754,951	0	1,555,754,951
3. Benefit Payments-FY2020	(4,005,502,000)	(585,584,000)	(4,591,086,000)
4. Interest <sup>1</sup>	4,687,191,018	151,610,000	4,838,801,018
5. Experience (Gain)/Loss-FY2020	(25,514,446)	(8,809,313)	(34,323,759)
6. Roll-Forward EAAL at 6/30/2020	\$ 69,585,036,604	\$ 5,530,960,072	\$ 75,115,996,676

<sup>1</sup> Interest on Variable Funds set equal to Variable Funds Net Investment Income.



**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Allocations  
June 30, 2019**

<b>Employer</b>	<b>2019 Employer Contributions</b>	<b>Employer Allocation Percentage</b>
Department of Education	\$ 3,547,597,502	95.9669802957%
CUNY Senior Colleges	95,023,058	2.5704933915%
CUNY Community Colleges	46,144,383	1.2482636747%
Charter Schools	7,920,616	0.2142626381%
Total	\$ 3,696,685,559	100.000%

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source - by Obligor  
Balances at June 30, 2019

**Total Pension Liability**

	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2018</b>	\$ 70,320,766,041	\$ 1,922,653,198	\$ 862,081,072	\$ 138,431,030	\$ 73,243,931,341
<b>2. Changes for the Year:</b>					
a. Service Cost	1,622,939,570	43,470,738	21,109,933	3,623,489	1,691,143,730
b. Interest	4,716,347,391	126,328,241	61,346,571	10,530,049	4,914,552,252
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	(1,140,324,519)	(30,543,804)	(14,832,452)	(2,545,969)	(1,188,246,744)
e. Changes of Assumptions	(793,503,084)	(21,254,128)	(10,321,270)	(1,771,631)	(826,850,113)
f. Benefit Payments	(4,306,690,981)	(115,355,518)	(56,018,079)	(9,615,422)	(4,487,680,000)
<b>g. Net Changes</b>	\$ 98,768,377	\$ 2,645,529	\$ 1,284,703	\$ 220,516	\$ 102,919,125
<b>3. SubTotal</b>	\$ 70,419,534,418	\$ 1,925,298,727	\$ 863,365,775	\$ 138,651,546	\$ 73,346,850,466
<b>4. Changes in Proportionate Share</b>	\$ (30,776,884)	\$ (39,922,783)	\$ 52,196,316	\$ 18,503,351	\$ -
<b>5. Balances at June 30, 2019</b>	\$ 70,388,757,534	\$ 1,885,375,944	\$ 915,562,091	\$ 157,154,897	\$ 73,346,850,466

**Plan Fiduciary Net Position**

	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2018</b>	\$ 52,356,084,883	\$ 1,431,477,495	\$ 641,847,243	\$ 103,066,379	\$ 54,532,476,000
<b>2. Changes for the Year:</b>					
a. Contributions - Employer	3,547,597,943	95,023,058	46,144,383	7,920,616	3,696,686,000
b. Contributions - Other Employer <sup>1</sup>	59,991,838	1,606,893	780,327	133,942	62,513,000
c. Contributions - Employee	208,445,080	5,583,240	2,711,291	465,389	217,205,000
d. Net Investment Income	5,490,568,441	147,065,895	71,417,034	12,258,630	5,721,310,000
e. Benefit Payments	(4,306,690,981)	(115,355,518)	(56,018,079)	(9,615,422)	(4,487,680,000)
f. Payment of Interest on TDA Fixed Funds	(1,647,444,998)	(44,127,120)	(21,428,680)	(3,678,202)	(1,716,679,000)
g. Administrative Expenses	(61,698,131)	(1,652,596)	(802,521)	(137,752)	(64,291,000)
h. Other Changes	27,514,693	736,986	357,890	61,431	28,671,000
<b>i. Net Changes</b>	\$ 3,318,283,885	\$ 88,880,838	\$ 43,161,645	\$ 7,408,632	\$ 3,457,735,000
<b>3. SubTotal</b>	\$ 55,674,368,768	\$ 1,520,358,333	\$ 685,008,888	\$ 110,475,011	\$ 57,990,211,000
<b>4. Changes in Proportionate Share</b>	\$ (22,914,404)	\$ (29,723,792)	\$ 38,861,851	\$ 13,776,345	\$ -
<b>5. Balances at June 30, 2019</b>	\$ 55,651,454,364	\$ 1,490,634,541	\$ 723,870,739	\$ 124,251,356	\$ 57,990,211,000

**Net Pension Liability**

	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2018</b>	\$ 17,964,681,158	\$ 491,175,703	\$ 220,233,829	\$ 35,364,651	\$ 18,711,455,341
<b>2. Changes for the Year:</b>					
a. Service Cost	1,622,939,570	43,470,738	21,109,933	3,623,489	1,691,143,730
b. Interest	4,716,347,391	126,328,241	61,346,571	10,530,049	4,914,552,252
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	(1,140,324,519)	(30,543,804)	(14,832,452)	(2,545,969)	(1,188,246,744)
e. Changes of Assumptions	(793,503,084)	(21,254,128)	(10,321,270)	(1,771,631)	(826,850,113)
f. Contributions - Employer	(3,547,597,943)	(95,023,058)	(46,144,383)	(7,920,616)	(3,696,686,000)
g. Contributions - Other Employer <sup>1</sup>	(59,991,838)	(1,606,893)	(780,327)	(133,942)	(62,513,000)
h. Contributions - Employee	(208,445,080)	(5,583,240)	(2,711,291)	(465,389)	(217,205,000)
i. Net Investment Income	(5,490,568,441)	(147,065,895)	(71,417,034)	(12,258,630)	(5,721,310,000)
j. Benefit Payments	0	0	0	0	0
k. Payment of Interest on TDA Fixed Funds	1,647,444,998	44,127,120	21,428,680	3,678,202	1,716,679,000
l. Administrative Expenses	61,698,131	1,652,596	802,521	137,752	64,291,000
m. Other Changes	(27,514,693)	(736,986)	(357,890)	(61,431)	(28,671,000)
<b>n. Net Changes</b>	\$ (3,219,515,508)	\$ (86,235,309)	\$ (41,876,942)	\$ (7,188,116)	\$ (3,354,815,875)
<b>3. SubTotal</b>	\$ 14,745,165,650	\$ 404,940,394	\$ 178,356,887	\$ 28,176,535	\$ 15,356,639,466
<b>4. Changes in Proportionate Share</b>	\$ (7,862,480)	\$ (10,198,991)	\$ 13,334,465	\$ 4,727,006	\$ -
<b>5. Balances at June 30, 2019</b>	\$ 14,737,303,170	\$ 394,741,403	\$ 191,691,352	\$ 32,903,541	\$ 15,356,639,466

<sup>1</sup> Includes amounts for employer's portion of Additional Member Contributions and supplemental contributions for the ASAF and ASF Funds.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Allocations  
June 30, 2020**

<b>Employer</b>	<b>2020 Employer Contributions</b>	<b>Employer Allocation Percentage</b>
Department of Education	\$ 3,441,459,566	95.8404466437%
CUNY Senior Colleges	95,856,030	2.6694733884%
CUNY Community Colleges	45,940,141	1.2793768306%
Charter Schools	7,565,974	0.2107031373%
Total	\$ 3,590,821,711	100.000%

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source - by Obligor  
Balances at June 30, 2020

**Total Pension Liability**

	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2019</b>	\$ 70,388,757,534	\$ 1,885,375,944	\$ 915,562,091	\$ 157,154,897	\$ 73,346,850,466
<b>2. Changes for the Year:</b>					
a. Service Cost	1,491,042,495	41,530,464	19,903,968	3,278,024	1,555,754,951
b. Interest	4,637,528,508	129,170,505	61,906,499	10,195,506	4,838,801,018
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	(32,896,044)	(916,264)	(439,130)	(72,321)	(34,323,759)
e. Changes of Assumptions	0	0	0	0	0
f. Benefit Payments	(4,400,117,328)	(122,557,819)	(58,737,291)	(9,673,562)	(4,591,086,000)
<b>g. Net Changes</b>	\$ 1,695,557,631	\$ 47,226,886	\$ 22,634,046	\$ 3,727,647	\$ 1,769,146,210
<b>3. SubTotal</b>	\$ 72,084,315,165	\$ 1,932,602,830	\$ 938,196,137	\$ 160,882,544	\$ 75,115,996,676
<b>4. Changes in Proportionate Share</b>	\$ (92,808,450)	\$ 72,598,712	\$ 22,820,520	\$ (2,610,782)	\$ -
<b>5. Balances at June 30, 2020</b>	\$ 71,991,506,715	\$ 2,005,201,542	\$ 961,016,657	\$ 158,271,762	\$ 75,115,996,676

**Plan Fiduciary Net Position**

	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2019</b>	\$ 55,651,454,364	\$ 1,490,634,541	\$ 723,870,739	\$ 124,251,356	\$ 57,990,211,000
<b>2. Changes for the Year:</b>					
a. Contributions - Employer	3,441,459,855	95,856,030	45,940,141	7,565,974	3,590,822,000
b. Contributions - Other Employer <sup>1</sup>	59,179,559	1,648,346	789,990	130,105	61,748,000
c. Contributions - Employee	217,481,141	6,057,569	2,903,162	478,128	226,920,000
d. Net Investment Income	3,748,499,090	104,408,096	50,038,820	8,240,994	3,911,187,000
e. Benefit Payments	(4,400,117,328)	(122,557,819)	(58,737,291)	(9,673,562)	(4,591,086,000)
f. Payment of Interest on TDA Fixed Funds	(1,769,380,449)	(49,283,097)	(23,619,510)	(3,889,944)	(1,846,173,000)
g. Administrative Expenses	(61,847,757)	(1,722,665)	(825,607)	(135,971)	(64,532,000)
h. Other Changes	38,195,293	1,063,865	509,870	83,972	39,853,000
<b>i. Net Changes</b>	\$ 1,273,469,404	\$ 35,470,325	\$ 16,999,575	\$ 2,799,696	\$ 1,328,739,000
<b>3. SubTotal</b>	\$ 56,924,923,768	\$ 1,526,104,866	\$ 740,870,314	\$ 127,051,052	\$ 59,318,950,000
<b>4. Changes in Proportionate Share</b>	\$ (73,377,144)	\$ 57,398,719	\$ 18,042,588	\$ (2,064,163)	\$ -
<b>5. Balances at June 30, 2020</b>	\$ 56,851,546,624	\$ 1,583,503,585	\$ 758,912,902	\$ 124,986,889	\$ 59,318,950,000

**Net Pension Liability**

	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2019</b>	\$ 14,737,303,170	\$ 394,741,403	\$ 191,691,352	\$ 32,903,541	\$ 15,356,639,466
<b>2. Changes for the Year:</b>					
a. Service Cost	1,491,042,495	41,530,464	19,903,968	3,278,024	1,555,754,951
b. Interest	4,637,528,508	129,170,505	61,906,499	10,195,506	4,838,801,018
c. Changes of Benefit Terms	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	(32,896,044)	(916,264)	(439,130)	(72,321)	(34,323,759)
e. Changes of Assumptions	0	0	0	0	0
f. Contributions - Employer	(3,441,459,855)	(95,856,030)	(45,940,141)	(7,565,974)	(3,590,822,000)
g. Contributions - Other Employer <sup>1</sup>	(59,179,559)	(1,648,346)	(789,990)	(130,105)	(61,748,000)
h. Contributions - Employee	(217,481,141)	(6,057,569)	(2,903,162)	(478,128)	(226,920,000)
i. Net Investment Income	(3,748,499,090)	(104,408,096)	(50,038,820)	(8,240,994)	(3,911,187,000)
j. Benefit Payments	0	0	0	0	0
k. Payment of Interest on TDA Fixed Funds	1,769,380,449	49,283,097	23,619,510	3,889,944	1,846,173,000
l. Administrative Expenses	61,847,757	1,722,665	825,607	135,971	64,532,000
m. Other Changes	(38,195,293)	(1,063,865)	(509,870)	(83,972)	(39,853,000)
<b>n. Net Changes</b>	\$ 422,088,227	\$ 11,756,561	\$ 5,634,471	\$ 927,951	\$ 440,407,210
<b>3. SubTotal</b>	\$ 15,159,391,397	\$ 406,497,964	\$ 197,325,823	\$ 33,831,492	\$ 15,797,046,676
<b>4. Changes in Proportionate Share</b>	\$ (19,431,306)	\$ 15,199,993	\$ 4,777,932	\$ (546,619)	\$ -
<b>5. Balances at June 30, 2020</b>	\$ 15,139,960,091	\$ 421,697,957	\$ 202,103,755	\$ 33,284,873	\$ 15,797,046,676

<sup>1</sup> Includes amounts for employer's portion of Additional Member Contributions and supplemental contributions for the ASAF and ASF Funds.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Changes in Net Pension Liability and Related Ratios**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>1. Total Pension Liability</b>								
a. Service Cost	\$ 1,555,754,951	\$ 1,691,143,730	\$ 1,436,616,796	\$ 1,386,673,964	\$ 1,274,307,859	\$ 1,223,157,877	\$ 1,205,662,452	\$ 1,170,546,070
b. Interest	4,838,801,018	4,914,552,252	5,071,480,880	5,147,042,567	4,131,176,953	4,027,138,338	4,407,702,189	4,176,571,397
c. Changes of Benefit Terms	0	0	0	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	(34,323,759)	(1,188,246,744)	(2,235,672,787)	1,008,248,813	1,229,501,602	1,507,964,351	0	0
e. Changes of Assumptions	0	(826,850,113)	0	0	2,432,878,017	0	0	0
f. Benefit Payments	(4,591,086,000)	(4,487,680,000)	(4,351,924,000)	(4,219,312,000)	(4,107,455,000)	(4,024,272,000)	(3,818,248,000)	(3,619,254,000)
<b>g. Net Changes in Total Pension Liability</b>	<b>\$ 1,769,146,210</b>	<b>\$ 102,919,125</b>	<b>\$ (79,499,111)</b>	<b>\$ 3,322,653,344</b>	<b>\$ 4,960,409,431</b>	<b>\$ 2,733,988,566</b>	<b>\$ 1,795,116,641</b>	<b>\$ 1,727,863,467</b>
<b>2. Total Pension Liability - Beginning</b>	<b>\$ 73,346,850,466</b>	<b>\$ 73,243,931,341</b>	<b>\$ 73,323,430,452</b>	<b>\$ 70,000,777,108</b>	<b>\$ 65,040,367,677</b>	<b>\$ 62,306,379,111</b>	<b>\$ 60,511,262,470</b>	<b>\$ 58,783,399,003</b>
<b>3. Total Pension Liability - Ending</b>	<b>\$ 75,115,996,676</b>	<b>\$ 73,346,850,466</b>	<b>\$ 73,243,931,341</b>	<b>\$ 73,323,430,452</b>	<b>\$ 70,000,777,108</b>	<b>\$ 65,040,367,677</b>	<b>\$ 62,306,379,111</b>	<b>\$ 60,511,262,470</b>
<b>4. Plan Fiduciary Net Position</b>								
a. Contributions - Employer	\$ 3,590,822,000	\$ 3,696,686,000	\$ 3,889,710,000	\$ 3,888,399,000	\$ 3,760,714,000	\$ 3,325,528,000	\$ 3,054,424,000	\$ 2,912,844,000
b. Contributions - Other Employer <sup>1</sup>	61,748,000	62,513,000	59,979,000	57,369,000	n/a	n/a	n/a	n/a
c. Contributions - Employee	226,920,000	217,205,000	195,241,000	180,076,000	173,696,000	158,590,000	154,962,000	154,698,000
d. Net Investment Income	3,911,187,000	5,721,310,000	6,275,115,000	8,133,280,000	960,267,000	1,611,929,000	9,435,906,000	5,721,112,000
e. Benefit Payments	(4,591,086,000)	(4,487,680,000)	(4,351,924,000)	(4,219,312,000)	(4,107,455,000)	(4,024,272,000)	(3,818,248,000)	(3,619,254,000)
f. Payment of Interest on TDA Fixed Funds	(1,846,173,000)	(1,716,679,000)	(1,595,462,000)	(1,466,615,000)	(1,354,207,000)	(1,248,988,000)	(1,147,923,000)	(1,047,979,000)
g. Administrative Expenses	(64,532,000)	(64,291,000)	(65,076,000)	(60,790,000)	(59,367,000)	(58,391,000)	(46,042,000)	(39,682,000)
h. Other Changes	39,853,000	28,671,000	29,170,000	(46,229,000)	1,233,000	329,000	404,000	(44,000)
<b>i. Net Changes in Fiduciary Net Position</b>	<b>\$ 1,328,739,000</b>	<b>\$ 3,457,735,000</b>	<b>\$ 4,436,753,000</b>	<b>\$ 6,466,178,000</b>	<b>\$ (625,119,000)</b>	<b>\$ (235,275,000)</b>	<b>\$ 7,633,483,000</b>	<b>\$ 4,081,695,000</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 57,990,211,000</b>	<b>\$ 54,532,476,000</b>	<b>\$ 50,095,723,000</b>	<b>\$ 43,629,545,000</b>	<b>\$ 44,254,664,000</b>	<b>\$ 44,489,939,000</b>	<b>\$ 36,856,456,000</b>	<b>\$ 32,774,761,000</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 59,318,950,000</b>	<b>\$ 57,990,211,000</b>	<b>\$ 54,532,476,000</b>	<b>\$ 50,095,723,000</b>	<b>\$ 43,629,545,000</b>	<b>\$ 44,254,664,000</b>	<b>\$ 44,489,939,000</b>	<b>\$ 36,856,456,000</b>
<b>7. TRS' Net Pension Liability</b>	<b>\$ 15,797,046,676</b>	<b>\$ 15,356,639,466</b>	<b>\$ 18,711,455,341</b>	<b>\$ 23,227,707,452</b>	<b>\$ 26,371,232,108</b>	<b>\$ 20,785,703,677</b>	<b>\$ 17,816,440,111</b>	<b>\$ 23,654,806,470</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>79.0%</b>	<b>79.1%</b>	<b>74.5%</b>	<b>68.3%</b>	<b>62.3%</b>	<b>68.0%</b>	<b>71.4%</b>	<b>60.9%</b>
<b>9. Covered Employee Payroll<sup>2</sup></b>	<b>\$ 10,903,755,059</b>	<b>\$ 10,404,403,684</b>	<b>\$ 9,200,179,606</b>	<b>\$ 8,818,536,927</b>	<b>\$ 8,256,100,227</b>	<b>\$ 8,074,522,271</b>	<b>\$ 7,996,941,545</b>	<b>\$ 7,964,148,973</b>
<b>10. TRS' Net Pension Liability as a Percentage of Covered Employee Payroll</b>	<b>144.9%</b>	<b>147.6%</b>	<b>203.4%</b>	<b>263.4%</b>	<b>319.4%</b>	<b>257.4%</b>	<b>222.8%</b>	<b>297.0%</b>

<sup>1</sup> Includes amounts for employer's portion of Additional Member Contributions and supplemental contributions for the ASAF and ASF Funds.

<sup>2</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Contributions (\$ in thousands)**

<b>Fiscal Year Ending June 30</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Actuarially Determined Contribution	\$ 3,590,822	\$ 3,696,686	\$ 3,889,710	\$ 3,888,399	\$ 3,702,569	\$ 3,270,007	\$ 2,998,694	\$ 2,855,640	\$ 2,673,078	\$ 2,468,973
Contributions in relation to the Actuarially Determined Contribution	<u>\$ 3,590,822</u>	<u>\$ 3,696,686</u>	<u>\$ 3,889,710</u>	<u>\$ 3,888,399</u>	<u>\$ 3,702,569</u>	<u>\$ 3,270,007</u>	<u>\$ 2,998,694</u>	<u>\$ 2,855,640</u>	<u>\$ 2,673,078</u>	<u>\$ 2,468,973</u>
Contribution Deficiency (Excess)	0	0	0	0	0	0	0	0	0	0
Contributions as a percentage of Covered employee payroll <sup>1</sup>	32.932%	35.530%	42.279%	44.093%	44.846%	40.498%	37.652%	36.455%	33.747%	31.114%

<sup>1</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Average Expected Remaining Service Lives**

<u>Group</u>	<u>Count</u>	Average Expected Remaining Service Life <u>@ 6/30/2019</u>
Active	123,336	15.14
Active Off Payroll	8,174	0.00
Term Vested	13,410	0.00
Retired	<u>88,507</u>	<u>0.00</u>
Total	233,427	8.00

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

Year	Differences between Expected and Actual Experience	Recognition Period (Years)										
			2019	2020	2021	2022	2023	2024	2025	2026	2027	
2016	\$ 1,229,501,602	3.84	268,953,475									
2017	1,008,248,813	7.20	140,034,557	140,034,557	140,034,557	140,034,557	140,034,557	28,006,914				
2018	(2,235,672,787)	7.81	(286,257,719)	(286,257,719)	(286,257,719)	(286,257,719)	(286,257,719)	(286,257,719)	(231,868,754)			
2019	(1,188,246,744)	7.87	(150,984,339)	(150,984,339)	(150,984,339)	(150,984,339)	(150,984,339)	(150,984,339)	(150,984,339)	(131,356,371)		
2020	(34,323,759)	8.00		(4,290,470)	(4,290,470)	(4,290,470)	(4,290,470)	(4,290,470)	(4,290,470)	(4,290,470)	(4,290,470)	(4,290,469)
Net increase (decrease) in Pension Expense			<b>\$ (28,254,026)</b>	<b>\$ (301,497,971)</b>	<b>\$ (301,497,971)</b>	<b>\$ (301,497,971)</b>	<b>\$ (301,497,971)</b>	<b>\$ (413,525,614)</b>	<b>\$ (387,143,563)</b>	<b>\$ (135,646,841)</b>	<b>\$ (4,290,469)</b>	



**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
2016	\$ 2,432,878,017	3.84	532,192,065							
2017	0									
2018	0									
2019	(826,850,113)	7.87	(105,063,547)	(105,063,547)	(105,063,547)	(105,063,547)	(105,063,547)	(105,063,547)	(105,063,547)	(91,405,284)
2020	0									
Net increase (decrease) in Pension Expense			<u>\$ 427,128,518</u>	<u>\$ (105,063,547)</u>	<u>\$ (105,063,547)</u>	<u>\$ (105,063,547)</u>	<u>\$ (105,063,547)</u>	<u>\$ (105,063,547)</u>	<u>\$ (105,063,547)</u>	<u>\$ (91,405,284)</u>

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Projected and Actual Earnings on Pension Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2015	\$ 1,385,375,562	5	277,075,114					
2016	1,886,427,168	5	377,285,434	377,285,432				
2017	(4,593,826,280)	5	(918,765,256)	(918,765,256)	(918,765,256)			
2018	(2,511,052,439)	5	(502,210,488)	(502,210,488)	(502,210,488)	(502,210,487)		
2019	(1,979,861,450)	5	(395,972,290)	(395,972,290)	(395,972,290)	(395,972,290)	(395,972,290)	
2020	(191,111,179)	5		(38,222,236)	(38,222,236)	(38,222,236)	(38,222,236)	(38,222,235)
Net increase (decrease) in Pension Expense			<b>\$ (1,162,587,486)</b>	<b>\$ (1,477,884,838)</b>	<b>\$ (1,855,170,270)</b>	<b>\$ (936,405,013)</b>	<b>\$ (434,194,526)</b>	<b>\$ (38,222,235)</b>

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share  
Changes in Proportionate Share at 6/30/2016**

