June 30, 2023
Actuarial Valuation Report

for the

New York City
Employees' Retirement System

prepared by the

New York City
Office of the Actuary

CONTRIBUTIONS REQUIRED FOR FISCAL YEAR 2025

OFFICE OF THE ACTUARY

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MAREK TYSZKIEWICZ
CHIEF ACTUARY

September 29, 2025

Board of Trustees
New York City Employees' Retirement System
335 Adams Street, Suite 2300
Brooklyn, NY 11201-3751

Re: June 30, 2023 Actuarial Valuation Report (Report)

Dear Trustees:

This is the June 30, 2023 actuarial valuation report of the New York City Employees' Retirement System (NYCERS) Qualified Pension Plan (the Plan).

Purpose

The purpose of this actuarial valuation report is to:

- Determine the actuarially required contribution for Fiscal Year 2025 - the period from July 1, 2024 to June 30, 2025;
- Measure the Plan's funding progress; and
- Disclose the census data, financial information, assumptions, and methods used.

Required Contribution

The actuarially required contribution for Fiscal Year 2025 is $3,953,084,165.

Data Used

Results shown for current and prior valuation dates are based on data as of June 30th of the valuation year, including:

- Census data, including the data for the cost for certain cases processed through June 30, 2023 due to Gulino settlement, submitted by the Plan's administrative staff, by the participating employers' payroll facilities, by the Office of the Payroll Administration, and by the Financial Information Services Agency; and
- Financial information was provided by NYCERS and the Office of the Comptroller.

The Office of the Actuary has reviewed this data for reasonableness, consistent with Actuarial Standards of Practice, but has not audited it. The accuracy of these results depends on the accuracy of this data. If the data provided is materially inaccurate, these results require revision.

Benefit Changes

A summary of the Plan's benefits is shown in SECTION IX – SUMMARY OF PLAN PROVISIONS. This valuation reflects:

- The enactment of Chapter 55 of the Laws of 2024, Part KK, which extends Chapter 56 of the Laws of 2022 by excluding overtime and compensation earned for supplemental work from wages used to calculate Tier 6 Basic Member Contribution Rates for two additional years.

- The enactment of Chapter 56 of the Laws of 2024, Part QQ, which reduces the number of years used to calculate the Final Average Salary from 5 years to 3 years for certain Tier 3 and Tier 6 NYCERS members.

All other benefits under the Plan are unchanged from the prior valuation.

Actuarial Assumptions and Methods

A summary of the actuarial assumptions and methods used in the valuation of the Plan is shown in SECTION XII – ACTUARIAL ASSUMPTIONS AND METHODS. The actuarial assumptions and methods are unchanged from the prior valuation.

Items Excluded or Not Valued

Not included in this Report are:

- Governmental Accounting Standards Board (GASB) results. The Office of the Actuary publishes the Fiscal Year 2025 GASB67 and GASB68 results in a separate Report which can be found on the Office of the Actuary website www.nyc.gov/actuary.

- The cost for any pension payments that exceed the Internal Revenue Code Section 415 Limit which are expected to be made from the Excess Benefit Plan.

- Unless specifically noted, Variable Supplements Funds results.

Risks and Uncertainty

These results may be different in future reports for many reasons, including:

- Economic or demographic experience being different than what was assumed;
- Changes in actuarial assumption and methods; and
- Changes in statute and plan provisions.

Likewise, results for purposes other than those described earlier may be quite different.

See SECTION VIII – RISK AND UNCERTAINTY for more information about these risks.

Actuarial Qualifications

Marek Tyszkiewicz and Frankie Chen are Associates of the Society of Actuaries and Members of the American Academy of Actuaries. Frankie Chen is also an Enrolled Actuary under the Employee Retirement Income Security Act of 1974.

Actuaries' Statement of Opinion

To the best of our knowledge, these results have been prepared in accordance with generally accepted actuarial principles, procedures, and under the Actuarial Standards of Practice issued by the Actuarial Standards Board. We meet the Qualification Standards of the American Academy of Actuaries to render this actuarial opinion. While we are also members of NYCERS, we do not believe it impairs our objectivity to issue this opinion.