Department of Education	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 96.346%	Proportionate Share at 6/30/2016 96.019%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(2,227,614,195)	(2,146,217,172)	(2,138,932,874)	7,284,298	3.84	1,896,953	1,896,953	1,896,953	1,593,439
<b>Deferred Inflows of Resources</b>	5,094,667,839	4,908,508,675	4,891,849,112	(16,659,563)	3.84	(4,338,427)	(4,338,427)	(4,338,427)	(3,644,282)
<b>Net Pension Liability</b>	20,785,703,677	20,026,194,063	19,958,224,814	(67,969,249)	3.84	(17,700,324)	(17,700,324)	(17,700,324)	(14,868,277)
<b>Total</b>	23,652,757,321	22,788,485,566	22,711,141,052	(77,344,514)		(20,141,798)	(20,141,798)	(20,141,798)	(16,919,120)
<b>CUNY Senior Colleges</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 2.540%	Proportionate Share at 6/30/2016 2.779%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(2,227,614,195)	(56,581,401)	(61,905,398)	(5,323,997)	3.84	(1,386,458)	(1,386,458)	(1,386,458)	(1,164,623)
<b>Deferred Inflows of Resources</b>	5,094,667,839	129,404,563	141,580,819	12,176,256	3.84	3,170,900	3,170,900	3,170,900	2,663,556
<b>Net Pension Liability</b>	20,785,703,677	527,956,873	577,634,705	49,677,832	3.84	12,936,935	12,936,935	12,936,935	10,867,027
<b>Total</b>	23,652,757,321	600,780,035	657,310,126	56,530,091		14,721,377	14,721,377	14,721,377	12,365,960
<b>CUNY Community Colleges</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.928%	Proportionate Share at 6/30/2016 1.056%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(2,227,614,195)	(20,672,260)	(23,523,606)	(2,851,346)	3.84	(742,538)	(742,538)	(742,538)	(623,732)
<b>Deferred Inflows of Resources</b>	5,094,667,839	47,278,518	53,799,692	6,521,174	3.84	1,698,222	1,698,222	1,698,222	1,426,508
<b>Net Pension Liability</b>	20,785,703,677	192,891,330	219,497,031	26,605,701	3.84	6,928,568	6,928,568	6,928,568	5,819,997
<b>Total</b>	23,652,757,321	219,497,588	249,773,117	30,275,529		7,884,252	7,884,252	7,884,252	6,622,773
<b>Charter Schools</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.186%	Proportionate Share at 6/30/2016 0.146%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(2,227,614,195)	(4,143,361)	(3,252,316)	891,045	3.84	232,043	232,043	232,043	194,916
<b>Deferred Inflows of Resources</b>	5,094,667,839	9,476,083	7,438,215	(2,037,868)	3.84	(530,696)	(530,696)	(530,696)	(445,780)
<b>Net Pension Liability</b>	20,785,703,677	38,661,409	30,347,126	(8,314,283)	3.84	(2,165,178)	(2,165,178)	(2,165,178)	(1,818,749)
<b>Total</b>	23,652,757,321	43,994,131	34,533,025	(9,461,106)		(2,463,831)	(2,463,831)	(2,463,831)	(2,069,613)

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share  
Changes in Proportionate Share at 6/30/2017

Department of Education	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 96.019%	Proportionate Share at 6/30/2017 96.627%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022	2023	2024
<b>Deferred Outflows of Resources</b>	(5,779,665,137)	(5,549,576,668)	(5,584,717,032)	(35,140,364)	7.20	(4,880,607)	(4,880,607)	(4,880,607)	(4,880,607)	(4,880,607)	(4,880,607)	(4,880,607)	(976,116)
<b>Deferred Inflows of Resources</b>	3,189,542,961	3,062,567,255	3,081,959,677	19,392,422	7.20	2,693,393	2,693,393	2,693,393	2,693,393	2,693,393	2,693,393	2,693,393	538,670
<b>Net Pension Liability</b>	26,371,232,108	25,321,393,356	25,481,730,449	160,337,093	7.20	22,269,041	22,269,041	22,269,041	22,269,041	22,269,041	22,269,041	22,269,041	4,453,804
<b>Total</b>	23,781,109,932	22,834,383,943	22,978,973,094	144,589,147		20,081,827	20,081,827	20,081,827	20,081,827	20,081,827	20,081,827	20,081,827	4,016,358
<b>CUNY Senior Colleges</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 2.779%	Proportionate Share at 6/30/2017 2.175%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022	2023	2024
<b>Deferred Outflows of Resources</b>	(5,779,665,137)	(160,616,894)	(125,707,717)	34,909,177	7.20	4,848,497	4,848,497	4,848,497	4,848,497	4,848,497	4,848,497	4,848,497	969,698
<b>Deferred Inflows of Resources</b>	3,189,542,961	88,637,399	69,372,559	(19,264,840)	7.20	(2,675,672)	(2,675,672)	(2,675,672)	(2,675,672)	(2,675,672)	(2,675,672)	(2,675,672)	(535,136)
<b>Net Pension Liability</b>	26,371,232,108	732,856,540	573,574,298	(159,282,242)	7.20	(22,122,534)	(22,122,534)	(22,122,534)	(22,122,534)	(22,122,534)	(22,122,534)	(22,122,534)	(4,424,504)
<b>Total</b>	23,781,109,932	660,877,045	517,239,140	(143,637,905)		(19,949,709)	(19,949,709)	(19,949,709)	(19,949,709)	(19,949,709)	(19,949,709)	(19,949,709)	(3,989,942)
<b>CUNY Community Colleges</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 1.056%	Proportionate Share at 6/30/2017 0.989%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022	2023	2024
<b>Deferred Outflows of Resources</b>	(5,779,665,137)	(61,033,264)	(57,160,888)	3,872,376	7.20	537,830	537,830	537,830	537,830	537,830	537,830	537,830	107,566
<b>Deferred Inflows of Resources</b>	3,189,542,961	33,681,574	31,544,580	(2,136,994)	7.20	(296,805)	(296,805)	(296,805)	(296,805)	(296,805)	(296,805)	(296,805)	(59,359)
<b>Net Pension Liability</b>	26,371,232,108	278,480,211	260,811,486	(17,668,725)	7.20	(2,453,990)	(2,453,990)	(2,453,990)	(2,453,990)	(2,453,990)	(2,453,990)	(2,453,990)	(490,795)
<b>Total</b>	23,781,109,932	251,128,521	235,195,178	(15,933,343)		(2,212,965)	(2,212,965)	(2,212,965)	(2,212,965)	(2,212,965)	(2,212,965)	(2,212,965)	(442,588)
<b>Charter Schools</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.146%	Proportionate Share at 6/30/2017 0.209%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022	2023	2024
<b>Deferred Outflows of Resources</b>	(5,779,665,137)	(8,438,313)	(12,079,501)	(3,641,188)	7.20	(505,720)	(505,720)	(505,720)	(505,720)	(505,720)	(505,720)	(505,720)	(101,148)
<b>Deferred Inflows of Resources</b>	3,189,542,961	4,656,731	6,666,144	2,009,413	7.20	279,084	279,084	279,084	279,084	279,084	279,084	279,084	55,825
<b>Net Pension Liability</b>	26,371,232,108	38,501,999	55,115,875	16,613,876	7.20	2,307,483	2,307,483	2,307,483	2,307,483	2,307,483	2,307,483	2,307,483	461,495
<b>Total</b>	23,781,109,932	34,720,417	49,702,518	14,982,101		2,080,847	2,080,847	2,080,847	2,080,847	2,080,847	2,080,847	2,080,847	416,172

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share  
Changes in Proportionate Share at 6/30/2018

Department of Education	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 96.642%	Proportionate Share at 6/30/2018 96.009%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024	2025
<b>Deferred Outflows of Resources</b>	(2,965,117,022)	(2,865,548,392)	(2,846,779,202)	18,769,190	7.81	2,403,225	2,403,225	2,403,225	2,403,225	2,403,225	2,403,225	2,403,225	1,946,616
<b>Deferred Inflows of Resources</b>	3,273,472,580	3,163,549,369	3,142,828,289	(20,721,080)	7.81	(2,653,148)	(2,653,148)	(2,653,148)	(2,653,148)	(2,653,148)	(2,653,148)	(2,653,148)	(2,149,044)
<b>Net Pension Liability</b>	23,227,707,452	22,447,721,036	22,300,689,648	(147,031,388)	7.81	(18,826,042)	(18,826,042)	(18,826,042)	(18,826,042)	(18,826,042)	(18,826,042)	(18,826,042)	(15,249,095)
<b>Total</b>	23,536,063,010	22,745,722,013	22,596,738,735	(148,983,278)		(19,075,965)	(19,075,965)	(19,075,965)	(19,075,965)	(19,075,965)	(19,075,965)	(19,075,965)	(15,451,523)
<b>CUNY Senior Colleges</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 2.175%	Proportionate Share at 6/30/2018 2.625%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024	2025
<b>Deferred Outflows of Resources</b>	(2,965,117,022)	(64,491,295)	(77,834,322)	(13,343,027)	7.81	(1,708,454)	(1,708,454)	(1,708,454)	(1,708,454)	(1,708,454)	(1,708,454)	(1,708,454)	(1,383,849)
<b>Deferred Inflows of Resources</b>	3,273,472,580	71,198,029	85,928,655	14,730,626	7.81	1,886,124	1,886,124	1,886,124	1,886,124	1,886,124	1,886,124	1,886,124	1,527,758
<b>Net Pension Liability</b>	23,227,707,452	505,202,637	609,727,321	104,524,684	7.81	13,383,442	13,383,442	13,383,442	13,383,442	13,383,442	13,383,442	13,383,442	10,840,590
<b>Total</b>	23,536,063,010	511,909,371	617,821,654	105,912,283		13,561,112	13,561,112	13,561,112	13,561,112	13,561,112	13,561,112	13,561,112	10,984,499
<b>CUNY Community Colleges</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.989%	Proportionate Share at 6/30/2018 1.177%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024	2025
<b>Deferred Outflows of Resources</b>	(2,965,117,022)	(29,325,007)	(34,899,427)	(5,574,420)	7.81	(713,754)	(713,754)	(713,754)	(713,754)	(713,754)	(713,754)	(713,754)	(578,142)
<b>Deferred Inflows of Resources</b>	3,273,472,580	32,374,644	38,528,772	6,154,128	7.81	787,981	787,981	787,981	787,981	787,981	787,981	787,981	638,261
<b>Net Pension Liability</b>	23,227,707,452	229,722,027	273,390,117	43,668,090	7.81	5,591,305	5,591,305	5,591,305	5,591,305	5,591,305	5,591,305	5,591,305	4,528,955
<b>Total</b>	23,536,063,010	232,771,664	277,019,462	44,247,798		5,665,532	5,665,532	5,665,532	5,665,532	5,665,532	5,665,532	5,665,532	4,589,074
<b>Charter Schools</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.194%	Proportionate Share at 6/30/2018 0.189%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023	2024	2025
<b>Deferred Outflows of Resources</b>	(2,965,117,022)	(5,752,327)	(5,604,071)	148,256	7.81	18,983	18,983	18,983	18,983	18,983	18,983	18,983	15,375
<b>Deferred Inflows of Resources</b>	3,273,472,580	6,350,537	6,186,863	(163,674)	7.81	(20,957)	(20,957)	(20,957)	(20,957)	(20,957)	(20,957)	(20,957)	(16,975)
<b>Net Pension Liability</b>	23,227,707,452	45,061,752	43,900,367	(1,161,385)	7.81	(148,705)	(148,705)	(148,705)	(148,705)	(148,705)	(148,705)	(148,705)	(120,450)
<b>Total</b>	23,536,063,010	45,659,962	44,483,159	(1,176,803)		(150,679)	(150,679)	(150,679)	(150,679)	(150,679)	(150,679)	(150,679)	(122,050)

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share  
Changes in Proportionate Share at 6/30/2019

Department of Education	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 96.009%	Proportionate Share at 6/30/2019 95.967%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025	2026
<b>Deferred Outflows of Resources</b>	(1,529,325,239)	(1,468,289,868)	(1,467,647,251)		642,617	7.87	81,654	81,654	81,654	81,654	81,654	81,654	81,654	71,039
<b>Deferred Inflows of Resources</b>	5,682,906,807	5,456,101,996	5,453,714,056		(2,387,940)	7.87	(303,423)	(303,423)	(303,423)	(303,423)	(303,423)	(303,423)	(303,423)	(263,979)
<b>Net Pension Liability</b>	18,711,455,341	17,964,681,158	17,956,818,660	18	(7,862,480)	7.87	(999,044)	(999,044)	(999,044)	(999,044)	(999,044)	(999,044)	(999,044)	(869,172)
<b>Total</b>	22,865,036,909	21,952,493,286	21,942,885,465	18	(9,607,803)		(1,220,813)	(1,220,813)	(1,220,813)	(1,220,813)	(1,220,813)	(1,220,813)	(1,220,813)	(1,062,112)
<b>CUNY Senior Colleges</b>	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 2.625%	Proportionate Share at 6/30/2019 2.570%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025	2026
<b>Deferred Outflows of Resources</b>	(1,529,325,239)	(40,144,788)	(39,311,204)		833,584	7.87	105,919	105,919	105,919	105,919	105,919	105,919	105,919	92,151
<b>Deferred Inflows of Resources</b>	5,682,906,807	149,176,304	146,078,744		(3,097,560)	7.87	(393,591)	(393,591)	(393,591)	(393,591)	(393,591)	(393,591)	(393,591)	(342,423)
<b>Net Pension Liability</b>	18,711,455,341	491,175,703	480,976,723	(11)	(10,198,991)	7.87	(1,295,933)	(1,295,933)	(1,295,933)	(1,295,933)	(1,295,933)	(1,295,933)	(1,295,933)	(1,127,460)
<b>Total</b>	22,865,036,909	600,207,219	587,744,263	(11)	(12,462,967)		(1,583,605)	(1,583,605)	(1,583,605)	(1,583,605)	(1,583,605)	(1,583,605)	(1,583,605)	(1,377,732)
<b>CUNY Community Colleges</b>	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 1.177%	Proportionate Share at 6/30/2019 1.248%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025	2026
<b>Deferred Outflows of Resources</b>	(1,529,325,239)	(18,000,158)	(19,090,011)		(1,089,853)	7.87	(138,482)	(138,482)	(138,482)	(138,482)	(138,482)	(138,482)	(138,482)	(120,479)
<b>Deferred Inflows of Resources</b>	5,682,906,807	66,887,813	70,937,661		4,049,848	7.87	514,593	514,593	514,593	514,593	514,593	514,593	514,593	447,697
<b>Net Pension Liability</b>	18,711,455,341	220,233,829	233,568,300	(6)	13,334,465	7.87	1,694,341	1,694,341	1,694,341	1,694,341	1,694,341	1,694,341	1,694,341	1,474,078
<b>Total</b>	22,865,036,909	269,121,484	285,415,950	(6)	16,294,460		2,070,452	2,070,452	2,070,452	2,070,452	2,070,452	2,070,452	2,070,452	1,801,296
<b>Charter Schools</b>	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.189%	Proportionate Share at 6/30/2019 0.214%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2019	2020	2021	2022	2023	2024	2025	2026
<b>Deferred Outflows of Resources</b>	(1,529,325,239)	(2,890,425)	(3,276,773)		(386,348)	7.87	(49,091)	(49,091)	(49,091)	(49,091)	(49,091)	(49,091)	(49,091)	(42,711)
<b>Deferred Inflows of Resources</b>	5,682,906,807	10,740,694	12,176,346		1,435,652	7.87	182,421	182,421	182,421	182,421	182,421	182,421	182,421	158,705
<b>Net Pension Liability</b>	18,711,455,341	35,364,651	40,091,658	(1)	4,727,006	7.87	600,636	600,636	600,636	600,636	600,636	600,636	600,636	522,554
<b>Total</b>	22,865,036,909	43,214,920	48,991,231	(1)	5,776,310		733,966	733,966	733,966	733,966	733,966	733,966	733,966	638,548

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Proportionate Share  
Changes in Proportionate Share at 6/30/2020

Department of Education	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 95.967%	Proportionate Share at 6/30/2020 95.840%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026	2027
Deferred Outflows of Resources	(588,145,142)	(564,425,133)	(563,680,931)		744,202	8.00	93,025	93,025	93,025	93,025	93,025	93,025	93,025	93,027
Deferred Inflows of Resources	7,972,972,023	7,651,420,490	7,641,331,998		(10,088,492)	8.00	(1,261,061)	(1,261,061)	(1,261,061)	(1,261,061)	(1,261,061)	(1,261,061)	(1,261,061)	(1,261,065)
Net Pension Liability	15,356,639,466	14,737,303,170	14,717,871,854	10	(19,431,306)	8.00	(2,428,914)	(2,428,914)	(2,428,914)	(2,428,914)	(2,428,914)	(2,428,914)	(2,428,914)	(2,428,908)
<b>Total</b>	<b>22,741,466,347</b>	<b>21,824,298,527</b>	<b>21,795,522,921</b>	<b>10</b>	<b>(28,775,596)</b>		<b>(3,596,950)</b>	<b>(3,596,950)</b>	<b>(3,596,950)</b>	<b>(3,596,950)</b>	<b>(3,596,950)</b>	<b>(3,596,950)</b>	<b>(3,596,950)</b>	<b>(3,596,946)</b>
CUNY Senior Colleges	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 2.570%	Proportionate Share at 6/30/2020 2.669%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026	2027
Deferred Outflows of Resources	(588,145,142)	(15,118,232)	(15,700,378)		(582,146)	8.00	(72,768)	(72,768)	(72,768)	(72,768)	(72,768)	(72,768)	(72,768)	(72,770)
Deferred Inflows of Resources	7,972,972,023	204,944,719	212,836,366		7,891,647	8.00	986,456	986,456	986,456	986,456	986,456	986,456	986,456	986,455
Net Pension Liability	15,356,639,466	394,741,403	409,941,404	(8)	15,199,993	8.00	1,899,999	1,899,999	1,899,999	1,899,999	1,899,999	1,899,999	1,899,999	1,900,000
<b>Total</b>	<b>22,741,466,347</b>	<b>584,567,890</b>	<b>607,077,392</b>	<b>(8)</b>	<b>22,509,494</b>		<b>2,813,687</b>	<b>2,813,687</b>	<b>2,813,687</b>	<b>2,813,687</b>	<b>2,813,687</b>	<b>2,813,687</b>	<b>2,813,687</b>	<b>2,813,685</b>
CUNY Community Colleges	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 1.248%	Proportionate Share at 6/30/2020 1.279%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026	2027
Deferred Outflows of Resources	(588,145,142)	(7,341,602)	(7,524,593)		(182,991)	8.00	(22,874)	(22,874)	(22,874)	(22,874)	(22,874)	(22,874)	(22,874)	(22,873)
Deferred Inflows of Resources	7,972,972,023	99,523,714	102,004,357		2,480,643	8.00	310,080	310,080	310,080	310,080	310,080	310,080	310,080	310,083
Net Pension Liability	15,356,639,466	191,691,352	196,469,287	(3)	4,777,932	8.00	597,242	597,242	597,242	597,242	597,242	597,242	597,242	597,238
<b>Total</b>	<b>22,741,466,347</b>	<b>283,873,464</b>	<b>290,949,051</b>	<b>(3)</b>	<b>7,075,584</b>		<b>884,448</b>	<b>884,448</b>	<b>884,448</b>	<b>884,448</b>	<b>884,448</b>	<b>884,448</b>	<b>884,448</b>	<b>884,448</b>
Charter Schools	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30							
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 0.214%	Proportionate Share at 6/30/2020 0.211%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025	2026	2027
Deferred Outflows of Resources	(588,145,142)	(1,260,175)	(1,239,240)		20,935	8.00	2,617	2,617	2,617	2,617	2,617	2,617	2,617	2,616
Deferred Inflows of Resources	7,972,972,023	17,083,100	16,799,302		(283,798)	8.00	(35,475)	(35,475)	(35,475)	(35,475)	(35,475)	(35,475)	(35,475)	(35,473)
Net Pension Liability	15,356,639,466	32,903,541	32,356,921	1	(546,619)	8.00	(68,327)	(68,327)	(68,327)	(68,327)	(68,327)	(68,327)	(68,327)	(68,330)
<b>Total</b>	<b>22,741,466,347</b>	<b>48,726,466</b>	<b>47,916,983</b>	<b>1</b>	<b>(809,482)</b>		<b>(101,185)</b>	<b>(101,185)</b>	<b>(101,185)</b>	<b>(101,185)</b>	<b>(101,185)</b>	<b>(101,185)</b>	<b>(101,185)</b>	<b>(101,187)</b>

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Components of Pension Expense for the Fiscal Year Ending June 30, 2019 - By Obligor**

<u>Component</u>	<u>DEPT. OF ED.</u>	<u>SENIOR COLL.</u>	<u>COMM. COLL.</u>	<u>Charter Schools</u>	<u>Total</u>
a. Service Cost	\$ 1,622,939,570	\$ 43,470,738	\$ 21,109,933	\$ 3,623,489	1,691,143,730
b. Interest on the Total Pension Liability	4,716,347,391	126,328,241	61,346,571	10,530,049	4,914,552,252
c. Differences between Expected and Actual Experience	(27,114,535)	(726,268)	(352,685)	(60,538)	(28,254,026)
d. Changes of Assumptions	409,902,341	10,979,310	5,331,690	915,177	427,128,518
e. Employee Contributions	(208,445,080)	(5,583,240)	(2,711,291)	(465,389)	(217,205,000)
f. Projected Earnings on Pension Plan Investments	(3,590,555,193)	(96,173,688)	(46,703,143)	(8,016,526)	(3,741,448,550)
g. Differences between Projected and Actual Earnings on Plan Investments	(1,115,700,104)	(29,884,234)	(14,512,157)	(2,490,991)	(1,162,587,486)
h. Pension Plan Administrative Expenses	61,698,131	1,652,596	802,521	137,752	64,291,000
i. Payment of Interest on TDA Fixed Funds	1,647,444,998	44,127,120	21,428,680	3,678,202	1,716,679,000
j. Other Changes in Fiduciary Net Position	(27,514,693)	(736,986)	(357,890)	(61,431)	(28,671,000)
k. Changes in Proportionate Share	(17,368,530)	4,393,758	12,145,792	828,980	0
<b>Total Pension Expense</b>	<b>\$ 3,471,634,296</b>	<b>\$ 97,847,347</b>	<b>\$ 57,528,021</b>	<b>\$ 8,618,774</b>	<b>3,635,628,438</b>



**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Components of Pension Expense for the Fiscal Year Ending June 30, 2020 - By Obligor**

<u>Component</u>		<u>DEPT. OF ED.</u>		<u>SENIOR COLL.</u>		<u>COMM. COLL.</u>		<u>Charter Schools</u>		<u>Total</u>
a. Service Cost	\$	1,491,042,495	\$	41,530,464	\$	19,903,968	\$	3,278,024	\$	1,555,754,951
b. Interest on the Total Pension Liability		4,637,528,508		129,170,505		61,906,499		10,195,506		4,838,801,018
c. Differences between Expected and Actual Experience		(288,957,002)		(8,048,408)		(3,857,295)		(635,266)		(301,497,971)
d. Changes of Assumptions		(100,693,373)		(2,804,643)		(1,344,159)		(221,372)		(105,063,547)
e. Employee Contributions		(217,481,141)		(6,057,569)		(2,903,162)		(478,128)		(226,920,000)
f. Projected Earnings on Pension Plan Investments		(3,565,337,283)		(99,306,434)		(47,593,788)		(7,838,316)		(3,720,075,821)
g. Differences between Projected and Actual Earnings on Plan Investments		(1,416,411,430)		(39,451,742)		(18,907,716)		(3,113,950)		(1,477,884,838)
h. Pension Plan Administrative Expenses		61,847,757		1,722,665		825,607		135,971		64,532,000
i. Payment of Interest on TDA Fixed Funds		1,769,380,449		49,283,097		23,619,510		3,889,944		1,846,173,000
j. Other Changes in Fiduciary Net Position		(38,195,293)		(1,063,865)		(509,870)		(83,972)		(39,853,000)
k. Changes in Proportionate Share		(3,580,696)		(5,158,515)		6,407,467		2,331,744		0
<b>Total Pension Expense</b>	<b>\$</b>	<b>2,329,142,991</b>	<b>\$</b>	<b>59,815,555</b>	<b>\$</b>	<b>37,547,061</b>	<b>\$</b>	<b>7,460,185</b>	<b>\$</b>	<b>2,433,965,792</b>

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Pension Expense, Deferred Outflows of Resources, Deferred Inflows of Resources

	Fiscal Year Ending June 30, 2015		Fiscal Year Ending June 30, 2016		Fiscal Year Ending June 30, 2017		Fiscal Year Ending June 30, 2018		Fiscal Year Ending June 30, 2019		Fiscal Year Ending June 30, 2020	
	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows
<b>Recognized Pension Expense</b>	<b>\$2,162,052,493</b>		<b>\$3,889,066,611</b>		<b>\$3,700,721,078</b>		<b>\$3,278,662,899</b>		<b>\$3,635,628,438</b>		<b>\$2,433,965,792</b>	
<b>Deferred Resources</b>												
Differences Between Expected and Actual Experience	1,119,313,745	0	909,318,893	0	868,214,256	0	0	1,949,415,068	0	1,037,262,405	0	30,033,289
Changes of Assumptions	0	0	1,799,316,033	0	0	0	0	0	0	721,786,566	0	0
Net Difference between Projected and Actual Earnings on Pension Plan Investments	1,108,300,450	0	1,509,141,734	0	0	3,675,061,024	0	2,008,841,951	0	1,583,889,160	0	152,888,943
<b>Total</b>	<b>2,227,614,195</b>	<b>0</b>	<b>4,217,776,660</b>	<b>0</b>	<b>868,214,256</b>	<b>3,675,061,024</b>	<b>0</b>	<b>3,958,257,019</b>	<b>0</b>	<b>3,342,938,131</b>	<b>0</b>	<b>182,922,232</b>

Reported amounts will be recognized in Pension Expense  
during Fiscal Year Ending June 30

2015	\$665,725,718											
2016	\$665,725,718		\$1,331,030,127									
2017	\$665,725,718		\$1,331,030,127		(\$778,730,699)							
2018	\$619,087,645		\$1,331,030,127		(\$778,730,699)		(\$788,468,207)					
2019	\$277,075,114		\$1,178,430,974		(\$778,730,699)		(\$788,468,207)		(\$652,020,176)			
2020			\$377,285,432		(\$778,730,699)		(\$788,468,207)		(\$652,020,176)		(\$42,512,706)	
2021					(\$778,730,699)		(\$788,468,207)		(\$652,020,176)		(\$42,512,706)	
2022					\$140,034,557		(\$788,468,206)		(\$652,020,176)		(\$42,512,706)	
2023					\$140,034,557		(\$286,257,719)		(\$652,020,176)		(\$42,512,706)	
2024					\$28,006,914		(\$286,257,719)		(\$256,047,886)		(\$42,512,705)	
2025							(\$231,868,754)		(\$256,047,886)		(\$4,290,470)	
2026									(\$222,761,655)		(\$4,290,470)	
2027											(\$4,290,469)	

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

For the Fiscal Year ending June 30, 2020, the Obligors recognized Pension Expense for TRS of \$2,433,965,792.

At June 30, 2020, the Obligors reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions for TRS from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 448,110,585	\$ 2,293,210,985
Changes of Assumptions	0	616,723,019
Net Difference between Projected and Actual Earnings on Pension Plan Investments	<u>0</u>	<u>3,263,992,044</u>
Total	\$ 448,110,585	\$ 6,173,926,048

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for TRS will be recognized in Pension Expense as follows:

Fiscal Year Ending <u>June 30</u>	<u>Amount</u>
2020	\$ (1,884,446,356)
2021	(2,261,731,788)
2022	(1,342,966,531)
2023	(840,756,044)
2024	(556,811,396)
2025	(492,207,110)
2026	(227,052,125)
2027	(4,290,469)

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Pension Amounts by Employer  
As of and for the year ending June 30, 2019**

**Deferred Outflows of Resources**

<u>Entity</u>	<u>Net Pension Liability</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Change of Assumptions</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Deferred Outflows of Resources</u>
Department of Education	\$ 14,737,303,170	\$ 564,425,133	\$ 0	\$ 0	\$ (27,692,766)	\$ 536,732,367
CUNY Senior Colleges	394,741,403	15,118,232	0	0	(27,043,313)	(11,925,081)
CUNY Community Colleges	191,691,352	7,341,602	0	0	40,685,691	48,027,293
Charter Schools	<u>32,903,541</u>	<u>1,260,175</u>	<u>0</u>	<u>0</u>	<u>14,050,388</u>	<u>15,310,563</u>
Total	<u>\$ 15,356,639,466</u>	<u>\$ 588,145,142</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 588,145,142</u>

**Deferred Inflows of Resources**

<u>Entity</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Change of Assumptions</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Deferred Inflows of Resources</u>
Department of Education	\$ 2,591,511,293	\$ 692,676,771	\$ 4,367,232,425	\$ 6,210,844	\$ 7,657,631,333
CUNY Senior Colleges	69,414,111	18,553,476	116,977,132	(11,165,232)	193,779,487
CUNY Community Colleges	33,708,359	9,009,800	56,805,555	2,839,397	102,363,111
Charter Schools	<u>5,785,991</u>	<u>1,546,519</u>	<u>9,750,591</u>	<u>2,114,991</u>	<u>19,198,092</u>
Total	<u>\$ 2,700,419,754</u>	<u>\$ 721,786,566</u>	<u>\$ 4,550,765,703</u>	<u>\$ 0</u>	<u>\$ 7,972,972,023</u>

**Pension Expense**

<u>Entity</u>	<u>Proportionate Share of Plan Pension Expense</u>	<u>Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Employer Pension Expense</u>
Department of Education	\$ 3,489,002,826	\$ (17,368,530)	\$ 3,471,634,296
CUNY Senior Colleges	93,453,589	4,393,758	97,847,347
CUNY Community Colleges	45,382,229	12,145,792	57,528,021
Charter Schools	<u>7,789,794</u>	<u>828,980</u>	<u>8,618,774</u>
Total	<u>\$ 3,635,628,438</u>	<u>\$ 0</u>	<u>\$ 3,635,628,438</u>

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Pension Amounts by Employer  
As of and for the year ending June 30, 2020**

**Deferred Outflows of Resources**

<u>Entity</u>	<u>Net Pension Liability</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Change of Assumptions</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Deferred Outflows of Resources</u>
Department of Education	\$ 15,139,960,091	\$ 429,471,186	\$ 0	\$ 0	\$ (55,990,762)	\$ 373,480,424
CUNY Senior Colleges	421,697,957	11,962,193	0	0	4,380,036	16,342,229
CUNY Community Colleges	202,103,755	5,733,023	0	0	41,199,519	46,932,542
Charter Schools	<u>33,284,873</u>	<u>944,183</u>	<u>0</u>	<u>0</u>	<u>10,411,207</u>	<u>11,355,390</u>
Total	<u>\$ 15,797,046,676</u>	<u>\$ 448,110,585</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 448,110,585</u>

**Deferred Inflows of Resources**

<u>Entity</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Change of Assumptions</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Deferred Inflows of Resources</u>
Department of Education	\$ 2,197,823,651	\$ 591,070,096	\$ 3,128,224,553	\$ 3,107,748	\$ 5,920,226,048
CUNY Senior Colleges	61,216,657	16,463,257	87,131,399	(7,409,892)	157,401,421
CUNY Community Colleges	29,338,810	7,890,211	41,758,758	2,685,108	81,672,887
Charter Schools	<u>4,831,867</u>	<u>1,299,455</u>	<u>6,877,334</u>	<u>1,617,036</u>	<u>14,625,692</u>
Total	<u>\$ 2,293,210,985</u>	<u>\$ 616,723,019</u>	<u>\$ 3,263,992,044</u>	<u>\$ 0</u>	<u>\$ 6,173,926,048</u>

**Pension Expense**

<u>Entity</u>	<u>Proportionate Share of Plan Pension Expense</u>	<u>Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Employer Pension Expense</u>
Department of Education	\$ 2,332,723,687	\$ (3,580,696)	\$ 2,329,142,991
CUNY Senior Colleges	64,974,070	(5,158,515)	59,815,555
CUNY Community Colleges	31,139,594	6,407,467	37,547,061
Charter Schools	<u>5,128,441</u>	<u>2,331,744</u>	<u>7,460,185</u>
Total	<u>\$ 2,433,965,792</u>	<u>\$ 0</u>	<u>\$ 2,433,965,792</u>

**NEW YORK CITY TEACHERS' RETIREMENT SYSTEM (TRS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Collective Pension Amounts  
As of and for the year ending June 30, 2020**

Net Pension Liability	Deferred Outflows of Resources				Deferred Inflows of Resources				Plan Pension Expense
	Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Total Deferred Outflows of Resources Excluding Employer Specific Amounts	Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Total Deferred Inflows of Resources Excluding Employer Specific Amounts	
\$ 15,797,046,676	\$ 448,110,585	\$ 0	\$ 0	\$ 448,110,585	\$ 2,293,210,985	\$ 616,723,019	\$ 3,263,992,044	\$ 6,173,926,048	\$ 2,433,965,792

# Appendix C

## APPENDIX C

### NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)

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**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Fiduciary Net Position - QPP Only**

**June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 977	\$ 3,694
Receivables:		
Investment securities sold	116,436	173,665
Member loans	48,751	50,586
Accrued interest and dividends	15,279	15,501
Other	<u>14,724</u>	<u>626</u>
Total receivables	\$ 195,190	\$ 240,378
Investments - at fair value		
Fixed Return Funds:		
Short-term investments:		
Commercial paper	29,179	46,954
Short-term investment fund	73,082	26,625
Discount notes	149,094	11,108
Debt securities	1,941,029	1,841,703
Equity securities	2,723,900	2,116,377
Alternative investments	976,076	892,479
Collective Trust Funds:		
International equity	776,286	1,096,779
Domestic equity	51,279	261,858
Mortgage debt security	22,965	20,203
Treasury inflation protected securities	0	0
Fixed income	119,264	123,051
Collateral from securities lending	451,742	411,646
Variable Return Funds:		
Short-term investments	484	467
Debt securities	1,250	1,095
Equities	51,826	53,088
Collateral from securities lending	<u>345</u>	<u>359</u>
Total Investments	7,367,801	\$ 6,903,792
Other assets	242,160	248,466
Total assets	<u>7,806,128</u>	<u>\$ 7,396,330</u>
<b>LIABILITIES</b>		
Accounts payable	32,441	43,333
Payables for investment securities purchased	166,434	182,667
Accrued benefits payable	12,884	10,034
Due to TDA Program from the System	1,959,392	1,756,459
Securities lending	452,087	412,005
Total liabilities	<u>2,623,238</u>	<u>\$ 2,404,498</u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u>5,182,890</u>	<u>\$ 4,991,832</u>

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Statement of Changes in Fiduciary Net Position - QPP Only  
June 30, 2020 and June 30, 2019

(Dollar amounts in thousands)

	June 30, 2020		June 30, 2019	
	Fixed	Variable	Fixed	Variable
<b>ADDITIONS</b>				
Contributions:				
Member Contributions	\$ 49,766	\$ 0	\$ 46,304	\$ 0
Employer Contributions	257,503	0	269,637	0
<i>Total contributions</i>	\$ 307,269	\$ 0	\$ 315,941	\$ 0
Investment income:				
Interest income	81,847	23	85,214	35
Dividend income	78,625	794	81,451	1,000
Net appreciation (depreciation) in fair value	235,297	386	265,605	2,874
<i>Total investment income</i>	\$ 395,769	\$ 1,203	\$ 432,270	\$ 3,909
Less:				
Investment expenses	32,624	53	31,170	50
<i>Net income</i>	363,145	1,150	401,100	3,859
Securities lending transactions:				
Securities lending income	1,608	0	2,124	0
Securities lending fees	(136)	0	(204)	0
<i>Net securities lending income</i>	1,472	0	1,920	0
<i>Net investment income</i>	364,617	1,150	403,020	3,859
Other:				
Net receipts from other retirement systems	(7,947)	(28)	35,595	29
Litigation income	0	0	0	0
<i>Total additions</i>	\$ 663,939	\$ 1,122	\$ 754,556	\$ 3,888
<b>DEDUCTIONS</b>				
Benefit payments and withdrawals	293,844	2,203	277,848	2,615
Payment of Interest on TDA Fixed Funds	155,749	0	141,695	0
Administrative expenses	22,207	0	17,357	0
<i>Total deductions</i>	\$ 471,800	\$ 2,203	\$ 436,900	\$ 2,615
<b>INCREASE IN PLAN NET POSITION</b>	192,139	(1,081)	317,656	1,273
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>				
<b>Beginning of year</b>	\$ 4,937,065	\$ 54,767	\$ 4,619,409	\$ 53,494
<b>End of year</b>	\$ 5,129,204	\$ 53,686	\$ 4,937,065	\$ 54,767

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Market Values of Assets - QPP Only**

	<b>Fixed</b>	<b>Variable</b>	<b>Total</b>
<b>1. Plan Net Position @ 6/30/2018</b>	\$ 4,619,409,000	\$ 53,494,000	\$ 4,672,903,000
<b>2. Changes for the year:</b>			
a. ER Contributions	269,637,000	0	269,637,000
b. EE Contributions	46,304,000	0	46,304,000
c. Net Investment Income	403,020,000	3,859,000	406,879,000
d. Benefit Payments	(277,848,000)	(2,615,000)	(280,463,000)
e. Payment of Interest on TDA Fixed Funds	(141,695,000)	0	(141,695,000)
f. Administrative Expenses	(17,357,000)	0	(17,357,000)
g. Other	35,595,000	29,000	35,624,000
h. Net Changes	<u>\$ 317,656,000</u>	<u>\$ 1,273,000</u>	<u>\$ 318,929,000</u>
<b>3. Plan Net Position @ 6/30/2019</b>	<u>\$ 4,937,065,000</u>	<u>\$ 54,767,000</u>	<u>\$ 4,991,832,000</u>
<b>4. Changes for the year:</b>			
a. ER Contributions	257,503,000	0	257,503,000
b. EE Contributions	49,766,000	0	49,766,000
c. Net Investment Income	364,617,000	1,150,000	365,767,000
d. Benefit Payments	(293,844,000)	(2,203,000)	(296,047,000)
e. Payment of Interest on TDA Fixed Funds	(155,749,000)	0	(155,749,000)
f. Administrative Expenses	(22,207,000)	0	(22,207,000)
g. Other	(7,947,000)	(28,000)	(7,975,000)
h. Net Changes	<u>\$ 192,139,000</u>	<u>\$ (1,081,000)</u>	<u>\$ 191,058,000</u>
<b>5. Plan Net Position @ 6/30/2020</b>	<u>\$ 5,129,204,000</u>	<u>\$ 53,686,000</u>	<u>\$ 5,182,890,000</u>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Long-Term Expected Rate of Return**

The Long-Term Expected Rate of Return (LTEROR) assumption on pension fund investments was determined using a Building-Block Method in which best-estimate ranges of Expected Real Rates of Return (i.e. Expected Returns, net of pension fund investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the LTEROR by weighting the Expected Real Rates of Return (RROR) by the Target Asset Allocation percentage and by adding Expected Inflation. The Target Asset Allocation and best estimates of Arithmetic Real Rates of Return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
<i>Public Markets:</i>		
U.S. Public Market Equities	31.0%	6.6%
Developed Public Market Equities	10.0%	7.2%
Emerging Public Market Equities	6.0%	9.1%
Fixed Income	27.0%	1.6%
<i>Private Markets (Alternative Investments):</i>		
Private Equity	9.0%	10.4%
Private Real Estate	8.0%	4.8%
Infrastructure	4.0%	6.0%
Opportunistic Fixed Income	<u>5.0%</u>	7.3%
Total	100.0%	

The Discount Rate used to measure the Total Pension Liability was 7.0% per annum. The projection of Cash Flows used to determine the Discount Rate assumes that employee contributions will be made at the rates applicable to the current Tier for each member and that employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the pension fund's Fiduciary Net Position is projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the Long-Term Expected Rate of Return on pension fund investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss - QPP Only  
June 30, 2019**

	Fixed	Variable	Total
<b>1. Market Value 6/30/2018</b>	\$ 4,619,409,000	\$ 53,494,000	\$ 4,672,903,000
<b>2. Market Value 6/30/2019</b>	4,937,065,000	54,767,000	4,991,832,000
<b>3. Net Investment Income</b>	403,020,000	3,859,000	406,879,000
<b>4. Cash Flow (2. - 1. - 3.)</b>	(85,364,000)	(2,586,000)	(87,950,000)
<b>5. Projected Earnings<sup>1</sup> (7% * 1. + 3.441% * 4.)</b>	320,421,255	3,859,000	324,280,255
<b>6. (Gain) / Loss (5. - 3.)</b>	(82,598,745)	0	(82,598,745)
<b>7. Recognition Period</b>	5 Years	5 Years	5 Years
<b>8. Amount Recognized in Pension Expense (6. / 7.)</b>	(16,519,749)	0	(16,519,749)
<b>9. Deferred (Inflow) / Outflow of Resources (6. - 8.)</b>	\$ (66,078,996)	\$ 0	\$ (66,078,996)

<sup>1</sup>Variable Funds Projected Earnings set equal to Variable Funds Net Investment Income.

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss - QPP Only  
June 30, 2020**

	Fixed	Variable	Total
<b>1. Market Value 6/30/2019</b>	\$ 4,937,065,000	\$ 54,767,000	\$ 4,991,832,000
<b>2. Market Value 6/30/2020</b>	5,129,204,000	53,686,000	5,182,890,000
<b>3. Net Investment Income</b>	364,617,000	1,150,000	365,767,000
<b>4. Cash Flow (2. - 1. - 3.)</b>	(172,478,000)	(2,231,000)	(174,709,000)
<b>5. Projected Earnings<sup>1</sup> (7% * 1. + 3.441% * 4.)</b>	339,659,582	1,150,000	340,809,582
<b>6. (Gain) / Loss (5. - 3.)</b>	(24,957,418)	0	(24,957,418)
<b>7. Recognition Period</b>	5 Years	5 Years	5 Years
<b>8. Amount Recognized in Pension Expense (6. / 7.)</b>	(4,991,484)	0	(4,991,484)
<b>9. Deferred (Inflow) / Outflow of Resources (6. - 8.)</b>	\$ (19,965,934)	\$ 0	\$ (19,965,934)

<sup>1</sup>Variable Funds Projected Earnings set equal to Variable Funds Net Investment Income.

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Roll-Forward of Entry Age Actuarial Accrued Liabilities to June 30, 2020**

		<b>Fixed</b>		<b>Variable</b>		<b>Total</b>
1. Disclosed EA Accrued Liability at 6/30/2019	\$	5,245,567,708	\$	20,498,363	\$	5,266,066,071
2. EA Normal Cost at 6/30/2019	\$	166,791,932	\$	0	\$	166,791,932
3. Benefit Payments-FY2020	\$	(293,844,000)	\$	(2,203,000)	\$	(296,047,000)
4. Interest <sup>1</sup>	\$	368,754,003	\$	1,150,000	\$	369,904,003
5. Experience (Gain)/Loss-FY2020	\$	(44,429,391)	\$	(2,144,923)	\$	(46,574,314)
6. Roll-Forward EAAL at 6/30/2020	\$	5,442,840,252	\$	17,300,440	\$	5,460,140,692

<sup>1</sup> Interest on Variable Funds set equal to Variable Funds Net Investment Income.

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Allocations**  
**June 30, 2019**

<b>Employer</b>	<b>2019 Employer Contributions</b>	<b>Employer Allocation Percentage</b>
Department of Education (DOE)	\$ 257,905,187	95.6491759812%
School Construction Authority (SCA)	11,689,168	4.3351562646%
Charter Schools	42,246	0.0156677542%
<b>Total</b>	\$ 269,636,601	100.000000000%



**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Net Pension Liability (NPL) by Source - By Obligor**  
**Balances as of June 30, 2019**

	<b>Total Pension Liability</b>			
	<b>DOE</b>	<b>SCA</b>	<b>Charter Schools</b>	<b>TOTAL</b>
<b>1. Balances at June 30, 2018</b>	\$ 4,951,688,886	\$ 221,149,014	\$ 1,448,800	\$ 5,174,286,700
<b>2. Changes for the Year:</b>				
a. Service Cost	161,169,588	7,304,771	26,400	168,500,759
b. Interest	350,156,369	15,870,315	57,357	366,084,041
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	145,539,868	6,596,378	23,840	152,160,086
e. Changes of Assumptions	(300,819,065)	(13,634,175)	(49,275)	(314,502,515)
f. Benefit Payments	(268,260,549)	(12,158,509)	(43,942)	(280,463,000)
g. <b>Net Changes</b>	\$ 87,786,211	\$ 3,978,780	\$ 14,380	\$ 91,779,371
<b>3. SubTotal</b>	\$ 5,039,475,097	\$ 225,127,794	\$ 1,463,180	\$ 5,266,066,071
<b>4. Changes in Proportionate Share</b>	\$ (2,526,293)	\$ 3,164,399	\$ (638,106)	\$ 0
<b>5. Balances at June 30, 2019</b>	\$ 5,036,948,804	\$ 228,292,193	\$ 825,074	\$ 5,266,066,071
	<b>Plan Fiduciary Net Position</b>			
	<b>DOE</b>	<b>SCA</b>	<b>Charter Schools</b>	<b>TOTAL</b>
<b>6. Balances at June 30, 2018</b>	\$ 4,471,874,713	\$ 199,719,874	\$ 1,308,413	\$ 4,672,903,000
<b>7. Changes for the Year:</b>				
a. Contributions - Employer	257,905,586	11,689,168	42,246	269,637,000
b. Contributions - Employee	44,289,394	2,007,351	7,255	46,304,000
c. Net Investment Income	389,176,411	17,638,840	63,749	406,879,000
d. Benefit Payments	(268,260,549)	(12,158,509)	(43,942)	(280,463,000)
e. Administrative Expenses	(16,601,828)	(752,453)	(2,719)	(17,357,000)
f. Payment of Interest on TDA Fixed Funds	(135,530,100)	(6,142,700)	(22,200)	(141,695,000)
g. Other Changes	34,074,063	1,544,356	5,581	35,624,000
h. <b>Net Changes</b>	\$ 305,052,977	\$ 13,826,053	\$ 49,970	\$ 318,929,000
<b>8. SubTotal</b>	\$ 4,776,927,690	\$ 213,545,927	\$ 1,358,383	\$ 4,991,832,000
<b>9. Changes in Proportionate Share</b>	\$ (2,281,516)	\$ 2,857,791	\$ (576,275)	\$ 0
<b>10. Balances at June 30, 2019</b>	\$ 4,774,646,174	\$ 216,403,718	\$ 782,108	\$ 4,991,832,000
	<b>Net Pension Liability</b>			
	<b>DOE</b>	<b>SCA</b>	<b>Charter Schools</b>	<b>TOTAL</b>
<b>11. Balances at June 30, 2018</b>	\$ 479,814,173	\$ 21,429,140	\$ 140,387	\$ 501,383,700
<b>12. Changes for the Year:</b>				
a. Service Cost	161,169,588	7,304,771	26,400	168,500,759
b. Interest	350,156,369	15,870,315	57,357	366,084,041
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	145,539,868	6,596,378	23,840	152,160,086
e. Changes of Assumptions	(300,819,065)	(13,634,175)	(49,275)	(314,502,515)
f. Contributions - Employer	(257,905,586)	(11,689,168)	(42,246)	(269,637,000)
g. Contributions - Employee	(44,289,394)	(2,007,351)	(7,255)	(46,304,000)
h. Net Investment Income	(389,176,411)	(17,638,840)	(63,749)	(406,879,000)
i. Benefit Payments	0	0	0	0
j. Administrative Expenses	16,601,828	752,453	2,719	17,357,000
k. Payment of Interest on TDA Fixed Funds	135,530,100	6,142,700	22,200	141,695,000
l. Other Changes	(34,074,063)	(1,544,356)	(5,581)	(35,624,000)
l. <b>Net Changes</b>	\$ (217,266,766)	\$ (9,847,273)	\$ (35,590)	\$ (227,149,629)
<b>13. SubTotal</b>	\$ 262,547,407	\$ 11,581,867	\$ 104,797	\$ 274,234,071
<b>14. Changes in Proportionate Share</b>	\$ (244,777)	\$ 306,608	\$ (61,831)	\$ 0
<b>15. Balances at June 30, 2019</b>	\$ 262,302,630	\$ 11,888,475	\$ 42,966	\$ 274,234,071

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Allocations  
June 30, 2020**

<u>Employer</u>	<u>2020 Employer Contributions</u>	<u>Employer Allocation Percentage</u>
Department of Education (DOE)	\$ 245,646,817	95.3955451323%
School Construction Authority (SCA)	11,720,440	4.5515662553%
Charter Schools	<u>136,190</u>	<u>0.0528886124%</u>
Total	\$ 257,503,447	100.000000000%

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Net Pension Liability (NPL) by Source - By Obligor  
Balances as of June 30, 2020**