Best Regards,

Marek Tyszkiewicz

Marek Tyszkiewicz, ASA, MAAA
Chief Actuary

Frankie Chen, ASA, EA, MAAA
Assistant Deputy Chief Actuary

MT/eh

cc: Chun Gong - New York City Employees' Retirement System
Elizabeth Reyes - New York City Employees' Retirement System
Keith Snow, Esq. - New York City Office of the Actuary

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SECTION I – SUMMARY OF VALUATION RESULTS

Funded Status

The funded status is the ratio of Plan assets to liabilities. The Plan's funded status based on the Market Value of Assets increased from 79.2% in the prior valuation to 80.1% as of June 30, 2023. The Plan's investment return for this period, based on the Market Value of Assets, was 8.1%.

Required Contribution Amount

The actuarially required contribution for Fiscal Year 2025 is $3,953,084,165 and is derived as the sum of the:

- Normal Cost: The actuarial cost for the additional one year of service credit expected to be earned by current active members for the upcoming year; and
- Amortization of Unfunded Accrued Liabilities: The amortization of the unfunded actuarial accrued liabilities for past service earned prior to the valuation date; and
- Administrative Expense: The reimbursement to the Plan with interest for administrative expenses paid from Plan assets during the valuation year; and
- Gulino Charge: Cost for member contribution receivable amounts for cases processed through June 30, 2023 due to *Gulino vs Board of Education*, 96 Civ. 8414 (KMW).
- Interest on Late Payments: Interest at 7% for any late employer contributions.

The derivation of the funded status and required contribution amounts are shown on the next page.

Table I-1
Valuation Results

Presented in **Table I-1** are the principal results of the June 30, 2023 actuarial valuation and, for comparative purposes, the June 30, 2022 actuarial valuation.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF VALUATION RESULTS		
Valuation Date	**June 30, 2023**	**June 30, 2022**
Fiscal Year	**2025**	**2024**
Funded Status		
1. Accrued Liability[1]	$ 101,708,043,088	$ 97,771,536,990
2. Actuarial Value of Assets (AVA)	83,567,132,000	80,653,520,000
3. Unfunded Accrued Liability (AVA Basis) (1. - 2.)	$ 18,140,911,088	$ 17,118,016,990
4. Market Value of Assets (MVA)	81,434,508,000	77,457,302,000
5. Unfunded Accrued Liability (MVA Basis) (1. - 4.)	$ 20,273,535,088	$ 20,314,234,990
6. Funded Ratio (MVA Basis) (4. / 1.)	80.1%	79.2%
Contribution[2]		
1. Normal Cost	$ 1,641,133,672	$ 1,583,506,220
2. Amortization of Unfunded Accrued Liability	2,193,181,328	1,870,157,720
3. Administrative Expenses	118,603,933	117,917,222
4. Gulino Charges	165,232	N/A
5. Interest on Late Employer Contributions	0	0
6. Actuarial Required Contribution (1. + 2. + 3. + 4. + 5.)	$ 3,953,084,165	$ 3,571,581,162
Participant Data		
1. Active Members		
a. Number	180,354	179,596
b. Annual Salary[3]	$ 16,018,576,283	$ 15,467,773,670
c. Average Salary	$ 88,817	$ 86,125
d. Average Age	47.81	47.87
e. Average Service	11.79	12.03
2. Terminated Nonvested Members	39,184	36,636
3. Deferred Vested Members	29,272	28,684
4. Retirees and Beneficiaries		
a. Number	170,396	166,631
b. Total Annual Benefits	$ 5,905,654,582	$ 5,579,250,743
c. Average Annual Benefit	$ 34,658	$ 33,483
d. Average Age	71.84	71.70

[1] Includes Unfunded Accrued Liability for VSFs.

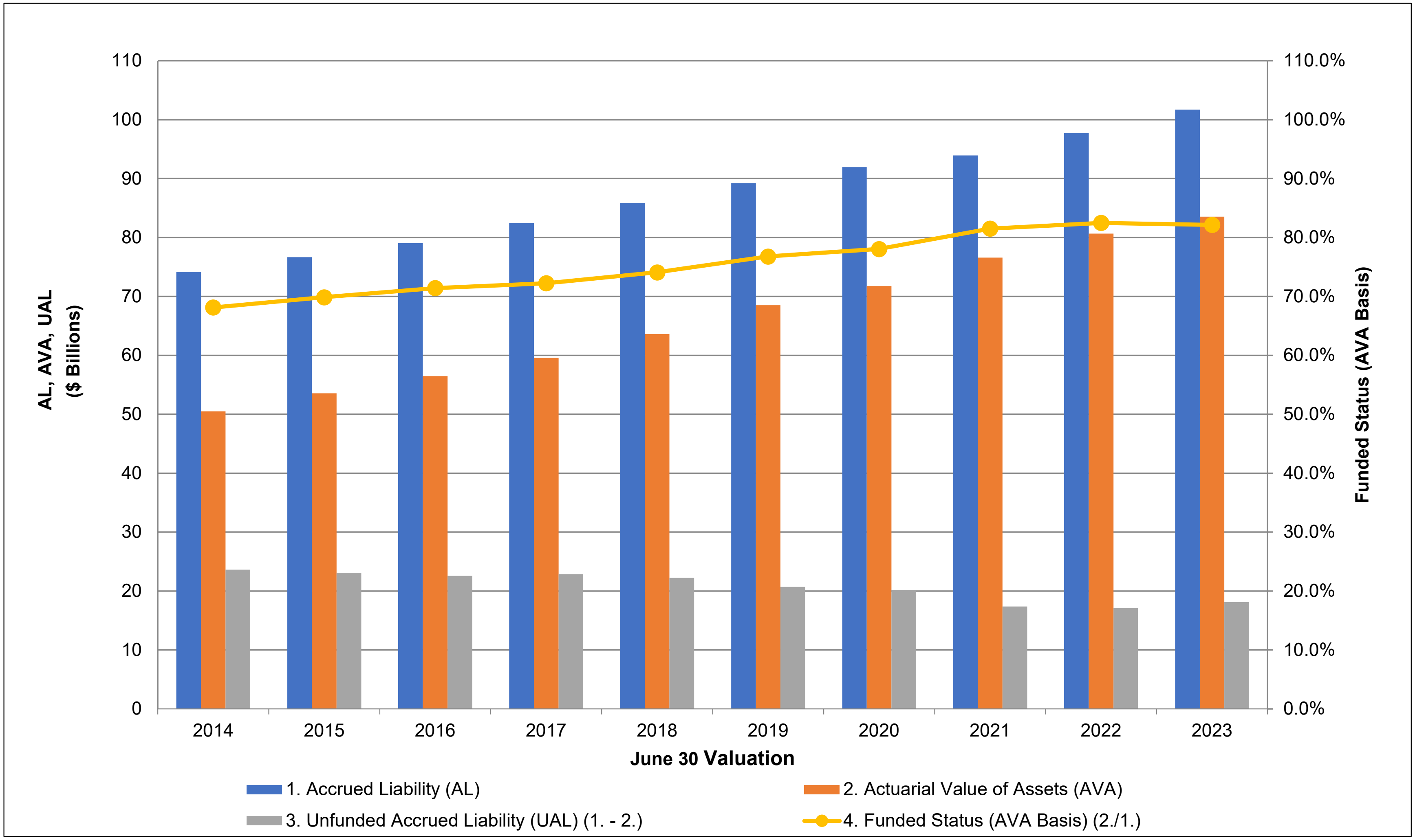
[2] Includes results for VSFs.

[3] Salaries shown are base salary plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in census data.

Table I-2
Actuarial Liabilities

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM ACTUARIAL LIABILITIES BY STATUS		
Valuation Date	**June 30, 2023**	**June 30, 2022**
Fiscal Year	**2025**	**2024**
Accrued Liability		
1. Active Members	$ 36,517,455,780	$ 35,749,415,913
2. Terminated Nonvested Members	294,033,086	265,722,474
3. Deferred Vested Members	3,592,473,568	3,633,142,815
4. Retirees and Beneficiaries	60,937,732,141	57,828,348,271
5. Unfunded VSF	366,348,513	294,907,517
6. Total Accrued Liability	$ 101,708,043,088	$ 97,771,536,990
Present Value of Benefits		
1. Active Members	$ 56,964,388,238	$ 55,025,779,319
2. Terminated Nonvested Members	294,033,086	265,722,474
3. Deferred Vested Members	3,592,473,568	3,633,142,815
4. Retirees and Beneficiaries	60,937,732,141	57,828,348,271
5. Unfunded VSF	481,412,639	424,871,665
6. Total Present Value of Benefits	$ 122,270,039,672	$ 117,177,864,544

Graph I-3
Historical Funded Status



SECTION II – MARKET AND ACTUARIAL VALUES OF ASSETS

Information on the Market Value of Assets (MVA) of the Plan is provided by the Office of the Comptroller. An asset smoothing method is used to determine the Actuarial Value of Assets (AVA) of the Plan.