	<u>Total Pension Liability</u>			
	<u>DOE</u>	<u>SCA</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>1. Balances at June 30, 2019</b>	\$ 5,036,948,804	\$ 228,292,193	\$ 825,074	\$ 5,266,066,071
<b>2. Changes for the Year:</b>				
a. Service Cost	159,112,073	7,591,645	88,214	166,791,932
b. Interest	352,871,940	16,836,426	195,637	369,904,003
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	(44,429,820)	(2,119,861)	(24,633)	(46,574,314)
e. Changes of Assumptions	0	0	0	0
f. Benefit Payments	(282,415,650)	(13,474,775)	(156,575)	(296,047,000)
g. <b>Net Changes</b>	\$ 185,138,543	\$ 8,833,435	\$ 102,643	\$ 194,074,621
<b>3. SubTotal</b>	\$ 5,222,087,347	\$ 237,125,628	\$ 927,717	\$ 5,460,140,692
<b>4. Changes in Proportionate Share</b>	\$ (13,356,369)	\$ 11,396,293	\$ 1,960,076	\$ 0
<b>5. Balances at June 30, 2020</b>	\$ 5,208,730,978	\$ 248,521,921	\$ 2,887,793	\$ 5,460,140,692
	<u>Plan Fiduciary Net Position</u>			
	<u>DOE</u>	<u>SCA</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>6. Balances at June 30, 2019</b>	\$ 4,774,646,174	\$ 216,403,718	\$ 782,108	\$ 4,991,832,000
<b>7. Changes for the Year:</b>				
a. Contributions - Employer	245,646,370	11,720,440	136,190	257,503,000
b. Contributions - Employee	47,474,547	2,265,132	26,321	49,766,000
c. Net Investment Income	348,925,424	16,648,127	193,449	365,767,000
d. Benefit Payments	(282,415,650)	(13,474,775)	(156,575)	(296,047,000)
e. Administrative Expenses	(21,184,489)	(1,010,766)	(11,745)	(22,207,000)
f. Payment of Interest on TDA Fixed Funds	(148,577,608)	(7,089,019)	(82,373)	(155,749,000)
g. Other Changes	(7,607,795)	(362,987)	(4,218)	(7,975,000)
h. <b>Net Changes</b>	\$ 182,260,799	\$ 8,696,152	\$ 101,049	\$ 191,058,000
<b>8. SubTotal</b>	\$ 4,956,906,973	\$ 225,099,870	\$ 883,157	\$ 5,182,890,000
<b>9. Changes in Proportionate Share</b>	\$ (12,660,804)	\$ 10,802,802	\$ 1,858,002	\$ 0
<b>10. Balances at June 30, 2020</b>	\$ 4,944,246,169	\$ 235,902,672	\$ 2,741,159	\$ 5,182,890,000
	<u>Net Pension Liability</u>			
	<u>DOE</u>	<u>SCA</u>	<u>Charter Schools</u>	<u>TOTAL</u>
<b>11. Balances at June 30, 2019</b>	\$ 262,302,630	\$ 11,888,475	\$ 42,966	\$ 274,234,071
<b>12. Changes for the Year:</b>				
a. Service Cost	159,112,073	7,591,645	88,214	166,791,932
b. Interest	352,871,940	16,836,426	195,637	369,904,003
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	(44,429,820)	(2,119,861)	(24,633)	(46,574,314)
e. Changes of Assumptions	0	0	0	0
f. Contributions - Employer	(245,646,370)	(11,720,440)	(136,190)	(257,503,000)
g. Contributions - Employee	(47,474,547)	(2,265,132)	(26,321)	(49,766,000)
h. Net Investment Income	(348,925,424)	(16,648,127)	(193,449)	(365,767,000)
i. Benefit Payments	0	0	0	0
j. Administrative Expenses	21,184,489	1,010,766	11,745	22,207,000
k. Payment of Interest on TDA Fixed Funds	148,577,608	7,089,019	82,373	155,749,000
l. Other Changes	7,607,795	362,987	4,218	7,975,000
l. <b>Net Changes</b>	\$ 2,877,744	\$ 137,283	\$ 1,594	\$ 3,016,621
<b>13. SubTotal</b>	\$ 265,180,374	\$ 12,025,758	\$ 44,560	\$ 277,250,692
<b>14. Changes in Proportionate Share</b>	\$ (695,565)	\$ 593,491	\$ 102,074	\$ 0
<b>15. Balances at June 30, 2020</b>	\$ 264,484,809	\$ 12,619,249	\$ 146,634	\$ 277,250,692

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Schedule of Changes in Net Pension Liability and Related Ratios

	2020	2019	2018	2017	2016	2015	2014	2013
<b>1. Total Pension Liability</b>								
a. Service Cost	\$ 166,791,932	\$ 168,500,759	\$ 176,109,730	\$ 168,625,048	\$ 153,106,995	\$ 147,898,591	\$ 142,686,386	\$ 138,530,472
b. Interest	369,904,003	366,084,041	350,999,332	346,508,926	320,315,152	299,591,999	288,162,040	271,737,317
c. Changes of Benefit Terms	0	0	0	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	(46,574,314)	152,160,086	(164,586,983)	19,938,359	(75,906,864)	50,147,724	0	0
e. Changes of Assumptions	0	(314,502,515)	0	0	183,677,129	0	0	0
f. Benefit Payments	(296,047,000)	(280,463,000)	(261,574,000)	(262,432,000)	(240,727,000)	(223,244,000)	(214,315,000)	(204,093,000)
<b>g. Net Changes in Total Pension Liability</b>	<b>\$ 194,074,621</b>	<b>\$ 91,779,371</b>	<b>\$ 100,948,079</b>	<b>\$ 272,640,333</b>	<b>\$ 340,465,412</b>	<b>\$ 274,394,314</b>	<b>\$ 216,533,426</b>	<b>\$ 206,174,789</b>
<b>2. Total Pension Liability - Beginning</b>	<b>\$ 5,266,066,071</b>	<b>\$ 5,174,286,700</b>	<b>\$ 5,073,338,621</b>	<b>\$ 4,800,698,288</b>	<b>\$ 4,460,232,876</b>	<b>\$ 4,185,838,562</b>	<b>\$ 3,969,305,136</b>	<b>\$ 3,763,130,347</b>
<b>3. Total Pension Liability - Ending</b>	<b>\$ 5,460,140,692</b>	<b>\$ 5,266,066,071</b>	<b>\$ 5,174,286,700</b>	<b>\$ 5,073,338,621</b>	<b>\$ 4,800,698,288</b>	<b>\$ 4,460,232,876</b>	<b>\$ 4,185,838,562</b>	<b>\$ 3,969,305,136</b>
<b>4. Plan Fiduciary Net Position</b>								
a. Contributions - Employer	\$ 257,503,000	\$ 269,637,000	\$ 318,643,000	\$ 288,233,000	\$ 265,532,000	\$ 258,099,000	\$ 214,590,000	\$ 196,246,000
b. Contributions - Employee	49,766,000	46,304,000	40,846,000	39,821,000	38,581,000	39,564,000	37,193,000	39,056,000
c. Net Investment Income	365,767,000	406,879,000	565,577,000	862,510,000	164,144,000	177,166,000	875,453,000	660,827,000
d. Benefit Payments	(296,047,000)	(280,463,000)	(261,574,000)	(262,432,000)	(240,727,000)	(223,244,000)	(214,315,000)	(204,093,000)
e. Administrative Expenses	(22,207,000)	(17,357,000)	(13,212,000)	(15,486,000)	(12,818,000)	(10,956,000)	(9,776,000)	(8,927,000)
f. Payment of Interest on TDA Fixed Funds	(155,749,000)	(141,695,000)	(127,972,000)	(106,554,000)	(94,789,000)	(85,104,000)	(206,615,000)	(163,756,000)
g. Other Changes	(7,975,000)	35,624,000	51,024,000	(122,954,000)	(157,499,000)	(52,021,000)	(70,916,000)	(176,301,000)
<b>h. Net Changes in Fiduciary Net Position</b>	<b>\$ 191,058,000</b>	<b>\$ 318,929,000</b>	<b>\$ 573,332,000</b>	<b>\$ 683,138,000</b>	<b>\$ (37,576,000)</b>	<b>\$ 103,504,000</b>	<b>\$ 625,614,000</b>	<b>\$ 343,052,000</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 4,991,832,000</b>	<b>\$ 4,672,903,000</b>	<b>\$ 4,099,571,000</b>	<b>\$ 3,416,433,000</b>	<b>\$ 3,454,009,000</b>	<b>\$ 3,350,505,000</b>	<b>\$ 2,653,651,000</b>	<b>\$ 2,310,599,000</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 5,182,890,000</b>	<b>\$ 4,991,832,000</b>	<b>\$ 4,672,903,000</b>	<b>\$ 4,099,571,000</b>	<b>\$ 3,416,433,000</b>	<b>\$ 3,454,009,000</b>	<b>\$ 3,279,265,000</b>	<b>\$ 2,653,651,000</b>
<b>7. BERS' Net Pension Liability</b>	<b>\$ 277,250,692</b>	<b>\$ 274,234,071</b>	<b>\$ 501,383,700</b>	<b>\$ 973,767,621</b>	<b>\$ 1,384,265,288</b>	<b>\$ 1,006,223,876</b>	<b>\$ 906,573,562</b>	<b>\$ 1,315,654,136</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>94.9%</b>	<b>94.8%</b>	<b>90.3%</b>	<b>80.8%</b>	<b>71.2%</b>	<b>77.4%</b>	<b>78.3%</b>	<b>66.9%</b>
<b>9. Covered Employee Payroll<sup>1</sup></b>	<b>\$ 1,353,266,355</b>	<b>\$ 1,264,079,158</b>	<b>\$ 1,102,183,933</b>	<b>\$ 1,052,171,260</b>	<b>\$ 1,008,055,944</b>	<b>\$ 1,016,822,150</b>	<b>\$ 989,160,097</b>	<b>\$ 886,178,191</b>
<b>10. BERS' Net Pension Liability as a Percentage of Covered Employee Payroll</b>	<b>20.5%</b>	<b>21.7%</b>	<b>45.5%</b>	<b>92.5%</b>	<b>137.3%</b>	<b>99.0%</b>	<b>91.7%</b>	<b>148.5%</b>

<sup>1</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Contributions (\$ in thousands)**

<b>Fiscal Year Ending June 30</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Actuarially Determined Contribution	\$ 257,503	\$ 269,637	\$ 318,643	\$ 288,233	\$ 265,532	\$ 258,099	\$ 214,590	\$ 196,246	\$ 213,651	\$ 180,191
Contributions in relation to the Actuarially Determined Contribution	<u>\$ 257,503</u>	<u>\$ 269,637</u>	<u>\$ 318,643</u>	<u>\$ 288,233</u>	<u>\$ 265,532</u>	<u>\$ 258,099</u>	<u>\$ 214,590</u>	<u>\$ 196,246</u>	<u>\$ 213,651</u>	<u>\$ 180,191</u>
Contribution Deficiency (Excess)	0	0	0	0	0	0	0	0	0	0
Contributions as a percentage of Covered Employee Payroll <sup>1</sup>	19.028%	21.331%	28.910%	27.394%	26.341%	25.383%	21.694%	22.145%	24.293%	20.461%

<sup>1</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Average Expected Remaining Service Lives**

<u>Group</u>	<u>Count</u>	Average Expected Remaining Service Life <u>@ 6/30/2019</u>
Active	25,825	11.93
Active Off Payroll	11,422	0
Term Vested	2,019	0
Retired	<u>18,502</u>	<u>0</u>
Total	57,768	5.33

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Expected and Actual Experience</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
2016	\$ (75,906,864)	3.19	(4,521,099)	0	0	0	0	0	0
2017	\$ 19,938,359	5.17	3,856,549	3,856,549	3,856,549	655,614	0	0	0
2018	\$ (164,586,983)	5.85	(28,134,527)	(28,134,527)	(28,134,527)	(28,134,527)	(23,914,348)	0	0
2019	\$ 152,160,086	5.92	25,702,717	25,702,717	25,702,717	25,702,717	25,702,717	23,646,501	0
2020	\$ (46,574,314)	5.33		(8,738,145)	(8,738,145)	(8,738,145)	(8,738,145)	(8,738,145)	(2,883,589)
Net increase (decrease) in Pension Expense			<b>\$ (3,096,360)</b>	<b>\$ (7,313,406)</b>	<b>\$ (7,313,406)</b>	<b>\$ (10,514,341)</b>	<b>\$ (6,949,776)</b>	<b>\$ 14,908,356</b>	<b>\$ (2,883,589)</b>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2016	\$ 183,677,129	3.19	10,940,018					
2017								
2018								
2019	\$ (314,502,515)	5.92	(53,125,425)	(53,125,425)	(53,125,425)	(53,125,425)	(53,125,425)	(48,875,390)
2020								
Net increase (decrease) in Pension Expense			<b>\$ (42,185,407)</b>	<b>\$ (53,125,425)</b>	<b>\$ (53,125,425)</b>	<b>\$ (53,125,425)</b>	<b>\$ (53,125,425)</b>	<b>\$ (48,875,390)</b>



**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Projected and Actual Earnings on Pension Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2015	\$ 54,021,526	5	10,804,306					
2016	\$ 67,373,543	5	13,474,709	13,474,707				
2017	\$ (624,753,917)	5	(124,950,783)	(124,950,783)	(124,950,785)			
2018	\$ (275,816,841)	5	(55,163,368)	(55,163,368)	(55,163,368)	(55,163,369)		
2019	\$ (82,598,745)	5	(16,519,749)	(16,519,749)	(16,519,749)	(16,519,749)	(16,519,749)	
2020	\$ (24,957,418)	5		(4,991,484)	(4,991,484)	(4,991,484)	(4,991,484)	(4,991,482)
Net increase (decrease) in Pension Expense			<b>\$ (172,354,885)</b>	<b>\$ (188,150,677)</b>	<b>\$ (201,625,386)</b>	<b>\$ (76,674,602)</b>	<b>\$ (21,511,233)</b>	<b>\$ (4,991,482)</b>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**  
**Changes in Proportionate Share at 6/30/2016**

Department of Education	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 96.5724%	Proportionate Share at 6/30/2016 96.8080%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(78,168,665)	(75,489,357)	(75,673,522)	(184,165)	3.19	(57,732)	(57,732)	(57,732)	(10,969)
<b>Deferred Inflows of Resources</b>	617,120,991	595,968,552	597,422,488	1,453,936	3.19	455,779	455,779	455,779	86,599
<b>Net Pension Liability</b>	1,006,223,876	971,734,546	974,105,211	2,370,665	3.19	743,155	743,155	743,155	141,200
<b>Total</b>	1,545,176,202	1,492,213,741	1,495,854,177	3,640,436		1,141,202	1,141,202	1,141,202	216,830
<b>School Construction Authority</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 3.4105%	Proportionate Share at 6/30/2016 3.1787%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(78,168,665)	(2,665,942)	(2,484,747)	181,195	3.19	56,801	56,801	56,801	10,792
<b>Deferred Inflows of Resources</b>	617,120,991	21,046,911	19,616,425	(1,430,486)	3.19	(448,428)	(448,428)	(448,428)	(85,202)
<b>Net Pension Liability</b>	1,006,223,876	34,317,265	31,984,838	(2,332,427)	3.19	(731,168)	(731,168)	(731,168)	(138,923)
<b>Total</b>	1,545,176,202	52,698,234	49,116,516	(3,581,718)		(1,122,795)	(1,122,795)	(1,122,795)	(213,333)
<b>Charter Schools</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30			
	Collective Amount at 6/30/2015	Proportionate Share at 6/30/2015 0.0171%	Proportionate Share at 6/30/2016 0.0133%	Change in Proportionate Share		2016	2017	2018	2019
<b>Deferred Outflows of Resources</b>	(78,168,665)	(13,366)	(10,396)	2,970	3.19	931	931	931	177
<b>Deferred Inflows of Resources</b>	617,120,991	105,528	82,078	(23,450)	3.19	(7,351)	(7,351)	(7,351)	(1,397)
<b>Net Pension Liability</b>	1,006,223,876	172,065	133,827	(38,238)	3.19	(11,987)	(11,987)	(11,987)	(2,277)
<b>Total</b>	1,545,176,202	264,227	205,509	(58,718)		(18,407)	(18,407)	(18,407)	(3,497)

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2017**

Department of Education	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 96.8080%	Proportionate Share at 6/30/2017 95.2749%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
<b>Deferred Outflows of Resources</b>	(232,165,006)	(224,754,299)	(221,194,978)	3,559,321	5.17	688,456	688,456	688,456	688,456	688,456	117,041
<b>Deferred Inflows of Resources</b>	429,833,123	416,112,850	409,523,077	(6,589,773)	5.17	(1,274,618)	(1,274,618)	(1,274,618)	(1,274,618)	(1,274,618)	(216,683)
<b>Net Pension Liability</b>	1,384,265,288	1,340,079,540	1,318,857,369	(21,222,171)	5.17	(4,104,869)	(4,104,869)	(4,104,869)	(4,104,869)	(4,104,869)	(697,826)
<b>Total</b>	1,581,933,405	1,531,438,091	1,507,185,468	(24,252,623)		(4,691,031)	(4,691,031)	(4,691,031)	(4,691,031)	(4,691,031)	(797,468)
<b>School Construction Authority</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 3.1787%	Proportionate Share at 6/30/2017 4.6845%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
<b>Deferred Outflows of Resources</b>	(232,165,006)	(7,379,829)	(10,875,770)	(3,495,941)	5.17	(676,197)	(676,197)	(676,197)	(676,197)	(676,197)	(114,956)
<b>Deferred Inflows of Resources</b>	429,833,123	13,663,105	20,135,533	6,472,428	5.17	1,251,920	1,251,920	1,251,920	1,251,920	1,251,920	212,828
<b>Net Pension Liability</b>	1,384,265,288	44,001,641	64,845,907	20,844,266	5.17	4,031,773	4,031,773	4,031,773	4,031,773	4,031,773	685,401
<b>Total</b>	1,581,933,405	50,284,917	74,105,670	23,820,753		4,607,496	4,607,496	4,607,496	4,607,496	4,607,496	783,273
<b>Charter Schools</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2016	Proportionate Share at 6/30/2016 0.0133%	Proportionate Share at 6/30/2017 0.0406%	Change in Proportionate Share		2017	2018	2019	2020	2021	2022
<b>Deferred Outflows of Resources</b>	(232,165,006)	(30,878)	(94,258)	(63,380)	5.17	(12,259)	(12,259)	(12,259)	(12,259)	(12,259)	(2,085)
<b>Deferred Inflows of Resources</b>	429,833,123	57,168	174,513	117,345	5.17	22,698	22,698	22,698	22,698	22,698	3,855
<b>Net Pension Liability</b>	1,384,265,288	184,107	562,012	377,905	5.17	73,096	73,096	73,096	73,096	73,096	12,425
<b>Total</b>	1,581,933,405	210,397	642,267	431,870		83,535	83,535	83,535	83,535	83,535	14,195

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2018**

Department of Education	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 95.2799%	Proportionate Share at 6/30/2018 95.698%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023
<b>Deferred Outflows of Resources</b>	(89,159,749)	(84,951,320)	(85,324,096)	(372,776)	5.85	(63,722)	(63,722)	(63,722)	(63,722)	(63,722)	(54,166)
<b>Deferred Inflows of Resources</b>	604,408,790	575,880,090	578,407,124	2,527,034	5.85	431,971	431,971	431,971	431,971	431,971	367,179
<b>Net Pension Liability</b>	973,767,621	927,804,816	931,876,138	4,071,322	5.85	695,953	695,953	695,953	695,953	695,953	591,557
<b>Total</b>	1,489,016,662	1,418,733,586	1,424,959,166	6,225,580		1,064,202	1,064,202	1,064,202	1,064,202	1,064,202	904,570
<b>School Construction Authority</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 4.6845%	Proportionate Share at 6/30/2018 4.274%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023
<b>Deferred Outflows of Resources</b>	(89,159,749)	(4,176,688)	(3,810,688)	366,000	5.85	62,564	62,564	62,564	62,564	62,564	53,180
<b>Deferred Inflows of Resources</b>	604,408,790	28,313,530	25,832,432	(2,481,098)	5.85	(424,119)	(424,119)	(424,119)	(424,119)	(424,119)	(360,503)
<b>Net Pension Liability</b>	973,767,621	45,616,144	41,618,828	(3,997,316)	5.85	(683,302)	(683,302)	(683,302)	(683,302)	(683,302)	(580,806)
<b>Total</b>	1,489,016,662	69,752,986	63,640,572	(6,112,414)		(1,044,857)	(1,044,857)	(1,044,857)	(1,044,857)	(1,044,857)	(888,129)
<b>Charter Schools</b>	(1)	(2)	(3)	(3)-(2)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2017	Proportionate Share at 6/30/2017 0.0356%	Proportionate Share at 6/30/2018 0.028%	Change in Proportionate Share		2018	2019	2020	2021	2022	2023
<b>Deferred Outflows of Resources</b>	(89,159,749)	(31,741)	(24,965)	6,776	5.85	1,158	1,158	1,158	1,158	1,158	986
<b>Deferred Inflows of Resources</b>	604,408,790	215,170	169,234	(45,936)	5.85	(7,852)	(7,852)	(7,852)	(7,852)	(7,852)	(6,676)
<b>Net Pension Liability</b>	973,767,621	346,661	272,655	(74,006)	5.85	(12,651)	(12,651)	(12,651)	(12,651)	(12,651)	(10,751)
<b>Total</b>	1,489,016,662	530,090	416,924	(113,166)		(19,345)	(19,345)	(19,345)	(19,345)	(19,345)	(16,441)

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2019**

Department of Education	(1)	(2)	(3)	(4)	(3)-(2)+(4)		Amount to Recognize in Pension Expense					
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 95.698%	Proportionate Share at 6/30/2019 95.649%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2019	2020	2021	2022	2023	2024
Deferred Outflows of Resources	(23,165,279)	(22,168,709)	(22,157,399)		11,310	5.92	1,910	1,910	1,910	1,910	1,910	1,760
Deferred Inflows of Resources	698,725,657	668,666,479	668,325,333		(341,146)	5.92	(57,626)	(57,626)	(57,626)	(57,626)	(57,626)	(53,016)
Net Pension Liability	501,383,700	479,814,173	479,569,377	19	(244,777)	5.92	(41,348)	(41,348)	(41,348)	(41,348)	(41,348)	(38,037)
<b>Total</b>	<b>1,176,944,078</b>	<b>1,126,311,943</b>	<b>1,125,737,311</b>	<b>19</b>	<b>(574,613)</b>		<b>(97,064)</b>	<b>(97,064)</b>	<b>(97,064)</b>	<b>(97,064)</b>	<b>(97,064)</b>	<b>(89,293)</b>
<b>School Construction Authority</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3)-(2)+(4)</b>		<b>Amount to Recognize in Pension Expense</b>					
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 4.274%	Proportionate Share at 6/30/2019 4.335%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2019	2020	2021	2022	2023	2024
Deferred Outflows of Resources	(23,165,279)	(990,084)	(1,004,251)		(14,167)	5.92	(2,393)	(2,393)	(2,393)	(2,393)	(2,393)	(2,202)
Deferred Inflows of Resources	698,725,657	29,863,535	30,290,849		427,314	5.92	72,181	72,181	72,181	72,181	72,181	66,409
Net Pension Liability	501,383,700	21,429,140	21,735,767	(19)	306,608	5.92	51,792	51,792	51,792	51,792	51,792	47,648
<b>Total</b>	<b>1,176,944,078</b>	<b>50,302,591</b>	<b>51,022,365</b>	<b>(19)</b>	<b>719,755</b>		<b>121,580</b>	<b>121,580</b>	<b>121,580</b>	<b>121,580</b>	<b>121,580</b>	<b>111,855</b>
<b>Charter Schools</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3)-(2)+(4)</b>		<b>Amount to Recognize in Pension Expense</b>					
	Collective Amount at 6/30/2018	Proportionate Share at 6/30/2018 0.028%	Proportionate Share at 6/30/2019 0.016%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share	Recognition Period (Years)	2019	2020	2021	2022	2023	2024
Deferred Outflows of Resources	(23,165,279)	(6,486)	(3,629)		2,857	5.92	483	483	483	483	483	442
Deferred Inflows of Resources	698,725,657	195,643	109,475		(86,168)	5.92	(14,555)	(14,555)	(14,555)	(14,555)	(14,555)	(13,393)
Net Pension Liability	501,383,700	140,387	78,556	0	(61,831)	5.92	(10,444)	(10,444)	(10,444)	(10,444)	(10,444)	(9,611)
<b>Total</b>	<b>1,176,944,078</b>	<b>329,544</b>	<b>184,402</b>	<b>0</b>	<b>(145,142)</b>		<b>(24,516)</b>	<b>(24,516)</b>	<b>(24,516)</b>	<b>(24,516)</b>	<b>(24,516)</b>	<b>(22,562)</b>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Proportionate Share at 6/30/2020**

Department of Education	(1)	(2)	(3)	(4)	(3)-(2)+(4)	Recognition Period (Years)	Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30					
	Collective Amount at 6/30/2019	Proportionate Share at 6/30/2019 95.649%	Proportionate Share at 6/30/2020 95.396%	Contributions in excess of Proportionate Share and Adjustments Due to Rounding	Change in Proportionate Share		2020	2021	2022	2023	2024	2025
Deferred Outflows of Resources	(134,826,081)	(128,960,036)	(128,618,075)		341,961	5.33	64,157	64,157	64,157	64,157	64,157	21,176
Deferred Inflows of Resources	837,690,981	801,244,521	799,119,878		(2,124,643)	5.33	(398,619)	(398,619)	(398,619)	(398,619)	(398,619)	(131,548)
Net Pension Liability	274,234,071	262,302,628	261,607,087	(24)	(695,565)	5.33	(130,500)	(130,500)	(130,500)	(130,500)	(130,500)	(43,065)
<b>Total</b>	<b>977,098,971</b>	<b>934,587,113</b>	<b>932,108,890</b>	<b>(24)</b>	<b>(2,478,247)</b>		<b>(464,962)</b>	<b>(464,962)</b>	<b>(464,962)</b>	<b>(464,962)</b>	<b>(464,962)</b>	<b>(153,437)</b>
<b>School Construction Authority</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3)-(2)+(4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>					
	<b>Collective Amount at 6/30/2019</b>	<b>Proportionate Share at 6/30/2019 4.335%</b>	<b>Proportionate Share at 6/30/2020 4.552%</b>	<b>Contributions in excess of Proportionate Share and Adjustments Due to Rounding</b>	<b>Change in Proportionate Share</b>	<b>Recognition Period (Years)</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Deferred Outflows of Resources	(134,826,081)	(5,844,921)	(6,136,698)		(291,777)	5.33	(54,742)	(54,742)	(54,742)	(54,742)	(54,742)	(18,067)
Deferred Inflows of Resources	837,690,981	36,315,213	38,128,060		1,812,847	5.33	340,121	340,121	340,121	340,121	340,121	112,242
Net Pension Liability	274,234,071	11,888,477	12,481,945	23	593,491	5.33	111,349	111,349	111,349	111,349	111,349	36,746
<b>Total</b>	<b>977,098,971</b>	<b>42,358,769</b>	<b>44,473,307</b>	<b>23</b>	<b>2,114,561</b>		<b>396,728</b>	<b>396,728</b>	<b>396,728</b>	<b>396,728</b>	<b>396,728</b>	<b>130,921</b>
<b>Charter Schools</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3)-(2)+(4)</b>		<b>Amount to Recognize in Pension Expense For the Fiscal Year Ending June 30</b>					
	<b>Collective Amount at 6/30/2019</b>	<b>Proportionate Share at 6/30/2019 0.016%</b>	<b>Proportionate Share at 6/30/2020 0.053%</b>	<b>Contributions in excess of Proportionate Share and Adjustments Due to Rounding</b>	<b>Change in Proportionate Share</b>	<b>Recognition Period (Years)</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Deferred Outflows of Resources	(134,826,081)	(21,124)	(71,308)		(50,184)	5.33	(9,415)	(9,415)	(9,415)	(9,415)	(9,415)	(3,109)
Deferred Inflows of Resources	837,690,981	131,247	443,043		311,796	5.33	58,498	58,498	58,498	58,498	58,498	19,306
Net Pension Liability	274,234,071	42,966	145,039	1	102,074	5.33	19,151	19,151	19,151	19,151	19,151	6,319
<b>Total</b>	<b>977,098,971</b>	<b>153,089</b>	<b>516,774</b>	<b>1</b>	<b>363,686</b>		<b>68,234</b>	<b>68,234</b>	<b>68,234</b>	<b>68,234</b>	<b>68,234</b>	<b>22,516</b>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Components of Pension Expense for the Fiscal Year Ending June 30, 2019 - By Obligor**

<b><u>Component</u></b>	<b><u>DOE</u></b>	<b><u>SCA</u></b>	<b><u>Charter Schools</u></b>	<b><u>Total</u></b>
a. Service Cost	\$ 161,169,588	\$ 7,304,771	\$ 26,400	\$ 168,500,759
b. Interest on the Total Pension Liability	350,156,369	15,870,315	57,357	366,084,041
c. Differences between Expected and Actual Experience	(2,961,643)	(134,232)	(485)	(3,096,360)
d. Changes of Assumptions	(40,349,994)	(1,828,803)	(6,610)	(42,185,407)
e. Employee Contributions	(44,289,394)	(2,007,351)	(7,255)	(46,304,000)
f. Projected Earnings on Pension Plan Investments	(310,171,392)	(14,058,056)	(50,807)	(324,280,255)
g. Differences between Projected and Actual Earnings on Plan Investments	(164,856,027)	(7,471,854)	(27,004)	(172,354,885)
h. Pension Plan Administrative Expenses	16,601,828	752,453	2,719	17,357,000
i. Payment of Interest on TDA Fixed Funds	135,530,100	6,142,700	22,200	141,695,000
j. Other Changes in Fiduciary Net Position	(34,074,063)	(1,544,356)	(5,581)	(35,624,000)
k. Changes in Proportionate Share	(3,514,744)	3,470,886	43,858	0
<b>Total Pension Expense</b>	<b>\$ 63,240,628</b>	<b>\$ 6,496,473</b>	<b>\$ 54,792</b>	<b>\$ 69,791,893</b>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Components of Pension Expense for the Fiscal Year Ending June 30, 2020 - By Obligor**

<u>Component</u>	<u>DOE</u>	<u>SCA</u>	<u>Charter Schools</u>	<u>Total</u>
a. Service Cost	\$ 159,112,073	\$ 7,591,645	\$ 88,214	\$ 166,791,932
b. Interest on the Total Pension Liability	352,871,940	16,836,426	195,637	369,904,003
c. Differences between Expected and Actual Experience	(6,976,663)	(332,875)	(3,868)	(7,313,406)
d. Changes of Assumptions	(50,679,289)	(2,418,039)	(28,097)	(53,125,425)
e. Employee Contributions	(47,474,547)	(2,265,132)	(26,321)	(49,766,000)
f. Projected Earnings on Pension Plan Investments	(325,117,159)	(15,512,174)	(180,249)	(340,809,582)
g. Differences between Projected and Actual Earnings on Plan Investments	(179,487,364)	(8,563,803)	(99,510)	(188,150,677)
h. Pension Plan Administrative Expenses	21,184,489	1,010,766	11,745	22,207,000
i. Payment of Interest on TDA Fixed Funds	148,577,608	7,089,019	82,373	155,749,000
j. Other Changes in Fiduciary Net Position	7,607,795	362,987	4,218	7,975,000
k. Changes in Proportionate Share	(4,195,892)	4,080,947	114,945	0
<b>Total Pension Expense</b>	<b>\$ 75,422,991</b>	<b>\$ 7,879,767</b>	<b>\$ 159,087</b>	<b>\$ 83,461,845</b>



**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

	Fiscal Year Ending June 30, 2015		Fiscal Year Ending June 30, 2016		Fiscal Year Ending June 30, 2017		Fiscal Year Ending June 30, 2018		Fiscal Year Ending June 30, 2019		Fiscal Year Ending June 30, 2020	
<b>Recognized Pension Expense</b>	<b>\$111,421,172</b>		<b>\$302,289,203</b>		<b>\$195,316,257</b>		<b>\$6,570,416</b>		<b>\$69,791,893</b>		<b>\$83,461,845</b>	
<b>Deferred Resources</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>
Differences Between Expected and Actual Experience	34,951,444	0	0	52,111,609	16,081,810	0	0	136,452,456	126,457,369	0	0	37,836,169
Chages of Assumptions	0	0	126,098,092	0	0	0	0	0	0	261,377,090	0	0
Net Difference between Projected and Actual Earnings on Pension Plan Investments	43,217,221	0	53,898,834	0	0	499,803,134	0	220,653,473	0	66,078,996	0	19,965,934
<b>Total</b>	<b>78,168,665</b>	<b>0</b>	<b>179,996,926</b>	<b>52,111,609</b>	<b>16,081,810</b>	<b>499,803,134</b>	<b>0</b>	<b>357,105,929</b>	<b>126,457,369</b>	<b>327,456,086</b>	<b>0</b>	<b>57,802,103</b>
Reported amounts will be recognized in Pension Expense during Fiscal Year Ending June 30												
2015	\$26,000,585											
2016	\$26,000,585		\$47,258,491									
2017	\$26,000,585		\$47,258,491		(\$121,094,234)							
2018	\$15,363,189		\$47,258,491		(\$121,094,234)		(\$83,297,895)					
2019	\$10,804,306		\$19,893,628		(\$121,094,234)		(\$83,297,895)		(\$43,942,457)			
2020			\$13,474,707		(\$121,094,234)		(\$83,297,895)		(\$43,942,457)		(\$13,729,629)	
2021					(\$121,094,236)		(\$83,297,895)		(\$43,942,457)		(\$13,729,629)	
2022					\$655,614		(\$83,297,896)		(\$43,942,457)		(\$13,729,629)	
2023							(\$23,914,348)		(\$43,942,457)		(\$13,729,629)	
2024									(\$25,228,889)		(\$13,729,627)	
2025											(\$2,883,589)	

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**  
**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

For the Fiscal Year ending June 30, 2020, the Obligors recognized Pension Expense for BERS of \$83,461,845.

At June 30, 2020, the Obligors reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions for BERS from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected and Actual Experience	\$ 105,266,815	\$ 118,019,571
Changes of Assumptions	0	208,251,665
Net Difference between Projected and Actual Earnings on Pension Plan Investments	<u>0</u>	<u>304,802,703</u>
Total	\$ 105,266,815	\$ 631,073,939

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for BERS will be recognized in Pension Expense as follows:

Fiscal Year Ending <u>June 30</u>	<u>Amount</u>
2020	\$ (248,589,508)
2021	\$ (262,064,217)
2022	\$ (140,314,368)
2023	\$ (81,586,434)
2024	\$ (38,958,516)
2025	\$ (2,883,589)

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Schedule of Pension Amounts by Employer  
As of and for the year ending June 30, 2019

Deferred Outflows of Resources						
Entity	Net Pension Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
Department of Education	\$ 262,302,630	\$ 128,960,036	\$ 0	\$ 0	\$ (7,835,438)	\$ 121,124,598
School Construction Authority	11,888,475	5,844,921	0	0	\$ 7,811,992	13,656,913
Charter Schools	42,966	21,124	0	0	\$ 23,446	44,570
Total	<u>\$ 274,234,071</u>	<u>\$ 134,826,081</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 134,826,081</u>

Deferred Inflows of Resources						
Entity	Differences Between Expected and Actual Experience	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	
Department of Education	\$ 103,605,207	\$ 250,005,033	\$ 447,634,282	\$ (1,260,262)	\$ 799,984,260	
School Construction Authority	4,695,751	11,331,105	20,288,356	1,238,252	37,553,464	
Charter Schools	16,971	40,952	73,324	22,010	153,257	
Total	<u>\$ 108,317,929</u>	<u>\$ 261,377,090</u>	<u>\$ 467,995,962</u>	<u>\$ 0</u>	<u>\$ 837,690,981</u>	

Pension Expense			
Entity	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Department of Education	\$ 66,755,372	\$ (3,514,744)	\$ 63,240,628
School Construction Authority	3,025,587	3,470,886	6,496,473
Charter Schools	10,934	43,858	54,792
Total	<u>\$ 69,791,893</u>	<u>\$ 0</u>	<u>\$ 69,791,893</u>

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Schedule of Pension Amounts by Employer  
As of and for the year ending June 30, 2020

<u>Deferred Outflows of Resources</u>						
<u>Entity</u>	<u>Net Pension Liability</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Changes of Assumptions</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Deferred Outflows of Resources</u>
Department of Education	\$ 264,484,809	\$ 100,419,852	\$ 0	\$ 0	\$ (5,767,920)	\$ 94,651,932
School Construction Authority	12,619,249	4,791,289	0	0	\$ 5,466,615	10,257,904
Charter Schools	146,634	55,674	0	0	\$ 301,305	356,979
Total	<u>\$ 277,250,692</u>	<u>\$ 105,266,815</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 105,266,815</u>

<u>Deferred Inflows of Resources</u>						
<u>Entity</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Changes of Assumptions</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Deferred Inflows of Resources</u>	
Department of Education	\$ 112,585,413	\$ 198,662,811	\$ 290,768,200	\$ (910,389)	\$ 601,106,035	
School Construction Authority	5,371,739	9,478,713	13,873,297	859,261	29,583,010	
Charter Schools	62,419	110,141	161,206	51,128	384,894	
Total	<u>\$ 118,019,571</u>	<u>\$ 208,251,665</u>	<u>\$ 304,802,703</u>	<u>\$ 0</u>	<u>\$ 631,073,939</u>	

<u>Pension Expense</u>			
<u>Entity</u>	<u>Proportionate Share of Plan Pension Expense</u>	<u>Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions</u>	<u>Total Employer Pension Expense</u>
Department of Education	\$ 79,618,883	\$ (4,195,892)	\$ 75,422,991
School Construction Authority	3,798,820	4,080,947	7,879,767
Charter Schools	44,142	114,945	159,087
Total	<u>\$ 83,461,845</u>	<u>\$ 0</u>	<u>\$ 83,461,845</u>

**NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM (BERS)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Collective Pension Amounts  
As of and for the year ending June 30, 2020**

Deferred Outflows of Resources				Deferred Inflows of Resources					
Net Pension Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Total Deferred Outflows of Resources Excluding Employer Specific Amounts	Differences Between Expected and Actual Experience	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Total Deferred Inflows of Resources Excluding Employer Specific Amounts	Plan Pension Expense
\$ 277,250,692	\$ 105,266,815	\$ 0	\$ 0	\$ 105,266,815	\$ 118,019,571	\$ 208,251,665	\$ 304,802,703	\$ 631,073,939	\$ 83,461,845

# Appendix D

## APPENDIX D

### NEW YORK CITY POLICE PENSION FUND (POLICE)

- Page 1a - Statement of Fiduciary Net Position - POLICE
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**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Fiduciary Net Position**

**June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 9,815	\$ 23,690
Receivables:		
Investment securities sold	608,688	865,477
Member loans	218,592	238,644
Transferable earnings due from VSFs	0	0
Accrued interest and dividends	1,009	2,294
Total receivables	<u>\$ 828,289</u>	<u>\$ 1,106,415</u>
Investments - at fair value		
Short-term investments:		
Commercial paper	238,555	235,970
Short-term investment fund	293,923	234,110
U.S. treasury bills and agencies	636,923	0
Discount notes	0	162,145
Debt securities:		
U.S. government and agency	3,069,573	4,618,579
Corporate and other	4,396,908	3,696,453
Bank Loans	226,857	206,667
Mortgage Debt Securities	1,377,705	861,533
Treasury Inflation Protected Securities	1,710,665	1,412,234
Equity Securities:		
Domestic Equity	13,542,621	12,958,661
International Equity	2,814,260	259,640
Collective trust funds:		
Domestic equity	356,956	87,942
International equity	2,872,858	5,984,252
Mortgage debt security	205,647	204,347
Treasury inflation protected securities	0	457,367
Bank Loans	514,197	536,357
Corporate and Other	11,597	50,620
U.S. Government and Agency	0	25,958
Opportunistic Fixed Income	137,770	132,311
Alternative Investments:		
Infrastructure	504,681	406,813
Opportunistic Fixed Income	1,354,060	1,223,141
Private Equity	2,489,568	2,516,553
Private Real Estate	2,181,695	1,980,800
Hedge Fund Investment	2,955,325	2,730,587
Collateral from securities lending	3,430,138	3,733,667
Total Investments	<u>\$ 45,322,482</u>	<u>\$ 44,716,707</u>
Other assets	9,716	7,093
Total assets	<u>\$ 46,170,302</u>	<u>\$ 45,853,905</u>
<b>LIABILITIES</b>		
Accounts payable	49,637	265,086
Payables for investment securities purchased	1,026,317	863,328
Accrued benefits payable	54,183	69,608
Transferable earnings due to VSFs	317,013	802,792
Securities lending	3,430,138	3,733,667
Total liabilities	<u>\$ 4,877,288</u>	<u>\$ 5,734,481</u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u>\$ 41,293,014</u>	<u>\$ 40,119,424</u>



**NEW YORK CITY POLICE DEPARTMENT  
POLICE OFFICERS' VARIABLE SUPPLEMENTS FUND (POVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Fiduciary Net Position**

**June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 4,213	\$ 2,026
Receivables:		
Investment securities sold	509	9,491
Transferable earnings due from QPP	144,452	135,164
Accrued interest and dividends	43	235
Total receivables	<u>\$ 145,004</u>	<u>\$ 144,890</u>
Investments - at fair value		
Short term investments:		
Commercial paper	3,000	0
Short-term investments fund	679	651
U.S. treasury bills and agencies	4,005	0
Discount notes	0	5,927
Equity Securities:		
Domestic Equity	591,182	613,984
Collective trust funds:		
Domestic equity	68,109	66,139
International equity	467,350	516,950
Mortgage Debt Securities	194,387	188,703
Corporate and other	206,576	181,261
U.S. Government and Agency	268,294	265,406
Alternative Investments:		
Collateral from securities lending	51,839	49,847
Total Investments	<u>\$ 1,855,421</u>	<u>\$ 1,888,868</u>
Total assets	<u><u>\$ 2,004,638</u></u>	<u><u>\$ 2,035,784</u></u>
<b>LIABILITIES</b>		
Accounts payable	347	188
Payables for investment securities purchased	345	9,350
Transferable earnings due to QPP	0	0
Accrued benefits payable	78,659	77,820
Securities lending	51,839	49,847
Total liabilities	<u><u>\$ 131,190</u></u>	<u><u>\$ 137,205</u></u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u><u>\$ 1,873,448</u></u>	<u><u>\$ 1,898,579</u></u>

**NEW YORK CITY POLICE DEPARTMENT  
POLICE SUPERIOR OFFICERS' VARIABLE SUPPLEMENTS FUND (PSOVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Fiduciary Net Position**

**June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 3,944	\$ 411
Receivables:		
Investment securities sold	852	12,469
Transferable earnings due from QPP	172,561	667,628
Accrued interest and dividends	78	228
Total receivables	<u>\$ 173,491</u>	<u>\$ 680,325</u>
Investments - at fair value		
Short-term investments:		
Commercial paper	69,000	0
Short-term investment fund	0	1,005
U.S. treasury bills and agencies	2,005	0
Discount notes	0	6,492
Equity Securities:		
Domestic Equity	994,288	811,896
Collective trust funds:		
Domestic equity	115,789	89,563
International equity	852,805	687,831
Mortgage Debt Securities	312,925	247,255
Corporate and other	332,546	237,504
U.S. Government and Agency	431,900	347,758
Alternative Investments:		
Collateral from securities lending	77,814	67,906
Total Investments	<u>\$ 3,189,072</u>	<u>\$ 2,497,210</u>
Total assets	<u>\$ 3,366,507</u>	<u>\$ 3,177,946</u>
<b>LIABILITIES</b>		
Accounts payable & accrued liabilities	69,315	244
Payables for investment securities purchased	1,643	12,440
Transferable earnings due to QPP	0	0
Accrued benefits payable	121,306	118,052
Securities lending	77,814	67,906
Total liabilities	<u>\$ 270,078</u>	<u>\$ 198,642</u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u>\$ 3,096,429</u>	<u>\$ 2,979,304</u>

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position**

**June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 280,129	\$ 278,087
Employer Contributions	2,458,907	2,558,256
	<hr/>	<hr/>
<i>Total contributions</i>	\$ 2,739,036	\$ 2,836,343
Investment income:		
Interest income	421,859	548,925
Dividend income	497,886	494,434
Net appreciation (depreciation) in fair value	1,191,629	1,772,808
	<hr/>	<hr/>
Total investment income	\$ 2,111,374	\$ 2,816,167
Less:		
Investment expenses	226,384	249,849
Net income	1,884,990	2,566,318
Securities lending transactions:		
Securities lending income	12,194	17,063
Securities lending fees	(1,172)	(1,679)
	<hr/>	<hr/>
Net securities lending income	\$ 11,022	\$ 15,384
<i>Net investment income</i>	\$ 1,896,012	\$ 2,581,702
<i>Transferable earnings due from VSFs</i>	0	139,836
Other:		
Net receipts from other retirement systems	2,053	1,907
Litigation income	4,435	2,201
<i>Other total</i>	6,488	4,108
Total additions	<u>\$ 4,641,536</u>	<u>\$ 5,561,989</u>
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	3,039,785	2,853,799
Transferable earnings due to VSFs	401,358	518,628
Administrative expenses	26,803	29,005
Total deductions	<u>\$ 3,467,946</u>	<u>\$ 3,401,432</u>
<b>INCREASE IN PLAN NET POSITION</b>	1,173,590	2,160,557
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 40,119,424	\$ 37,958,867
End of year	\$ 41,293,014	\$ 40,119,424

**NEW YORK CITY POLICE DEPARTMENT  
POLICE OFFICERS' VARIABLE SUPPLEMENTS FUND (POVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position  
June 30, 2020 and June 30, 2019  
(Dollar amounts in thousands)**

	<b>June 30, 2020</b>	<b>June 30, 2019</b>
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 0	\$ 0
Employer Contributions	0	0
	<hr/>	<hr/>
<i>Total contributions</i>	\$ 0	\$ 0
Investment income:		
Interest income	35,663	19,067
Dividend income	27,344	30,837
Net appreciation (depreciation) in fair value	(66,717)	54,392
	<hr/>	<hr/>
Total investment income	\$ (3,710)	\$ 104,296
Less:		
Investment expenses	998	1,122
Net income	(4,708)	103,174
Securities lending transactions:		
Securities lending income	533	573
Securities lending fees	(46)	(53)
	<hr/>	<hr/>
Net securities lending income	\$ 487	\$ 520
<i>Net investment income</i>	(4,221)	103,694
<i>Other</i>	29	40
<i>Transferable earnings due from QPP</i>	144,808	108,000
Total additions	<hr/> <hr/>	<hr/> <hr/>
	140,616	211,734
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	165,747	165,195
Transferable earnings due to QPP	0	139,836
Total deductions	<hr/> <hr/>	<hr/> <hr/>
	165,747	305,031
<b>INCREASE IN PLAN NET POSITION</b>	(25,131)	(93,297)
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 1,898,579	\$ 1,991,876
End of year	\$ 1,873,448	\$ 1,898,579

**NEW YORK CITY POLICE DEPARTMENT  
POLICE SUPERIOR OFFICERS' VARIABLE SUPPLEMENTS FUND (PSOVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position  
June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 0	\$ 0
Employer Contributions	0	0
	<hr/>	<hr/>
<i>Total contributions</i>	\$ 0	\$ 0
Investment income:		
Interest income	65,359	20,198
Dividend income	41,093	34,196
Net appreciation (depreciation) in fair value	40,878	122,482
	<hr/>	<hr/>
Total investment income	\$ 147,330	\$ 176,876
Less:		
Investment expenses	1,545	1,313
Net income	145,785	175,563
Securities lending transactions:		
Securities lending income	797	645
Securities lending fees	(68)	(60)
	<hr/>	<hr/>
Net securities lending income	\$ 729	\$ 585
<i>Net investment income</i>	146,514	176,148
<i>Other</i>	24	35
<i>Transferable earnings due from QPP</i>	256,550	410,628
Total additions	<hr/> <hr/>	<hr/> <hr/>
	403,088	586,811
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	285,963	263,077
Transferable earnings due to QPP	0	0
Total deductions	<hr/> <hr/>	<hr/> <hr/>
	285,963	263,077
<b>INCREASE IN PLAN NET POSITION</b>	117,125	323,734
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 2,979,304	\$ 2,655,570
End of year	\$ 3,096,429	\$ 2,979,304

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Market Values of Assets**

	<b>QPP</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>Total</b>
<b>1. Plan Net Position @ 6/30/2018</b>	\$ 39,238,867,000	\$ 1,861,876,000	\$ 1,505,570,000	\$ 42,606,313,000
<b>2. Accrued Benefits Payable</b>	0	76,906,000	115,640,000	192,546,000
<b>3. Transferable Earnings</b>	(1,280,000,000)	130,000,000	1,150,000,000	0
<b>4. Adjusted Market Value @ 6/30/2018</b>	37,958,867,000	2,068,782,000	2,771,210,000	42,798,859,000
<b>5. Changes for the year:</b>				
a. ER Contributions	2,558,256,000	0	0	2,558,256,000
b. EE Contributions	278,087,000	0	0	278,087,000
c. Net Investment Income	2,581,702,000	103,694,000	176,148,000	2,861,544,000
d. Benefit Payments <sup>1</sup>	(2,853,799,000)	(164,281,000)	(260,665,000)	(3,278,745,000)
e. Administrative Expenses	(29,005,000)	0	0	(29,005,000)
f. Other	4,108,000	40,000	35,000	4,183,000
g. Net Changes	\$ 2,539,349,000	\$ (60,547,000)	\$ (84,482,000)	\$ 2,394,320,000
<b>6. Plan Net Position @ 6/30/2019</b>	\$ 40,498,216,000	\$ 1,930,415,000	\$ 2,568,676,000	\$ 44,997,307,000
<b>7. Accrued Benefits Payable</b>	0	77,820,000	118,052,000	195,872,000
<b>8. Transferable Earnings</b>	(378,792,000)	(31,836,000)	410,628,000	0
<b>9. Adjusted Market Value @ 6/30/2019</b>	\$ 40,119,424,000	\$ 1,976,399,000	\$ 3,097,356,000	\$ 45,193,179,000
<b>10. Changes for the year:</b>				
a. ER Contributions	2,458,907,000	0	0	2,458,907,000
b. EE Contributions	280,129,000	0	0	280,129,000
c. Net Investment Income	1,896,012,000	(4,221,000)	146,514,000	2,038,305,000
d. Benefit Payments <sup>2</sup>	(3,039,785,000)	(164,908,000)	(282,709,000)	(3,487,402,000)
e. Administrative Expenses	(26,803,000)	0	0	(26,803,000)
f. Other	6,488,000	29,000	24,000	6,541,000
g. Net Changes	\$ 1,574,948,000	\$ (169,100,000)	\$ (136,171,000)	\$ 1,269,677,000
<b>11. Plan Net Position @ 6/30/2020</b>	\$ 41,694,372,000	\$ 1,728,640,000	\$ 2,839,879,000	\$ 46,262,891,000
<b>12. Accrued Benefits Payable</b>	0	78,659,000	121,306,000	199,965,000
<b>13. Transferable Earnings</b>	(401,358,000)	144,808,000	256,550,000	0
<b>14. Adjusted Market Value @ 6/30/2020</b>	\$ 41,293,014,000	\$ 1,952,107,000	\$ 3,217,735,000	\$ 46,462,856,000

<sup>1</sup> Includes Net Accrued Benefits Payable of \$914,000 for POVSF and \$2,412,000 for PSOVSF.