The Actuary reset the AVA to the MVA as of June 30, 2019. Beginning with the June 30, 2020 actuarial valuation, the asset smoothing method recognizes investment returns greater or less than expected over a period of five years, phasing these gains and losses into the AVA at a rate of 20% per year.

The expected investment return is derived using the Actuarial Interest Rate of 7%, beginning-of-fiscal-year MVA, and net cash flows which are assumed to occur midyear.

The AVA is further constrained to be within a corridor of 80% to 120% of the MVA.

Table II-1
Statement of Plan Net Assets

($ Thousands)	June 30, 2023	June 30, 2022
ASSETS		
Cash	$ 40,246	$ 66,460
Receivables		
Investment Securities Sold	$ 2,365,771	$ 1,461,381
Member Loans	1,161,243	1,082,833
Accrued Interest and Dividends	439,902	415,637
Receivables due from NYCERS	0	0
Other	0	0
Total Receivables	$ 3,966,916	$ 2,959,851
INVESTMENTS AT FAIR VALUE		
Short-Term Investments		
Commercial Paper	$ (1,661)	$ 407,689
Discount Notes	0	179,281
Short-term Investment Fund	754,591	679,921
U.S. Treasury Bills and Agencies	103,416	398,729
Debt Securities		
Bank Loans	136,554	106,294
Corporate and Other	9,248,169	9,021,309
Mortgage Debt Securities	3,694,482	4,526,662
Treasury Inflation Protected Securities	2,666,508	2,921,007
U.S. Government and Agency	7,356,372	7,139,037
Equity Securities		
Domestic Equity	23,762,374	21,370,604
International Equity	12,230,094	11,520,947
Collective Trust Funds		
Bank Loans	95,950	1,064
Corporate and Other	452,412	0
Domestic Equity	1,992	1,084
International Equity	54	0
Mortgage Debt Securities	140,501	430,725
Opportunistic Fixed Income	0	236,247
Treasury Inflation Protected Securities	0	0
U.S. Government and Agency	0	0
Alternative Investments		
Infrastucture	1,955,354	1,426,385
Opportunistic Fixed Income	3,288,363	2,949,143
Private Equity	8,427,303	7,985,627
Private Real Estate	5,865,182	5,672,114
Hedge Fund	813	1,129
Fixed Income Investment Company	308,526	0
Collateral From Securities Lending	8,512,937	9,415,078
Total Investments	$ 89,000,286	$ 86,390,076
OTHER ASSETS	208,871	268,255
TOTAL ASSETS	$ 93,216,319	$ 89,684,642
LIABILITIES		
Accounts Payable	$ 150,468	$ 142,426
Payables for Investment Securities Purchased	2,676,743	2,147,080
Accrued Benefits Payable	378,345	361,633
Amount due to Variable Supplements Funds	3,783	3,660
Transferable Earnings due from QPP to COVSF	0	93,000
Due to Other Retirement Systems	1,435	2,311
Security Lending	8,512,937	9,415,078
Other Liabilities	58,100	62,152
TOTAL LIABILITIES	$ 11,781,811	$ 12,227,340
PLAN ASSETS HELD IN TRUST FOR PENSION BENEFITS	$ 81,434,508	$ 77,457,302