<sup>2</sup> Includes Net Accrued Benefits Payable of \$839,000 for POVSF and \$3,254,000 for PSOVSF.

## NEW YORK CITY POLICE PENSION FUND (POLICE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

#### Long-Term Expected Rate of Return

The Long-Term Expected Rate of Return (LTEROR) assumption on pension fund investments was determined using a Building-Block Method in which best-estimate ranges of Expected Real Rates of Return (i.e. Expected Returns, net of pension fund investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the LTEROR by weighting the Expected Real Rates of Return (RROR) by the Target Asset Allocation percentage and by adding Expected Inflation. The Target Asset Allocation and best estimates of Arithmetic Real Rates of Return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
<i>Public Markets:</i>		
U.S. Public Market Equities	30.0%	6.3%
Developed Public Market Equities	8.0%	6.7%
Emerging Public Market Equities	5.0%	8.1%
Fixed Income	28.0%	1.5%
<i>Private Markets (Alternative Investments):</i>		
Private Equity	8.0%	10.8%
Private Real Estate	7.0%	7.8%
Infrastructure	3.0%	8.9%
Hedge Funds	6.0%	4.0%
Opportunistic Fixed Income	5.0%	<u>3.9%</u>
Total	100.0%	

The Discount Rate used to measure the Total Pension Liability was 7.0% per annum. The projection of Cash Flows used to determine the Discount Rate assumes that employee contributions will be made at the rates applicable to the current Tier for each member and that employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the pension fund's Fiduciary Net Position is projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the Long-Term Expected Rate of Return on pension fund investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss  
June 30, 2019**

	QPP	POVSF	PSOVSF	Total
<b>1. Assets</b>				
a. Market Value 6/30/2018*	\$ 39,238,867,000	\$ 1,938,782,000	\$ 1,621,210,000	\$ 42,798,859,000
b. 2018 Transferable Earnings	(1,280,000,000)	130,000,000	1,150,000,000	0
c. Adjusted Market Value @6/30/2018	37,958,867,000	2,068,782,000	2,771,210,000	42,798,859,000
d. Market Value 6/30/2019**	40,498,216,000	2,008,235,000	2,686,728,000	45,193,179,000
e. 2019 Transferable Earnings	(378,792,000)	(31,836,000)	410,628,000	0
f. Adjusted Market Value @6/30/2019	40,119,424,000	1,976,399,000	3,097,356,000	45,193,179,000
<b>2. Net Investment Income</b>	2,581,702,000	103,694,000	176,148,000	2,861,544,000
<b>3. Cash Flow</b> (1.d. - 1.a. - 2.)	(1,322,353,000)	(34,241,000)	889,370,000	(467,224,000)
<b>4. Projected Earnings</b> (7% * 1.a. + 3.441% * 3.)	2,701,218,523	134,536,507	144,087,922	2,979,842,952
<b>5. (Gain) / Loss</b> (4. - 2.)	119,516,523	30,842,507	(32,060,078)	118,298,952
<b>6. Recognition Period</b>	5 Years	5 Years	5 Years	5 Years
<b>7. Amount Recognized in Pension Expense</b> (5. / 6.)	23,903,305	6,168,501	(6,412,016)	23,659,790
<b>8. Deferred (Inflow) / Outflow of Resources</b> (5. - 7.)	\$ 95,613,218	\$ 24,674,006	\$ (25,648,062)	\$ 94,639,162

\* Before Reflecting 2018 Transferable Earnings.

\*\* Before Reflecting 2019 Transferable Earnings.



**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss  
June 30, 2020**

	<b>QPP</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>Total</b>
<b>1. Assets</b>				
a. Market Value 6/30/2019*	\$ 40,498,216,000	\$ 2,008,235,000	\$ 2,686,728,000	\$ 45,193,179,000
b. 2019 Transferable Earnings	(378,792,000)	(31,836,000)	410,628,000	0
c. Adjusted Market Value @6/30/2019	40,119,424,000	1,976,399,000	3,097,356,000	45,193,179,000
d. Market Value 6/30/2020**	41,694,372,000	1,807,299,000	2,961,185,000	46,462,856,000
e. 2020 Transferable Earnings	(401,358,000)	144,808,000	256,550,000	0
f. Adjusted Market Value @6/30/2020	41,293,014,000	1,952,107,000	3,217,735,000	46,462,856,000
<b>2. Net Investment Income</b>	1,896,012,000	(4,221,000)	146,514,000	2,038,305,000
<b>3. Cash Flow</b> (1.d. - 1.a. - 2.)	(699,856,000)	(196,715,000)	127,943,000	(768,628,000)
<b>4. Projected Earnings</b> (7% * 1.a. + 3.441% * 3.)	2,810,793,075	133,807,487	192,473,479	3,137,074,041
<b>5. (Gain) / Loss</b> (4. - 2.)	914,781,075	138,028,487	45,959,479	1,098,769,041
<b>6. Recognition Period</b>	5 Years	5 Years	5 Years	5 Years
<b>7. Amount Recognized in Pension Expense</b> (5. / 6.)	182,956,215	27,605,697	9,191,896	219,753,808
<b>8. Deferred (Inflow) / Outflow of Resources</b> (5. - 7.)	\$ 731,824,860	\$ 110,422,790	\$ 36,767,583	\$ 879,015,233

\* Before Reflecting 2019 Transferable Earnings.

\*\* Before Reflecting 2020 Transferable Earnings.

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Roll-Forward of Entry Age Accrued Liabilities to June 30, 2020**

		<b>QPP</b>		<b>POVSF</b>		<b>PSOVSF</b>		<b>Total</b>
1. Disclosed EA Accrued Liability at 6/30/2019	\$	49,089,967,123	\$	2,034,838,864	\$	3,872,625,392	\$	54,997,431,379
2. EA Normal Cost at 6/30/2019		1,375,436,447		34,290,728		73,382,177		1,483,109,352
3. Benefit Payments-FY2020		(3,039,785,000)		(164,908,000)		(282,709,000)		(3,487,402,000)
4. Interest		3,427,979,248		139,164,587		266,492,513		3,833,636,348
5. Experience (Gain)/Loss - FY 2020		463,894,454		11,749,784		(33,990,094)		441,654,144
6. Roll-Forward EAAL at 6/30/2020	\$	51,317,492,272	\$	2,055,135,963	\$	3,895,800,988	\$	57,268,429,223

NEW YORK CITY POLICE PENSION FUND (POLICE)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Changes in Net Pension Liability (NPL) by Source  
Balance at June 30, 2019

	Total Pension Liability			
	OPP	POVSF	PSOVSF	TOTAL
<b>1. Balances at June 30, 2018</b>	\$ 48,379,196,497	\$ 2,022,236,650	\$ 3,754,205,218	\$ 54,155,638,365
<b>2. Changes for the Year:</b>				
a. Service Cost	1,396,466,498	41,454,079	60,989,286	1,498,909,863
b. Interest	3,386,097,186	138,805,442	258,094,133	3,782,996,761
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	(868,163,702)	133,399,400	(84,202,519)	(818,966,821)
e. Changes of Assumptions	(349,830,356)	(136,775,707)	144,204,274	(342,401,789)
f. Benefit Payments	(2,853,799,000)	(164,281,000)	(260,665,000)	(3,278,745,000)
g. Net Changes	\$ 710,770,626	\$ 12,602,214	\$ 118,420,174	\$ 841,793,014
<b>3. Balances at June 30, 2019</b>	\$ 49,089,967,123	\$ 2,034,838,864	\$ 3,872,625,392	\$ 54,997,431,379
	Plan Fiduciary Net Position <sup>1</sup>			
	OPP	POVSF	PSOVSF	TOTAL
<b>4. Balances at June 30, 2018</b>	\$ 37,958,867,000	\$ 2,068,782,000	\$ 2,771,210,000	\$ 42,798,859,000
<b>5. Changes for the Year:</b>				
a. Contributions - Employer	2,558,256,000	0	0	2,558,256,000
b. Contributions - Employee	278,087,000	0	0	278,087,000
c. Net Investment Income	2,581,702,000	103,694,000	176,148,000	2,861,544,000
d. Benefit Payments	(2,853,799,000)	(164,281,000)	(260,665,000)	(3,278,745,000)
e. Administrative Expenses	(29,005,000)	0	0	(29,005,000)
f. Other Changes	4,108,000	40,000	35,000	4,183,000
g. Net Changes	\$ 2,539,349,000	\$ (60,547,000)	\$ (84,482,000)	\$ 2,394,320,000
<b>6. Transferable Earnings</b>	(378,792,000)	(31,836,000)	410,628,000	0
<b>7. Balances at June 30, 2019</b>	\$ 40,119,424,000	\$ 1,976,399,000	\$ 3,097,356,000	\$ 45,193,179,000
	Net Pension Liability			
	OPP	POVSF	PSOVSF	TOTAL
<b>8. Balances at June 30, 2018</b>	\$ 10,420,329,497	\$ (46,545,350)	\$ 982,995,218	\$ 11,356,779,365
<b>9. Changes for the Year:</b>				
a. Service Cost	1,396,466,498	41,454,079	60,989,286	1,498,909,863
b. Interest	3,386,097,186	138,805,442	258,094,133	3,782,996,761
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	(868,163,702)	133,399,400	(84,202,519)	(818,966,821)
e. Changes of Assumptions	(349,830,356)	(136,775,707)	144,204,274	(342,401,789)
f. Contributions - Employer	(2,558,256,000)	0	0	(2,558,256,000)
g. Contributions - Employee	(278,087,000)	0	0	(278,087,000)
h. Net Investment Income	(2,581,702,000)	(103,694,000)	(176,148,000)	(2,861,544,000)
i. Benefit Payments	0	0	0	0
j. Administrative Expenses	29,005,000	0	0	29,005,000
k. Other Changes	(4,108,000)	(40,000)	(35,000)	(4,183,000)
l. Net Changes	\$ (1,828,578,374)	\$ 73,149,214	\$ 202,902,174	\$ (1,552,526,986)
<b>10. Transferable Earnings</b>	378,792,000	31,836,000	(410,628,000)	0
<b>11. Balances at June 30, 2019</b>	\$ 8,970,543,123	\$ 58,439,864	\$ 775,269,392	\$ 9,804,252,379

<sup>1</sup> Balances at 6/30/2018 and 6/30/2019 are Adjusted Market Values - See Page 3.

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Net Pension Liability (NPL) by Source  
Balance at June 30, 2020**

	<b>Total Pension Liability</b>			
	<b>OPP</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>TOTAL</b>
<b>1. Balances at June 30, 2019</b>	\$ 49,089,967,123	\$ 2,034,838,864	\$ 3,872,625,392	\$ 54,997,431,379
<b>2. Changes for the Year:</b>				
a. Service Cost	1,375,436,447	34,290,728	73,382,177	1,483,109,352
b. Interest	3,427,979,248	139,164,587	266,492,513	3,833,636,348
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	463,894,454	11,749,784	(33,990,094)	441,654,144
e. Changes of Assumptions	0	0	0	0
f. Benefit Payments	(3,039,785,000)	(164,908,000)	(282,709,000)	(3,487,402,000)
g. <b>Net Changes</b>	\$ 2,227,525,149	\$ 20,297,099	\$ 23,175,596	\$ 2,270,997,844
<b>3. Balances at June 30, 2020</b>	\$ 51,317,492,272	\$ 2,055,135,963	\$ 3,895,800,988	\$ 57,268,429,223
	<b>Plan Fiduciary Net Position<sup>1</sup></b>			
	<b>OPP</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>TOTAL</b>
<b>4. Balances at June 30, 2019</b>	\$ 40,119,424,000	\$ 1,976,399,000	\$ 3,097,356,000	\$ 45,193,179,000
<b>5. Changes for the Year:</b>				
a. Contributions - Employer	2,458,907,000	0	0	2,458,907,000
b. Contributions - Employee	280,129,000	0	0	280,129,000
c. Net Investment Income	1,896,012,000	(4,221,000)	146,514,000	2,038,305,000
d. Benefit Payments	(3,039,785,000)	(164,908,000)	(282,709,000)	(3,487,402,000)
e. Administrative Expenses	(26,803,000)	0	0	(26,803,000)
f. Other Changes	6,488,000	29,000	24,000	6,541,000
g. <b>Net Changes</b>	\$ 1,574,948,000	\$ (169,100,000)	\$ (136,171,000)	\$ 1,269,677,000
<b>6. Transferable Earnings</b>	(401,358,000)	144,808,000	256,550,000	0
<b>7. Balances at June 30, 2020</b>	\$ 41,293,014,000	\$ 1,952,107,000	\$ 3,217,735,000	\$ 46,462,856,000
	<b>Net Pension Liability</b>			
	<b>OPP</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>TOTAL</b>
<b>8. Balances at June 30, 2019</b>	\$ 8,970,543,123	\$ 58,439,864	\$ 775,269,392	\$ 9,804,252,379
<b>9. Changes for the Year:</b>				
a. Service Cost	1,375,436,447	34,290,728	73,382,177	1,483,109,352
b. Interest	3,427,979,248	139,164,587	266,492,513	3,833,636,348
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	463,894,454	11,749,784	(33,990,094)	441,654,144
e. Changes of Assumptions	0	0	0	0
f. Contributions - Employer	(2,458,907,000)	0	0	(2,458,907,000)
g. Contributions - Employee	(280,129,000)	0	0	(280,129,000)
h. Net Investment Income	(1,896,012,000)	4,221,000	(146,514,000)	(2,038,305,000)
i. Benefit Payments	0	0	0	0
j. Administrative Expenses	26,803,000	0	0	26,803,000
k. Other Changes	(6,488,000)	(29,000)	(24,000)	(6,541,000)
l. <b>Net Changes</b>	\$ 652,577,149	\$ 189,397,099	\$ 159,346,596	\$ 1,001,320,844
<b>10. Transferable Earnings</b>	401,358,000	(144,808,000)	(256,550,000)	0
<b>11. Balances at June 30, 2020</b>	\$ 10,024,478,272	\$ 103,028,963	\$ 678,065,988	\$ 10,805,573,223

<sup>1</sup> Balances at 6/30/2019 and 6/30/2020 are Adjusted Market Values - See Page 3.

NEW YORK CITY POLICE PENSION FUND (POLICE)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Schedule of Changes in Net Pension Liability and Related Ratios

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>1. Total Pension Liability</b>								
a. Service Cost	\$ 1,483,109,352	\$ 1,498,909,863	\$ 1,386,278,934	\$ 1,320,416,462	\$ 1,340,614,909	\$ 1,325,807,839	\$ 1,301,753,171	\$ 1,263,838,030
b. Interest	3,833,636,348	3,782,996,761	3,649,115,174	3,524,331,362	3,441,398,429	3,245,225,246	3,117,317,330	2,998,478,091
c. Changes of Benefit Terms	0	0	104,671,094	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	441,654,144	(818,966,821)	(144,119,939)	(645,248,116)	233,461,664	(215,417,691)	0	0
e. Change of Assumptions	0	(342,401,789)	0	0	794,679,950	0	0	0
f. Benefit Payments	(3,487,402,000)	(3,278,745,000)	(3,193,553,000)	(2,987,000,000)	(2,878,451,000)	(2,746,784,000)	(2,682,223,000)	(2,525,475,000)
<b>g. Net Changes</b>	<b>\$ 2,270,997,844</b>	<b>\$ 841,793,014</b>	<b>\$ 1,802,392,263</b>	<b>\$ 1,212,499,708</b>	<b>\$ 2,931,703,952</b>	<b>\$ 1,608,831,394</b>	<b>\$ 1,736,847,501</b>	<b>\$ 1,736,841,121</b>
<b>2. Total Pension Liability - Beginning</b>	<b>\$ 54,997,431,379</b>	<b>\$ 54,155,638,365</b>	<b>\$ 52,353,246,102</b>	<b>\$ 51,140,746,394</b>	<b>\$ 48,209,042,442</b>	<b>\$ 46,600,211,048</b>	<b>\$ 44,549,855,738</b>	<b>\$ 42,813,014,617</b>
<b>3. Total Pension Liability - Ending</b>	<b>\$ 57,268,429,223</b>	<b>\$ 54,997,431,379</b>	<b>\$ 54,155,638,365</b>	<b>\$ 52,353,246,102</b>	<b>\$ 51,140,746,394</b>	<b>\$ 48,209,042,442</b>	<b>\$ 46,286,703,239</b>	<b>\$ 44,549,855,738</b>
<b>4. Plan Fiduciary Net Position</b>								
a. Contributions - Employer	\$ 2,458,907,000	\$ 2,558,256,000	\$ 2,415,153,000	\$ 2,293,840,000	\$ 2,393,940,000	\$ 2,309,619,000	\$ 2,320,910,000	\$ 2,424,690,000
b. Contributions - Employee	280,129,000	278,087,000	267,031,000	276,301,000	249,921,000	241,102,000	228,783,000	229,675,000
c. Net Investment Income	2,038,305,000	2,861,544,000	3,964,010,000	4,286,894,000	403,534,000	1,098,220,000	5,147,483,000	3,101,564,000
d. Benefit Payments	(3,487,402,000)	(3,278,745,000)	(3,193,553,000)	(2,987,000,000)	(2,878,451,000)	(2,746,784,000)	(2,682,223,000)	(2,525,475,000)
e. Administrative Expenses	(26,803,000)	(29,005,000)	(21,146,000)	(18,917,000)	(18,478,000)	(17,903,000)	(17,450,000)	(17,548,000)
f. Other Changes	6,541,000	4,183,000	3,465,000	10,507,000	6,756,000	4,616,000	6,911,000	6,118,000
<b>g. Net Changes</b>	<b>\$ 1,269,677,000</b>	<b>\$ 2,394,320,000</b>	<b>\$ 3,434,960,000</b>	<b>\$ 3,861,625,000</b>	<b>\$ 157,222,000</b>	<b>\$ 888,870,000</b>	<b>\$ 5,004,414,000</b>	<b>\$ 3,219,024,000</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 45,193,179,000</b>	<b>\$ 42,798,859,000</b>	<b>\$ 39,363,899,000</b>	<b>\$ 35,502,274,000</b>	<b>\$ 35,345,052,000</b>	<b>\$ 34,456,182,000</b>	<b>\$ 29,451,768,000</b>	<b>\$ 26,232,744,000</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 46,462,856,000</b>	<b>\$ 45,193,179,000</b>	<b>\$ 42,798,859,000</b>	<b>\$ 39,363,899,000</b>	<b>\$ 35,502,274,000</b>	<b>\$ 35,345,052,000</b>	<b>\$ 34,456,182,000</b>	<b>\$ 29,451,768,000</b>
<b>7. POLICE Net Pension Liability</b>	<b>\$ 10,805,573,223</b>	<b>\$ 9,804,252,379</b>	<b>\$ 11,356,779,365</b>	<b>\$ 12,989,347,102</b>	<b>\$ 15,638,472,394</b>	<b>\$ 12,863,990,442</b>	<b>\$ 11,830,521,239</b>	<b>\$ 15,098,087,738</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>81.1%</b>	<b>82.2%</b>	<b>79.0%</b>	<b>75.2%</b>	<b>69.4%</b>	<b>73.3%</b>	<b>74.4%</b>	<b>66.1%</b>
<b>9. Covered Employee Payroll <sup>1</sup></b>	<b>\$ 4,244,806,289</b>	<b>\$ 4,047,772,414</b>	<b>\$ 3,673,054,287</b>	<b>\$ 3,509,985,075</b>	<b>\$ 3,540,326,198</b>	<b>\$ 3,512,777,844</b>	<b>\$ 3,420,312,390</b>	<b>\$ 3,459,871,779</b>
<b>10. POLICE Net Pension Liability as a Percentage of Covered Employee Payroll</b>	<b>254.6%</b>	<b>242.2%</b>	<b>309.2%</b>	<b>370.1%</b>	<b>441.7%</b>	<b>366.2%</b>	<b>345.9%</b>	<b>436.4%</b>

<sup>1</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Contributions (\$ in thousands)**

<b>Fiscal Year Ending June 30</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
1. Actuarially Determined Contribution	\$ 2,458,907	\$ 2,558,256	\$ 2,415,153	\$ 2,293,840	\$ 2,393,940	\$ 2,309,619	\$ 2,320,910	\$ 2,424,690	\$ 2,385,731	\$ 2,083,633
2. Contributions in relation to the Actuarially Determined Contribution	<u>\$ 2,458,907</u>	<u>\$ 2,558,256</u>	<u>\$ 2,415,153</u>	<u>\$ 2,293,840</u>	<u>\$ 2,393,940</u>	<u>\$ 2,309,619</u>	<u>\$ 2,320,910</u>	<u>\$ 2,424,690</u>	<u>\$ 2,385,731</u>	<u>\$ 2,083,633</u>
3. Contribution Deficiency (Excess)	0	0	0	0	0	0	0	0	0	0
4. Contributions as a percentage of Covered Employee Payroll*	57.927%	63.202%	65.753%	65.352%	67.619%	65.749%	67.857%	70.080%	69.176%	64.058%

\* Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Average Expected Remaining Service Lives**

<u>Group</u>	<u># Count</u>	<u>Average Expected Remaining Service Life @ 6/30/2019</u>
Active	36,401	12.31
Active Off Payroll	1,640	0
Terminated Vested	497	0
Retired	<u>50,727</u>	<u>0</u>
Total	89,265	5.02

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2019		2020		2021		2022		2023		2024		2025	
			\$		\$		\$		\$		\$		\$		\$	
2017	\$ (645,248,116)	3.89	\$ (165,873,552)	\$ (147,627,460)												
2018	\$ (144,119,939)	4.41	\$ (32,680,258)	\$ (32,680,258)	\$ (32,680,258)	\$ (13,398,907)										
2019	\$ (818,966,821)	5.04	\$ (162,493,417)	\$ (162,493,417)	\$ (162,493,417)	\$ (162,493,417)	\$ (162,493,417)	\$ (162,493,417)	\$ (162,493,417)	\$ (162,493,417)	\$ (6,499,736)					
2020	\$ 441,654,144	5.02	\$	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 87,978,913	\$ 1,759,579	
Net increase (decrease) in Pension Expense			\$ (361,047,227)	\$ (254,822,222)	\$ (107,194,762)	\$ (87,913,411)	\$ (74,514,504)	\$ 81,479,177	\$ 1,759,579							