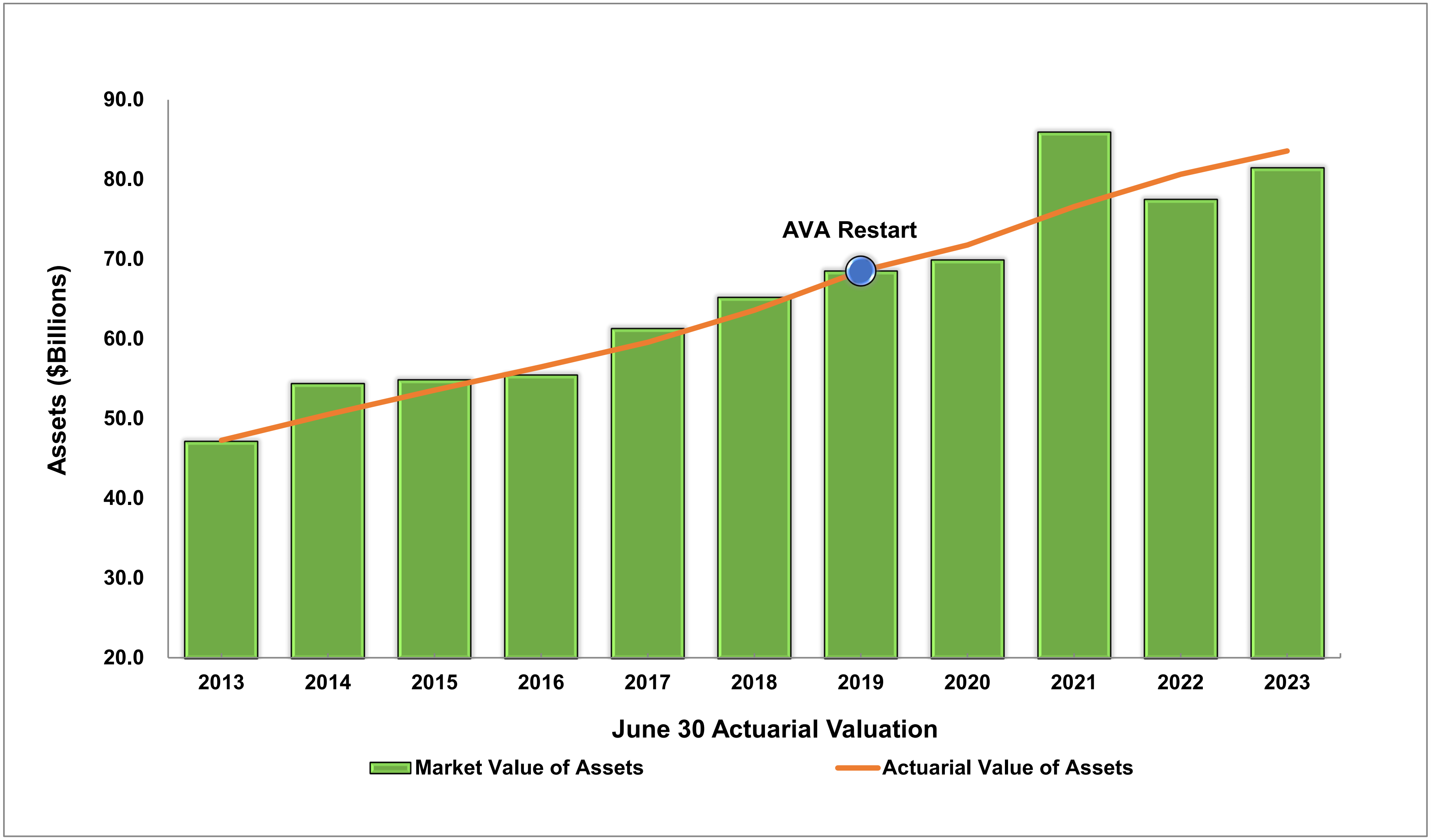
Table II-2
Statement of Changes in Plan Net Assets