**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2019	\$ (342,401,789)	5.04	\$ (67,936,863)	\$ (67,936,863)	\$ (67,936,863)	\$ (67,936,863)	\$ (67,936,863)	(2,717,474)
2020	\$ 0	0.00	\$ 0	\$ 0				
Net increase (decrease) in Pension Expense			\$ (67,936,863)	\$ (67,936,863)	\$ (67,936,863)	\$ (67,936,863)	\$ (67,936,863)	(2,717,474)

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Projected and Actual Earnings on Pension Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2015	\$ 1,306,509,007	5	\$ 261,301,803					
2016	\$ 2,062,144,044	5	\$ 412,428,809	\$ 412,428,808				
2017	\$ (1,816,368,326)	5	\$ (363,273,666)	\$ (363,273,666)	\$ (363,273,662)			
2018	\$ (1,226,741,680)	5	\$ (245,348,336)	\$ (245,348,336)	\$ (245,348,336)	\$ (245,348,336)		
2019	\$ 118,298,952	5	\$ 23,659,790	\$ 23,659,790	\$ 23,659,790	\$ 23,659,790	\$ 23,659,792	
2020	\$ 1,098,769,041	5	\$ 219,753,808	\$ 219,753,808	\$ 219,753,808	\$ 219,753,808	\$ 219,753,808	\$ 219,753,809
Net increase (decrease) in Pension Expense			<b>\$ 88,768,400</b>	<b>\$ 47,220,404</b>	<b>\$ (365,208,400)</b>	<b>\$ (1,934,738)</b>	<b>\$ 243,413,600</b>	<b>\$ 219,753,809</b>

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Components of Pension Expense for the Fiscal Year Ending June 30, 2019**

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 1,498,909,863
b. Interest on the Total Pension Liability	3,782,996,761
c. Changes of Benefit Terms	0
d. Differences between Expected and Actual Experience	(361,047,227)
e. Changes of Assumptions	(67,936,863)
f. Employee Contributions	(278,087,000)
g. Projected Earnings on Pension Plan Investments	(2,979,842,952)
h. Differences between Projected and Actual Earnings on Plan Investments	88,768,400
i. Pension Plan Administrative Expenses	29,005,000
j. Other Changes in Fiduciary Net Position	(4,183,000)
	<hr/>
<b>Total Pension Expense</b>	<b>\$ 1,708,582,982</b>

**NEW YORK CITY POLICE PENSION FUND (POLICE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Components of Pension Expense for the Fiscal Year Ending June 30, 2020**

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 1,483,109,352
b. Interest on the Total Pension Liability	3,833,636,348
c. Changes of Benefit Terms	0
d. Differences between Expected and Actual Experience	(254,822,222)
e. Changes of Assumptions	(67,936,863)
f. Employee Contributions	(280,129,000)
g. Projected Earnings on Pension Plan Investments	(3,137,074,041)
h. Differences between Projected and Actual Earnings on Plan Investments	47,220,404
i. Pension Plan Administrative Expenses	26,803,000
j. Other Changes in Fiduciary Net Position	(6,541,000)
	<hr/>
<b>Total Pension Expense</b>	<b>\$ 1,644,265,978</b>

NEW YORK CITY POLICE PENSION FUND (POLICE)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Pension Expense, Deferred Outflows and Inflows of Resources

	Fiscal Year Ending June 30, 2015		Fiscal Year Ending June 30, 2016		Fiscal Year Ending June 30, 2017		Fiscal Year Ending June 30, 2018		Fiscal Year Ending June 30, 2019		Fiscal Year Ending June 30, 2020	
<b>Recognized Pension Expense</b>	<b>\$1,241,462,818</b>		<b>\$2,213,188,481</b>		<b>\$1,760,595,190</b>		<b>\$1,590,687,570</b>		<b>\$1,708,582,982</b>		<b>\$1,644,265,978</b>	
<b>Deferred Resources</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>
Differences Between Expected and Actual Experience	0	127,492,103	138,171,189	0	0	479,374,564	0	111,439,681	0	656,473,404	353,675,231	0
Changes of Assumptions	0	0	470,320,787	0	0	0	0	0	0	274,464,926	0	0
Net Difference between Projected and Actual Earnings on Pension Plan Investments	1,045,207,206	0	1,649,715,235	0	0	1,453,094,660	0	981,393,344	94,639,162	0	879,015,233	0
<b>Total</b>	1,045,207,206	127,492,103	2,258,207,211	0	0	1,932,469,224	0	1,092,833,025	94,639,162	930,938,330	1,232,690,464	0

Reported amounts will be recognized in Pension Expense during  
during Fiscal Year Ending June 30

2015	\$173,376,213											
2016	\$173,376,213		\$832,078,447									
2017	\$221,735,286		\$832,078,447		(\$529,147,218)							
2018	\$261,301,801		\$601,271,147		(\$529,147,218)		(\$278,028,594)					
2019	\$261,301,803		\$412,428,809		(\$529,147,218)		(\$278,028,594)		(\$206,770,490)			
2020			\$412,428,808		(\$510,901,126)		(\$278,028,594)		(\$206,770,490)			\$307,732,721
2021					(\$363,273,662)		(\$278,028,594)		(\$206,770,490)			\$307,732,721
2022							(\$258,747,243)		(\$206,770,490)			\$307,732,721
2023									(\$206,770,488)			\$307,732,721
2024									(\$9,217,210)			\$307,732,722
2025												\$1,759,579

## NEW YORK CITY POLICE PENSION FUND (POLICE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

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

For the Fiscal Year ending June 30, 2020, the City recognized Pension Expense for POLICE of \$1,644,265,978.

At June 30, 2020, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for POLICE from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 353,675,231	\$ 540,059,152
Changes of Assumptions	0	206,528,063
Net difference between Projected and Actual Earnings on Pension Plan Investments	96,024,271	0
Total	\$ 449,699,502	\$ 746,587,215

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for POLICE will be recognized in Pension Expense as follows:

Fiscal Year Ending <u>June 30</u>	<u>Amount</u>
2020	\$ (275,538,681)
2021	(540,340,025)
2022	(157,785,012)
2023	100,962,233
2024	298,515,512
2025	1,759,579

# Appendix E

## APPENDIX E

### NEW YORK CITY FIRE PENSION FUND (FIRE)

- Page 1a - Statement of Fiduciary Net Position - FIRE
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## NEW YORK CITY FIRE PENSION FUND (FIRE)

## Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

## Statement of Fiduciary Net Position

June 30, 2020 and June 30, 2019

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ASSETS</b>		
Cash	\$ 3,118	\$ 6,770
Receivables:		
Investment securities sold	372,313	269,966
Member loans	20,559	23,052
Accrued interest and dividends	37,900	36,211
Accounts Receivables	91	225
Total receivables	<u>\$ 430,863</u>	<u>\$ 329,454</u>
Investments - at fair value		
Short-term investments:		
Commercial paper	115,094	254,839
Short-term investment fund	156,248	78,084
U.S. Treasury bills and agencies	470,090	0
Discount Notes	0	108,843
Debt securities:		
U.S. Government and agencies	1,383,806	1,513,791
Mortgage debt security	696,105	309,829
Corporate and other	1,341,212	1,469,495
Treasury inflation protected securities	667,049	462,901
Bank loans	61,355	102,820
Equity securities:	4,895,777	4,256,999
International equity	1,186,338	0
Alternative investments:	3,174,702	2,947,833
Collective trust funds:		
Bank loans	101,784	105,615
Corporate and other	624	32,299
International equity	877,623	2,368,346
Domestic equity	80,603	156,999
Mortgage debt security	52,601	107,129
Opportunistic fixed income	50,189	48,113
Treasury inflation protected securities	0	158,200
Collateral from securities lending	914,986	774,084
Total Investments	<u>\$ 16,226,186</u>	<u>\$ 15,256,219</u>
Other assets	2,970	2,573
Total assets	<u>\$ 16,663,137</u>	<u>\$ 15,595,016</u>
<b>LIABILITIES</b>		
Accounts payable	65,828	167,302
Payables for investment securities purchased	580,330	292,460
Accrued benefits payable	15,418	8,552
Transferable Earnings due from QPP to VSFs	0	15,000
Securities lending	914,986	774,084
Total liabilities	<u>\$ 1,576,562</u>	<u>\$ 1,257,398</u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u>\$ 15,086,575</u>	<u>\$ 14,337,618</u>

**NEW YORK CITY FIRE DEPARTMENT  
FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND (FFVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Fiduciary Net Position  
June 30, 2020 and June 30, 2019  
(Dollar amounts in thousands)**

	<b>June 30, 2020</b>	<b>June 30, 2019</b>
<b>ASSETS</b>		
Cash	\$ 1,887	\$ 1,454
Receivables:		
Investment securities sold	16	0
Accrued interest and dividends	108	2
Accounts Receivables	147	0
Transferable Earnings Due from QPP	0	15,000
Total receivables	<u>\$ 271</u>	<u>\$ 15,002</u>
Investments - at fair value		
Short-term investments:		
Commercial paper	0	3,589
Short-term investment fund	222	218
U.S. Treasury bills and agency	2,350	0
Discount Notes	0	0
Debt securities:	0	0
Equity securities:	160,922	167,231
Alternative investments:	0	0
Collective trust funds:		
Corporate and other	56,289	49,380
International equity	127,362	145,185
Domestic equity	18,543	13,624
Mortgage debt security	52,968	51,407
U.S. Government and agency	73,107	72,303
Collateral from securities lending	<u>15,856</u>	<u>10,296</u>
Total Investments	\$ 507,619	\$ 513,233
Other assets	0	0
Total assets	<u>\$ 509,777</u>	<u>\$ 529,689</u>
<b>LIABILITIES</b>		
Accounts payable	100	125
Payables for investment securities purchased	94	0
Accrued benefits payable	19,451	19,953
Securities lending	15,856	10,296
Total liabilities	<u>\$ 35,501</u>	<u>\$ 30,374</u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u>\$ 474,276</u>	<u>\$ 499,315</u>

**NEW YORK CITY FIRE DEPARTMENT  
FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND (FOVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Fiduciary Net Position  
June 30, 2020 and June 30, 2019  
(Dollar amounts in thousands)**

	<b>June 30, 2020</b>	<b>June 30, 2019</b>
<b>ASSETS</b>		
Cash	\$ 947	\$ 1,181
Receivables:		
Investment securities sold	5	1,801
Accrued interest and dividends	308	309
Accounts Receivables	36	1
Transferable Earnings Due from QPP	0	0
Total receivables	<u>\$ 349</u>	<u>\$ 2,111</u>
Investments - at fair value		
Short-term investments:		
Commercial paper	0	2,401
Short-term investment fund	160	128
U.S. Treasury bills and agency	1,299	0
Discount Notes	0	0
Debt securities:	0	0
Equity securities:	112,697	122,675
Alternative investments:	0	0
Collective trust funds:		
Corporate and other	40,014	0
International equity	90,792	105,202
Domestic equity	13,039	9,587
Mortgage debt security	37,653	0
U.S. Government and agency	51,969	110,088
Collateral from securities lending	<u>10,863</u>	<u>7,770</u>
Total Investments	\$ 358,486	\$ 357,851
Other assets	0	0
Total assets	<u>\$ 359,782</u>	<u>\$ 361,143</u>
<b>LIABILITIES</b>		
Accounts payable	65	105
Payables for investment securities purchased	66	1,882
Accrued benefits payable	8,932	9,008
Securities lending	10,863	7,770
Total liabilities	<u>\$ 19,926</u>	<u>\$ 18,765</u>
<b>Plan Net Position Held in Trust for Benefits</b>	<u>\$ 339,856</u>	<u>\$ 342,378</u>

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position**  
**June 30, 2020 and June 30, 2019**  
(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 106,821	\$ 108,015
Employer Contributions	<u>1,419,270</u>	<u>1,398,565</u>
<i>Total contributions</i>	\$ 1,526,091	\$ 1,506,580
Investment income:		
Interest income	172,679	181,067
Dividend income	174,436	170,140
Net appreciation (depreciation) in fair value	<u>411,582</u>	<u>667,697</u>
<i>Total investment income</i>	\$ 758,697	\$ 1,018,904
Less:		
Investment expenses	80,078	89,976
<i>Net income</i>	678,619	928,928
Securities lending transactions:		
Securities lending income	3,047	5,498
Securities lending fees	<u>(283)</u>	<u>(537)</u>
<i>Net securities lending income</i>	\$ 2,764	\$ 4,961
<i>Net investment income</i>	681,383	933,889
Other:		
Net receipts from other retirement systems	1,337	1,565
Litigation income	1,505	492
<i>Other total</i>	2,842	2,057
<i>Transferable Earnings due from VSFs to QPP</i>	15,000	14,000
<i>Total additions</i>	<u>2,225,316</u>	<u>2,456,526</u>
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	1,447,071	1,376,090
Transferable Earnings due from QPP to VSFs	0	0
Administrative expenses	9,131	9,861
Payment to VSFs - Interest on SKIM	20,157	0
<i>Total deductions</i>	<u>1,476,359</u>	<u>1,385,951</u>
<b>INCREASE IN PLAN NET POSITION</b>	748,957	1,070,575
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 14,337,618	13,267,043
End of year	\$ 15,086,575	\$ 14,337,618

**NEW YORK CITY FIRE DEPARTMENT  
FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND (FFVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position**

**June 30, 2020 and June 30, 2019**

(Dollar amounts in thousands)

	June 30, 2020	June 30, 2019
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 0	\$ 0
Employer Contributions	<u>0</u>	<u>0</u>
<i>Total contributions</i>	\$ 0	\$ 0
Investment income:		
Interest income	5,115	5,301
Dividend income	7,480	8,470
Net appreciation (depreciation) in fair value	<u>9,012</u>	<u>14,347</u>
Total investment income	\$ 21,607	\$ 28,118
Less:		
Investment expenses	220	280
Net income	21,387	27,838
Securities lending transactions:		
Securities lending income	142	155
Securities lending fees	<u>(12)</u>	<u>(14)</u>
Net securities lending income	\$ 130	\$ 141
<i>Net investment income</i>	21,517	27,979
Other:		
Net receipts from other retirement systems	0	0
Litigation income	0	0
Payment from QPP - Interest on SKIM	12,792	0
<i>Other total</i>	12,792	0
<i>Transferable Earnings due from QPP to FFVSF</i>	0	0
Total additions	<u><u>34,309</u></u>	<u><u>27,979</u></u>
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	44,348	44,744
Transferable Earnings due from FFVSF to QPP	15,000	14,000
Total deductions	<u><u>59,348</u></u>	<u><u>58,744</u></u>
<b>INCREASE IN PLAN NET POSITION</b>	(25,039)	(30,765)
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 499,315	\$ 530,080
End of year	\$ 474,276	\$ 499,315

**NEW YORK CITY FIRE DEPARTMENT  
FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND (FOVSF)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Statement of Changes in Fiduciary Net Position  
June 30, 2020 and June 30, 2019  
(Dollar amounts in thousands)**

	June 30, 2020	June 30, 2019
<b>ADDITIONS</b>		
Contributions:		
Member Contributions	\$ 0	\$ 0
Employer Contributions	0	0
	<hr/>	<hr/>
<i>Total contributions</i>	\$ 0	\$ 0
Investment income:		
Interest income	3,476	3,604
Dividend income	5,339	5,973
Net appreciation (depreciation) in fair value	7,087	11,023
	<hr/>	<hr/>
Total investment income	\$ 15,902	\$ 20,600
Less:		
Investment expenses	154	219
Net income	15,748	20,381
Securities lending transactions:		
Securities lending income	99	109
Securities lending fees	(8)	(10)
	<hr/>	<hr/>
Net securities lending income	\$ 91	\$ 99
<i>Net investment income</i>	15,839	20,480
Other:		
Net receipts from other retirement systems	0	0
Litigation income	0	0
Payment from QPP - Interest on SKIM	7,365	0
<i>Other total</i>	7,365	0
<i>Transferable Earnings due from QPP to FOVSF</i>	0	0
Total additions	<hr/> <hr/> 23,204	<hr/> <hr/> 20,480
<b>DEDUCTIONS</b>		
Benefit payments and withdrawals	25,726	24,735
Total deductions	<hr/> <hr/> 25,726	<hr/> <hr/> 24,735
<b>INCREASE IN PLAN NET POSITION</b>		
	(2,522)	(4,255)
<b>PLAN NET POSITION HELD IN TRUST FOR BENEFITS:</b>		
Beginning of year	\$ 342,378	\$ 346,633
End of year	\$ 339,856	\$ 342,378

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Market Values of Assets**

	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>1. Plan Net Position @ 6/30/2018</b>	\$ 13,282,043,000	\$ 515,080,000	\$ 346,633,000	14,143,756,000
<b>2. Accrued Benefits Payable</b>	0	20,427,000	9,079,000	29,506,000
<b>3. Transferable Earnings due from QPP to VSFs</b>	(15,000,000)	15,000,000	0	0
<b>4. Adjusted Market Value @ 6/30/2018</b>	13,267,043,000	550,507,000	355,712,000	14,173,262,000
<b>5. Changes for the year:</b>				
a. ER Contributions	1,398,565,000	0	0	1,398,565,000
b. EE Contributions	108,015,000	0	0	108,015,000
c. Net Investment Income	933,889,000	27,979,000	20,480,000	982,348,000
d. Benefit Payments <sup>1</sup>	(1,376,090,000)	(45,218,000)	(24,806,000)	(1,446,114,000)
e. Administrative Expenses	(9,861,000)	0	0	(9,861,000)
f. Other	2,057,000	0	0	2,057,000
g. Net Changes	\$ 1,056,575,000	\$ (17,239,000)	\$ (4,326,000)	\$ 1,035,010,000
<b>6. Plan Net Position @ 6/30/2019</b>	\$ 14,323,618,000	\$ 513,315,000	\$ 342,378,000	\$ 15,179,311,000
<b>7. Accrued Benefits Payable</b>	0	19,953,000	9,008,000	28,961,000
<b>8. Transferable Earnings due from VSFs to QPP</b>	14,000,000	(14,000,000)	0	0
<b>9. Adjusted Market Value @ 6/30/2019</b>	<u>\$ 14,337,618,000</u>	<u>\$ 519,268,000</u>	<u>\$ 351,386,000</u>	<u>\$ 15,208,272,000</u>
<b>10. Changes for the year:</b>				
a. ER Contributions	1,419,270,000	0	0	1,419,270,000
b. EE Contributions	106,821,000	0	0	106,821,000
c. Net Investment Income	681,383,000	21,517,000	15,839,000	718,739,000
d. Benefit Payments <sup>2</sup>	(1,447,071,000)	(44,850,000)	(25,802,000)	(1,517,723,000)
e. Administrative Expenses	(9,131,000)	0	0	(9,131,000)
f. Other	(17,315,000)	12,792,000	7,365,000	2,842,000
g. Net Changes	\$ 733,957,000	\$ (10,541,000)	\$ (2,598,000)	\$ 720,818,000
<b>11. Plan Net Position @ 6/30/2020</b>	\$ 15,071,575,000	\$ 489,276,000	\$ 339,856,000	\$ 15,900,707,000
<b>12. Accrued Benefits Payable</b>	0	19,451,000	8,932,000	28,383,000
<b>13. Transferable Earnings due from VSFs to QPP</b>	15,000,000	(15,000,000)	0	0
<b>14. Adjusted Market Value @ 6/30/2020</b>	<u>\$ 15,086,575,000</u>	<u>\$ 493,727,000</u>	<u>\$ 348,788,000</u>	<u>\$ 15,929,090,000</u>

<sup>1</sup> Includes Net Accrued Benefits Payable of -\$474,000 for FFVSF and -\$71,000 for FOVSF.

<sup>2</sup> Includes Net Accrued Benefits Payable of -\$502,000 for FFVSF and -\$76,000 for FOVSF.

## NEW YORK CITY FIRE PENSION FUND (FIRE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

#### Long-Term Expected Rate of Return

The Long-Term Expected Rate of Return (LTEROR) assumption on pension fund investments was determined using a Building-Block Method in which best-estimate ranges of Expected Real Rates of Return (i.e. Expected Returns, net of pension fund investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the LTEROR by weighting the Expected Real Rates of Return (RROR) by the Target Asset Allocation percentage and by adding Expected Inflation. The Target Asset Allocation and best estimates of Arithmetic Real Rates of Return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
<i>Public Markets:</i>		
U.S. Public Market Equities	27.0%	5.4%
Developed Public Market Equities	9.0%	6.1%
Emerging Public Market Equities	6.0%	9.6%
Fixed Income	31.0%	1.6%
<i>Private Markets (Alternative Investments):</i>		
Private Equity	8.0%	8.8%
Private Real Estate	7.0%	5.2%
Infrastructure	3.0%	4.7%
Hedge Funds	5.0%	3.5%
Opportunistic Fixed Income	<u>4.0%</u>	3.0%
Total	100.0%	

The Discount Rate used to measure the Total Pension Liability was 7.0% per annum. The projection of Cash Flows used to determine the Discount Rate assumes that employee contributions will be made at the rates applicable to the current Tier for each member and that employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the pension fund's Fiduciary Net Position is projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the Long-Term Expected Rate of Return on pension fund investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.



**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss  
June 30, 2019**

	QPP	FFVSF	FOVSF	Total
<b>1. Assets</b>				
a. Market Value 6/30/2018*	\$ 13,282,043,000	\$ 535,507,000	\$ 355,712,000	\$ 14,173,262,000
b. 2018 Transferable Earnings due from QPP to VSFs	(15,000,000)	15,000,000	0	0
c. Adjusted Market Value @6/30/2018	13,267,043,000	550,507,000	355,712,000	14,173,262,000
d. Market Value 6/30/2019**	14,323,618,000	533,268,000	351,386,000	15,208,272,000
e. 2019 Transferable Earnings due from VSFs to QPP	14,000,000	(14,000,000)	0	0
f. Adjusted Market Value @6/30/2019	14,337,618,000	519,268,000	351,386,000	15,208,272,000
<b>2. Net Investment Income</b>	933,889,000	27,979,000	20,480,000	982,348,000
<b>3. Cash Flow</b> (1.d. - 1.a. - 2.)	107,686,000	(30,218,000)	(24,806,000)	52,662,000
<b>4. Projected Earnings</b> (7% * 1.a. + 3.441% * 3.)	933,448,485	36,445,689	24,046,266	993,940,440
<b>5. (Gain) / Loss</b> (4. - 2.)	(440,515)	8,466,689	3,566,266	11,592,440
<b>6. Recognition Period</b>	5 Years	5 Years	5 Years	5 Years
<b>7. Amount Recognized in Pension Expense</b> (5. / 6.)	(88,103)	1,693,338	713,253	2,318,488
<b>8. Deferred (Inflow) / Outflow of Resources</b> (5. - 7.)	\$ (352,412)	\$ 6,773,351	\$ 2,853,013	\$ 9,273,952

\* Before Reflecting 2018 Transferable Earnings due from QPP to VSFs.

\*\* Before Reflecting 2019 Transferable Earnings due from VSFs to QPP.

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Development of Asset (Gain) / Loss  
June 30, 2020**

	QPP	FFVSF	FOVSF	Total
<b>1. Assets</b>				
<b>a. Market Value 6/30/2019*</b>	\$ 14,323,618,000	\$ 533,268,000	\$ 351,386,000	\$ 15,208,272,000
<b>b. 2019 Transferable Earnings due from VSFs to QPP</b>	14,000,000	(14,000,000)	0	0
<b>c. Adjusted Market Value @6/30/2019</b>	14,337,618,000	519,268,000	351,386,000	15,208,272,000
<b>d. Market Value 6/30/2020**</b>	15,071,575,000	508,727,000	348,788,000	15,929,090,000
<b>e. 2020 Transferable Earnings due from VSFs to QPP</b>	15,000,000	(15,000,000)	0	0
<b>f. Adjusted Market Value @6/30/2020</b>	15,086,575,000	493,727,000	348,788,000	15,929,090,000
<b>2. Net Investment Income</b>	681,383,000	21,517,000	15,839,000	718,739,000
<b>3. Cash Flow</b> (1.d. - 1.a. - 2.)	66,574,000	(46,058,000)	(18,437,000)	2,079,000
<b>4. Projected Earnings</b> (7% * 1.a. + 3.441% * 3.)	1,004,944,071	35,743,904	23,962,603	1,064,650,578
<b>5. (Gain) / Loss</b> (4. - 2.)	323,561,071	14,226,904	8,123,603	345,911,578
<b>6. Recognition Period</b>	5 Years	5 Years	5 Years	5 Years
<b>7. Amount Recognized in Pension Expense</b> (5. / 6.)	64,712,214	2,845,381	1,624,721	69,182,316
<b>8. Deferred (Inflow) / Outflow of Resources</b> (5. - 7.)	\$ 258,848,857	\$ 11,381,523	\$ 6,498,882	\$ 276,729,262

\* Before Reflecting 2019 Transferable Earnings due from VSFs to QPP.