($ Thousands)		
	June 30, 2023	**June 30, 2022**
ADDITIONS		
Contributions		
Member Contributions	$ 613,026	$ 595,587
Employer Contributions	3,456,775	3,831,464
Total Contributions	$ 4,069,801	$ 4,427,051
Investment Income (Loss)		
Interest Income	$ 1,027,323	$ 943,322
Dividend Income	940,847	1,038,806
Net Appreciation (Depreciation) in Fair Value	4,717,373	(8,577,663)
Total Investment Income (Loss)	$ 6,685,543	$ (6,595,535)
Less Investment Expenses	489,897	349,217
Net Income (Loss)	$ 6,195,646	$ (6,944,752)
Securities Lending Transactions		
Securities Lending Income	$ 25,640	$ 29,768
Securities Lending Fees	2,294	2,865
Net Securities Lending Income (Loss)	$ 23,346	$ 26,903
Net Investment Income (Loss)	$ 6,218,992	$ (6,917,849)
Other		
Other Income	$ 3,560	$ 3,282
TOTAL ADDITIONS	$ 10,292,353	$ (2,487,516)
DEDUCTIONS		
Benefit Payments and Withdrawals	$ 6,200,358	$ 5,836,192
Payables to Other Retirement Systems	10,282	11,046
Amount due to Variable Supplements Funds	8,907	9,164
Transferable Earnings due from QPP to COVSF	(10,193)	0
Administrative Expenses	105,793	104,988
TOTAL DEDUCTIONS	$ 6,315,147	$ 5,961,390
NET INCREASE (DECREASE) IN PLAN NET ASSETS	$ 3,977,206	$ (8,448,906)
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
Beginning of Year	$ 77,457,302	$ 85,906,208
End of Year	$ 81,434,508	$ 77,457,302

Table II-3
Development of Actuarial Value of Assets

($ Thousands)		
Valuation Date	**June 30, 2023**	**June 30, 2022**
1. Market Value of Assets (MVA)		
a. Beginning of Year (BOY)	$ 77,457,302	$ 85,906,208
b. End of Year (EOY)	$ 81,434,508	$ 77,457,302
2. Contributions		
a. Employee	$ 613,026	$ 595,587
b. Employer	3,456,775	3,831,464
c. Total Contributions	$ 4,069,801	$ 4,427,051
3. Net Investment Income		
a. Investment Income	$ 6,708,889	$ (6,568,632)
b. Investment Expenses	(489,897)	(349,217)
c. Total Net Investment Income	$ 6,218,992	$ (6,917,849)
4. Benefit Payments and Other Cash Flow	$ (6,321,780)	$ (5,958,108)
5. Preliminary Transferable Earnings from NYCERS to COVSF - EOY	$ 10,193	$ 0
6. Net Cash Flow (2.c. + 4. + 5.)	$ (2,241,786)	$ (1,531,057)
7. Expected Investment Return (EIR)	$ 5,344,525	$ 5,960,754
8. Unexpected Investment Return (UIR) (3.c. - 7.)	$ 874,467	$ (12,878,603)
9. AVA @ EOY		
a. AVA @ BOY (prior to corridor limit)	80,653,520	$ 76,587,843
b. Net Cash Flow (6.)	(2,241,786)	(1,531,057)
c. Expected Investment Return (7.)	5,344,525	5,960,754
d. Phase in of UIR		
20% * UIR for prior year	$ 174,893	$ (2,575,721)
20% * UIR for second prior year	(2,575,721)	2,683,264
20% * UIR for third prior year	2,683,264	(471,563)
20% * UIR for fourth prior year	(471,563)	N/A
20% * UIR for fifth prior year	N/A	N/A
Total	$ (189,127)	$ (364,020)
e. Lower Corridor Bound (80% of 1.b.)	$ 65,147,606	$ 61,965,842
f. Upper Corridor Bound (120% of 1.b.)	$ 97,721,410	$ 92,948,762
g. AVA (a. through d., bounded by e. and f.)	**$ 83,567,132**	**$ 80,653,520**

Graph II-4
Historical Market and Actuarial Value of Assets



Graph II-5
Future Recognition of Unexpected Investment Return

($ Thousands)

	June 30 Valuation				
	2024	2025	2026	2027	Total[1]
2020 Deferred Investment Gain/(Loss) Recognition	$ (471,563)				$ (471,563)
2021 Deferred Investment Gain/(Loss) Recognition	$ 2,683,264	$ 2,683,264			$ 5,366,527
2022 Deferred Investment Gain/(Loss) Recognition	$ (2,575,721)	$ (2,575,721)	$ (2,575,721)		$ (7,727,162)
2023 Deferred Investment Gain/(Loss) Recognition	$ 174,893	$ 174,893	$ 174,893	$ 174,893	$ 699,574
Total Deferred Investment Gain/(Loss) Recognition[1]	$ (189,127)	$ 282,436	$ (2,400,826)	$ 174,893	$ (2,132,624)

[1] Total may not add due to rounding.