\*\* Before Reflecting 2020 Transferable Earnings due from VSFs to QPP.

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Roll-Forward of Entry Age Accrued Liabilities to June 30, 2020**

		<b>QPP</b>		<b>FFVSF</b>		<b>FOVSF</b>		<b>Total</b>
1. Disclosed EA Accrued Liability at 6/30/2019	\$	22,477,031,781	\$	490,809,341	\$	298,944,067	\$	23,266,785,189
2. EA Normal Cost at 6/30/2019		559,170,761		8,525,579		4,958,293		572,654,633
3. Benefit Payments - FY 2020		(1,447,071,000)		(44,850,000)		(25,802,000)		(1,517,723,000)
4. Interest		1,562,740,465		33,410,156		20,385,318		1,616,535,939
5. Experience (Gain)/Loss - FY 2020		150,563,311		(3,290,996)		(3,546,704)		143,725,611
6. Roll-Forward EAAL at 6/30/2020	\$	23,302,435,318	\$	484,604,080	\$	294,938,974	\$	24,081,978,372

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Net Pension Liability (NPL) by Source  
Balances at June 30, 2019**

	<b>Total Pension Liability</b>			
	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>1. Balances at June 30, 2018</b>	\$ 21,073,770,457	\$ 545,062,935	\$ 373,078,788	\$ 21,991,912,180
<b>2. Changes for the Year:</b>				
a. Service Cost	467,492,657	10,961,502	6,373,623	484,827,782
b. Interest	1,460,537,161	37,365,759	25,708,094	1,523,611,014
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	154,208,202	6,872,622	(20,300,459)	140,780,365
e. Changes of Assumptions	697,113,304	(64,235,477)	(61,109,979)	571,767,848
f. Benefit Payments	(1,376,090,000)	(45,218,000)	(24,806,000)	(1,446,114,000)
<b>g. Net Changes</b>	<b>\$ 1,403,261,324</b>	<b>\$ (54,253,594)</b>	<b>\$ (74,134,721)</b>	<b>\$ 1,274,873,009</b>
<b>3. Balances at June 30, 2019</b>	<b>\$ 22,477,031,781</b>	<b>\$ 490,809,341</b>	<b>\$ 298,944,067</b>	<b>\$ 23,266,785,189</b>
	<b>Plan Fiduciary Net Position<sup>1</sup></b>			
	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>4. Balances at June 30, 2018</b>	\$ 13,267,043,000	\$ 550,507,000	\$ 355,712,000	\$ 14,173,262,000
<b>5. Changes for the Year:</b>				
a. Contributions - Employer	1,398,565,000	0	0	1,398,565,000
b. Contributions - Employee	108,015,000	0	0	108,015,000
c. Net Investment Income	933,889,000	27,979,000	20,480,000	982,348,000
d. Benefit Payments	(1,376,090,000)	(45,218,000)	(24,806,000)	(1,446,114,000)
e. Administrative Expenses	(9,861,000)	0	0	(9,861,000)
f. Other Changes	2,057,000	0	0	2,057,000
<b>g. Net Changes</b>	<b>\$ 1,056,575,000</b>	<b>\$ (17,239,000)</b>	<b>\$ (4,326,000)</b>	<b>\$ 1,035,010,000</b>
<b>6. Transferable Earnings due from VSFs to QPP</b>	<b>14,000,000</b>	<b>(14,000,000)</b>	<b>0</b>	<b>0</b>
<b>7. Balances at June 30, 2019</b>	<b>\$ 14,337,618,000</b>	<b>\$ 519,268,000</b>	<b>\$ 351,386,000</b>	<b>\$ 15,208,272,000</b>
	<b>Net Pension Liability</b>			
	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>8. Balances at June 30, 2018</b>	\$ 7,806,727,457	\$ (5,444,065)	\$ 17,366,788	\$ 7,818,650,180
<b>9. Changes for the Year:</b>				
a. Service Cost	467,492,657	10,961,502	6,373,623	484,827,782
b. Interest	1,460,537,161	37,365,759	25,708,094	1,523,611,014
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	154,208,202	6,872,622	(20,300,459)	140,780,365
e. Changes of Assumptions	697,113,304	(64,235,477)	(61,109,979)	571,767,848
f. Contributions - Employer	(1,398,565,000)	0	0	(1,398,565,000)
g. Contributions - Employee	(108,015,000)	0	0	(108,015,000)
h. Net Investment Income	(933,889,000)	(27,979,000)	(20,480,000)	(982,348,000)
i. Benefit Payments	0	0	0	0
j. Administrative Expenses	9,861,000	0	0	9,861,000
k. Other Changes	(2,057,000)	0	0	(2,057,000)
<b>l. Net Changes</b>	<b>\$ 346,686,324</b>	<b>\$ (37,014,594)</b>	<b>\$ (69,808,721)</b>	<b>\$ 239,863,009</b>
<b>10. Transferable Earnings due from VSFs to QPP</b>	<b>(14,000,000)</b>	<b>14,000,000</b>	<b>0</b>	<b>0</b>
<b>11. Balances at June 30, 2019</b>	<b>\$ 8,139,413,781</b>	<b>\$ (28,458,659)</b>	<b>\$ (52,441,933)</b>	<b>\$ 8,058,513,189</b>

<sup>1</sup> Balances at 6/30/2018 and 6/30/2019 are Adjusted Market Values - See Page 3.

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Changes in Net Pension Liability (NPL) by Source  
Balances at June 30, 2020**

	<b>Total Pension Liability</b>			
	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>1. Balances at June 30, 2019</b>	\$ 22,477,031,781	\$ 490,809,341	\$ 298,944,067	\$ 23,266,785,189
<b>2. Changes for the Year:</b>				
a. Service Cost	559,170,761	8,525,579	4,958,293	572,654,633
b. Interest	1,562,740,465	33,410,156	20,385,318	1,616,535,939
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	150,563,311	(3,290,996)	(3,546,704)	143,725,611
e. Changes of Assumptions	0	0	0	0
f. Benefit Payments	(1,447,071,000)	(44,850,000)	(25,802,000)	(1,517,723,000)
<b>g. Net Changes</b>	<b>\$ 825,403,537</b>	<b>\$ (6,205,261)</b>	<b>\$ (4,005,093)</b>	<b>\$ 815,193,183</b>
<b>3. Balances at June 30, 2020</b>	<b>\$ 23,302,435,318</b>	<b>\$ 484,604,080</b>	<b>\$ 294,938,974</b>	<b>\$ 24,081,978,372</b>
	<b>Plan Fiduciary Net Position<sup>1</sup></b>			
	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>4. Balances at June 30, 2019</b>	\$ 14,337,618,000	\$ 519,268,000	\$ 351,386,000	\$ 15,208,272,000
<b>5. Changes for the Year:</b>				
a. Contributions - Employer	1,419,270,000	0	0	1,419,270,000
b. Contributions - Employee	106,821,000	0	0	106,821,000
c. Net Investment Income	681,383,000	21,517,000	15,839,000	718,739,000
d. Benefit Payments	(1,447,071,000)	(44,850,000)	(25,802,000)	(1,517,723,000)
e. Administrative Expenses	(9,131,000)	0	0	(9,131,000)
f. Other Changes	(17,315,000)	12,792,000	7,365,000	2,842,000
<b>g. Net Changes</b>	<b>\$ 733,957,000</b>	<b>\$ (10,541,000)</b>	<b>\$ (2,598,000)</b>	<b>\$ 720,818,000</b>
<b>6. Transferable Earnings due from VSFs to QPP</b>	<b>15,000,000</b>	<b>(15,000,000)</b>	<b>0</b>	<b>0</b>
<b>7. Balances at June 30, 2020</b>	<b>\$ 15,086,575,000</b>	<b>\$ 493,727,000</b>	<b>\$ 348,788,000</b>	<b>\$ 15,929,090,000</b>
	<b>Net Pension Liability</b>			
	<b>QPP</b>	<b>FFVSF</b>	<b>FOVSF</b>	<b>Total</b>
<b>8. Balances at June 30, 2019</b>	\$ 8,139,413,781	\$ (28,458,659)	\$ (52,441,933)	\$ 8,058,513,189
<b>9. Changes for the Year:</b>				
a. Service Cost	559,170,761	8,525,579	4,958,293	572,654,633
b. Interest	1,562,740,465	33,410,156	20,385,318	1,616,535,939
c. Changes of Benefit Terms	0	0	0	0
d. Differences b/t Expected and Actual Experience	150,563,311	(3,290,996)	(3,546,704)	143,725,611
e. Changes of Assumptions	0	0	0	0
f. Contributions - Employer	(1,419,270,000)	0	0	(1,419,270,000)
g. Contributions - Employee	(106,821,000)	0	0	(106,821,000)
h. Net Investment Income	(681,383,000)	(21,517,000)	(15,839,000)	(718,739,000)
i. Benefit Payments	0	0	0	0
j. Administrative Expenses	9,131,000	0	0	9,131,000
k. Other Changes	17,315,000	(12,792,000)	(7,365,000)	(2,842,000)
<b>l. Net Changes</b>	<b>\$ 91,446,537</b>	<b>\$ 4,335,739</b>	<b>\$ (1,407,093)</b>	<b>\$ 94,375,183</b>
<b>10. Transferable Earnings due from VSFs to QPP</b>	<b>(15,000,000)</b>	<b>15,000,000</b>	<b>0</b>	<b>0</b>
<b>11. Balances at June 30, 2020</b>	<b>\$ 8,215,860,318</b>	<b>\$ (9,122,920)</b>	<b>\$ (53,849,026)</b>	<b>\$ 8,152,888,372</b>

<sup>1</sup> Balances at 6/30/2019 and 6/30/2020 are Adjusted Market Values - See Page 3.

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Changes in Net Pension Liability and Related Ratios**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>1. Total Pension Liability</b>								
a. Service Cost	\$ 572,654,633	\$ 484,827,782	\$ 436,368,702	\$ 432,482,302	\$ 431,267,723	\$ 419,575,546	\$ 412,911,205	\$ 400,884,665
b. Interest	1,616,535,939	1,523,611,014	1,484,608,815	1,438,804,602	1,395,735,250	1,312,813,977	1,215,276,517	1,184,217,313
c. Changes of Benefit Terms	0	0	11,602,422	0	0	0	0	0
d. Differences b/t Expected and Actual Experience	143,725,611	140,780,365	124,635,710	134,478,099	323,609,267	171,347,136	0	0
e. Change of Assumptions	0	571,767,848	0	0	405,497,988	0	0	0
f. Benefit Payments	(1,517,723,000)	(1,446,114,000)	(1,379,533,000)	(1,335,343,000)	(1,359,095,000)	(1,220,441,000)	(1,171,998,000)	(1,135,469,000)
<b>g. Net Changes</b>	<b>\$ 815,193,183</b>	<b>\$ 1,274,873,009</b>	<b>\$ 677,682,649</b>	<b>\$ 670,422,003</b>	<b>\$ 1,197,015,228</b>	<b>\$ 683,295,659</b>	<b>\$ 456,189,722</b>	<b>\$ 449,632,978</b>
<b>2. Total Pension Liability - Beginning</b>	<b>\$ 23,266,785,189</b>	<b>\$ 21,991,912,180</b>	<b>\$ 21,314,229,531</b>	<b>\$ 20,643,807,528</b>	<b>\$ 19,446,792,300</b>	<b>\$ 18,763,496,641</b>	<b>\$ 17,524,302,616</b>	<b>\$ 17,074,669,638</b>
<b>3. Total Pension Liability - Ending</b>	<b>\$ 24,081,978,372</b>	<b>\$ 23,266,785,189</b>	<b>\$ 21,991,912,180</b>	<b>\$ 21,314,229,531</b>	<b>\$ 20,643,807,528</b>	<b>\$ 19,446,792,300</b>	<b>\$ 17,980,492,338</b>	<b>\$ 17,524,302,616</b>
<b>4. Plan Fiduciary Net Position</b>								
a. Contributions - Employer	\$ 1,419,270,000	\$ 1,398,565,000	\$ 1,200,417,000	\$ 1,061,170,000	\$ 1,054,478,000	\$ 988,784,000	\$ 969,956,000	\$ 962,173,000
b. Contributions - Employee	106,821,000	108,015,000	108,338,000	108,368,000	116,619,000	108,582,000	108,859,000	104,816,000
c. Net Investment Income	718,739,000	982,348,000	1,249,731,000	1,371,721,000	203,104,000	302,567,000	1,689,485,000	1,042,431,000
d. Benefit Payments	(1,517,723,000)	(1,446,114,000)	(1,379,533,000)	(1,335,343,000)	(1,359,095,000)	(1,220,441,000)	(1,171,998,000)	(1,135,469,000)
e. Administrative Expenses	(9,131,000)	(9,861,000)	(6,412,000)	0	0	0	0	0
f. Other Changes	2,842,000	2,057,000	9,411,000	47,284,000	43,673,000	41,201,000	39,980,000	38,965,000
<b>g. Net Changes</b>	<b>\$ 720,818,000</b>	<b>\$ 1,035,010,000</b>	<b>\$ 1,181,952,000</b>	<b>\$ 1,253,200,000</b>	<b>\$ 58,779,000</b>	<b>\$ 220,693,000</b>	<b>\$ 1,636,282,000</b>	<b>\$ 1,012,916,000</b>
<b>5. Plan Fiduciary Net Position - Beginning</b>	<b>\$ 15,208,272,000</b>	<b>\$ 14,173,262,000</b>	<b>\$ 12,991,310,000</b>	<b>\$ 11,738,110,000</b>	<b>\$ 11,679,331,000</b>	<b>\$ 11,458,638,000</b>	<b>\$ 9,822,356,000</b>	<b>\$ 8,809,440,000</b>
<b>6. Plan Fiduciary Net Position - Ending</b>	<b>\$ 15,929,090,000</b>	<b>\$ 15,208,272,000</b>	<b>\$ 14,173,262,000</b>	<b>\$ 12,991,310,000</b>	<b>\$ 11,738,110,000</b>	<b>\$ 11,679,331,000</b>	<b>\$ 11,458,638,000</b>	<b>\$ 9,822,356,000</b>
<b>7. FIRE Net Pension Liability</b>	<b>\$ 8,152,888,372</b>	<b>\$ 8,058,513,189</b>	<b>\$ 7,818,650,180</b>	<b>\$ 8,322,919,531</b>	<b>\$ 8,905,697,528</b>	<b>\$ 7,767,461,300</b>	<b>\$ 6,521,854,338</b>	<b>\$ 7,701,946,616</b>
<b>8. Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>66.1%</b>	<b>65.4%</b>	<b>64.4%</b>	<b>61.0%</b>	<b>56.9%</b>	<b>60.1%</b>	<b>63.7%</b>	<b>56.0%</b>
<b>9. Covered Employee Payroll <sup>1</sup></b>	<b>\$ 1,336,843,002</b>	<b>\$ 1,302,871,992</b>	<b>\$ 1,164,528,195</b>	<b>\$ 1,145,919,396</b>	<b>\$ 1,129,469,957</b>	<b>\$ 1,111,744,091</b>	<b>\$ 1,102,396,453</b>	<b>\$ 1,129,926,037</b>
<b>10. FIRE Net Pension Liability as a Percentage of Covered Employee Payroll</b>	<b>609.9%</b>	<b>618.5%</b>	<b>671.4%</b>	<b>726.3%</b>	<b>788.5%</b>	<b>698.7%</b>	<b>591.6%</b>	<b>681.6%</b>

<sup>1</sup> Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

**Schedule of Employer Contributions (\$ in thousands)**

<b>Fiscal Year Ending June 30</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
1. Actuarially Determined Contribution	\$ 1,419,270	\$ 1,398,565	\$ 1,200,417	\$ 1,061,170	\$ 1,054,478	\$ 988,784	\$ 969,956	\$ 962,173	\$ 976,895	\$ 890,706
2. Contributions in relation to the Actuarially Determined Contribution	<u>\$ 1,419,270</u>	<u>\$ 1,398,565</u>	<u>\$ 1,200,417</u>	<u>\$ 1,061,170</u>	<u>\$ 1,054,478</u>	<u>\$ 988,784</u>	<u>\$ 969,956</u>	<u>\$ 962,173</u>	<u>\$ 976,895</u>	<u>\$ 890,706</u>
3. Contribution Deficiency (Excess)	0	0	0	0	0	0	0	0	0	0
4. Contributions as a percentage of Covered Employee Payroll*	106.166%	107.345%	103.082%	92.604%	93.360%	88.940%	87.986%	85.154%	84.990%	82.248%

\* Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

## NEW YORK CITY FIRE PENSION FUND (FIRE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

#### Average Expected Remaining Service Lives

<u>Group</u>	<u># Count</u>	Average Expected Remaining Service Life <u>@ 6/30/2019</u>
Active	11,244	13.66
Active Off Payroll	28	0
Terminated Vested	67	0
Retired	<u>16,628</u>	<u>0</u>
Total	<u>27,967</u>	5.49



**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2019		2020		2021		2022		2023		2024		2025	
			\$		\$		\$		\$		\$		\$		\$	
2017	134,478,099	4.60	\$	29,234,369	\$	29,234,369	\$	17,540,623								
2018	124,635,710	4.94	\$	25,229,901	\$	25,229,901	\$	25,229,901	\$	23,716,106						
2019	140,780,365	5.47	\$	25,736,813	\$	25,736,813	\$	25,736,813	\$	25,736,813	\$	25,736,813	\$	12,096,300		
2020	143,725,611	5.49			\$	26,179,528	\$	26,179,528	\$	26,179,528	\$	26,179,528	\$	26,179,528	\$	12,827,971
Net increase (decrease) in Pension Expense			\$	<b>80,201,083</b>	\$	<b>106,380,611</b>	\$	<b>94,686,865</b>	\$	<b>75,632,447</b>	\$	<b>51,916,341</b>	\$	<b>38,275,828</b>	\$	<b>12,827,971</b>

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Changes in Assumptions</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2019	571,767,848	5.47	\$ 104,527,943	\$ 104,527,943	\$ 104,527,943	\$ 104,527,943	\$ 104,527,943	\$ 49,128,133
2020	0	0	\$	0				
Net increase (decrease) in Pension Expense			<b>\$ 104,527,943</b>	<b>\$ 104,527,943</b>	<b>\$ 104,527,943</b>	<b>\$ 104,527,943</b>	<b>\$ 104,527,943</b>	<b>\$ 49,128,133</b>

**NEW YORK CITY FIRE PENSION FUND (FIRE)**

**Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)**

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

<b>Year</b>	<b>Differences between Projected and Actual Earnings on Pension Plan Investments</b>	<b>Recognition Period (Years)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2015	496,720,375	5	\$ 99,344,071					
2016	609,482,946	5	\$ 121,896,589	\$ 121,896,590				
2017	(554,131,607)	5	\$ (110,826,321)	\$ (110,826,321)	\$ (110,826,323)			
2018	(342,671,575)	5	\$ (68,534,315)	\$ (68,534,315)	\$ (68,534,315)	\$ (68,534,315)		
2019	11,592,440	5	\$ 2,318,488	\$ 2,318,488	\$ 2,318,488	\$ 2,318,488	\$ 2,318,488	
2020	345,911,578	5	\$	\$ 69,182,316	\$ 69,182,316	\$ 69,182,316	\$ 69,182,316	\$ 69,182,314
Net increase (decrease) in Pension Expense			<b>\$ 44,198,512</b>	<b>\$ 14,036,758</b>	<b>\$ (107,859,834)</b>	<b>\$ 2,966,489</b>	<b>\$ 71,500,804</b>	<b>\$ 69,182,314</b>

## NEW YORK CITY FIRE PENSION FUND (FIRE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

#### Components of Pension Expense for the Fiscal Year Ending June 30, 2019

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 484,827,782
b. Interest on the Total Pension Liability	1,523,611,014
c. Changes of Benefit Terms	0
d. Differences between Expected and Actual Experience	80,201,083
e. Changes of Assumptions	104,527,943
f. Employee Contributions	(108,015,000)
g. Projected Earnings on Pension Plan Investments	(993,940,440)
h. Differences between Projected and Actual Earnings on Plan Investments	44,198,512
i. Pension Plan Administrative Expenses	9,861,000
j. Other Changes in Fiduciary Net Position	<u>(2,057,000)</u>
<b>Total Pension Expense</b>	<b>\$ 1,143,214,894</b>

## NEW YORK CITY FIRE PENSION FUND (FIRE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

#### Components of Pension Expense for the Fiscal Year Ending June 30, 2020

<u>Component</u>	<u>Amount</u>
a. Service Cost	\$ 572,654,633
b. Interest on the Total Pension Liability	1,616,535,939
c. Changes of Benefit Terms	0
d. Differences between Expected and Actual Experience	106,380,611
e. Changes of Assumptions	104,527,943
f. Employee Contributions	(106,821,000)
g. Projected Earnings on Pension Plan Investments	(1,064,650,578)
h. Differences between Projected and Actual Earnings on Plan Investments	14,036,758
i. Pension Plan Administrative Expenses	9,131,000
j. Other Changes in Fiduciary Net Position	(2,842,000)
	(2,842,000)
<b>Total Pension Expense</b>	<b>\$ 1,248,953,306</b>

NEW YORK CITY FIRE PENSION FUND (FIRE)

Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

Pension Expense, Deferred Outflows and Inflows of Resources

	Fiscal Year Ending June 30, 2015		Fiscal Year Ending June 30, 2016		Fiscal Year Ending June 30, 2017		Fiscal Year Ending June 30, 2018		Fiscal Year Ending June 30, 2019		Fiscal Year Ending June 30, 2020	
<b>Recognized Pension Expense</b>	<b>\$663,750,858</b>		<b>\$1,139,052,037</b>		<b>\$1,071,143,838</b>		<b>\$973,685,487</b>		<b>\$1,143,214,894</b>		<b>\$1,248,953,306</b>	
<b>Deferred Resources</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>	<b>Outflows</b>	<b>Inflows</b>
Differences Between Expected and Actual Experience	104,152,181	0	198,179,319	0	105,243,730	0	99,405,809	0	115,043,552	0	117,546,083	0
Changes of Assumptions	0	0	248,328,225	0	0	0	0	0	467,239,905	0	0	0
Net Difference between Projected and Actual Earnings on Pension Plan Investments	397,376,299	0	487,586,357	0	0	443,305,286	0	274,137,260	9,273,952	0	276,729,262	0
<b>Total</b>	<b>501,528,480</b>	<b>0</b>	<b>934,093,901</b>	<b>0</b>	<b>105,243,730</b>	<b>443,305,286</b>	<b>99,405,809</b>	<b>274,137,260</b>	<b>591,557,409</b>	<b>0</b>	<b>394,275,345</b>	<b>0</b>

Reported amounts will be recognized in Pension Expense  
during Fiscal Year Ending June 30

2015	\$166,539,031											
2016	\$166,539,031		\$404,496,300									
2017	\$136,301,302		\$404,496,300		(\$81,591,952)							
2018	\$99,344,076		\$285,804,422		(\$81,591,952)		(\$43,304,414)					
2019	\$99,344,071		\$121,896,589		(\$81,591,952)		(\$43,304,414)		\$132,583,244			
2020			\$121,896,590		(\$81,591,952)		(\$43,304,414)		\$132,583,244		\$95,361,844	
2021					(\$93,285,700)		(\$43,304,414)		\$132,583,244		\$95,361,844	
2022							(\$44,818,209)		\$132,583,244		\$95,361,844	
2023									\$132,583,244		\$95,361,844	
2024									\$61,224,433		\$95,361,842	
2025											\$12,827,971	

## NEW YORK CITY FIRE PENSION FUND (FIRE)

### Governmental Accounting Standards Board Statements No. 67 and No. 68 (GASB 67/68)

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

For the Fiscal Year ending June 30, 2020, the City recognized Pension Expense for FIRE of \$1,248,953,306.

At June 30, 2020, the City reported total Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for FIRE from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 273,339,452	\$ 0
Changes of Assumptions	362,711,962	0
Net difference between Projected and Actual Earnings on Pension Plan Investments	35,789,773	0
Total	\$ 671,841,187	\$ 0

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions for FIRE will be recognized in Pension Expense as follows:

Fiscal Year Ending <u>June 30</u>	<u>Amount</u>
2020	\$ 224,945,312
2021	91,354,974
2022	183,126,879
2023	227,945,088
2024	156,586,275
2025	12,827,971