	June 30, 2023
Actuarial Value of Assets	$ 83,567,132
Deferred Investment Gain/(Loss) Future Recognition	$ (2,132,624)
Market Value of Assets	$ 81,434,508

SECTION III – CONTRIBUTION DEVELOPMENT AND HISTORY

Table III-1
Actuarial Required Contributions

Table III-1 shows the components of the Fiscal Year 2025 and the Fiscal Year 2024 Actuarial Required Contributions.

COMPONENTS OF CURRENT AND PRIOR FISCAL YEAR ACTUARIAL REQUIRED CONTRIBUTIONS		
Valuation Date	**June 30, 2023**	**June 30, 2022**
Fiscal Year	**2025**	**2024**
Normal Cost	$ 1,641,133,672	$ 1,583,506,220
Unfunded Accrued Liability Amortization[1]	2,193,181,328	1,870,157,720
Administrative Expenses	118,603,933	117,917,222
Gulino Charges	165,232	N/A
Total Contribution to the New York City Employees' Retirement System	**$ 3,953,084,165**	**$ 3,571,581,162**

[1] See Tables III-2 for additional details.

Table III-2
Schedule of Unfunded Accrued Liability Bases

The Initial Unfunded Accrued Liability (UAL) established with the 6/30/2010 valuation is being amortized as a level percent of pay (with payments increasing by 3% per year) over a 22-year period.

Increments to the UAL established after June 30, 2010 are amortized as level dollar over the following periods:

- Benefit Changes: Over the remaining working lifetimes of those impacted unless the amortization period is determined by statute.

- Assumption and Method Changes: Over a 20-year period.

- Actuarial Gains and Losses: Over a 15-year period.

Under the One-Year Lag methodology (OYLM), the number of payments is one fewer than the number of years in the amortization period (e.g., 14 payments over a 15-year amortization period).

Table III-2
Schedule of Unfunded Accrued Liability Bases (cont'd)

Table III-2 shows the Schedule of UAL Bases as of June 30, 2023.

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF UNFUNDED ACCRUED LIABILITY BASES				
Amortization Base	**Date Established**	**Original $ Amount**	**Amortization Years**	**Amortization $ Payment**
Initial UAL	6/30/10	$ 20,194,114,494	22	$ 2,228,096,987
(Gain)/Loss	6/30/11	(250,820,523)	15	(29,666,881)
(Gain)/Loss	6/30/12	(62,429,250)	15	(7,384,090)
(Gain)/Loss	6/30/13	83,180,893	15	9,838,578
(Gain)/Loss	6/30/14	(1,302,739,151)	15	(154,087,109)
Assumption Change[1]	6/30/14	2,328,933,026	20	233,084,500
(Gain)/Loss	6/30/15	(426,054,441)	15	(50,393,432)
(Gain)/Loss	6/30/16	(256,448,676)	15	(30,332,576)
Assumption Change[2]	6/30/16	19,238,347	20	1,925,414
SADB	6/30/16	20,783,169	15	2,458,219
SADB Sanitation Actives	6/30/16	4,530,309	11	667,208
(Gain)/Loss	6/30/17	(26,089,812)	15	(3,085,885)
COVSF Escalation Offset	6/30/17	1,497,838	19	154,027
Assumption Change[3]	6/30/17	(988,954,970)	20	(98,976,686)
Method Change[3]	6/30/17	816,476,035	20	81,714,634
OTB - City of New York Portion	6/30/17	53,833,920	15	6,367,440
OTB - State of New York Portion	6/30/17	53,833,920	15	6,367,440
(Gain)/Loss	6/30/18	(346,437,644)	15	(40,976,408)
(Gain)/Loss	6/30/19	120,225,130	15	14,220,148
Assumption Change[4]	6/30/19	(312,415,373)	20	(31,267,188)
Method Change[4]	6/30/19	(874,574,640)	20	(87,529,261)
Proval JS Coding Revisions	6/30/19	167,291,519	15	19,787,128
OTB - State of New York Portion	6/30/19	24,657,612	15	2,916,486
(Gain)/Loss	6/30/20	131,641,734	15	15,570,494
OWBPA	6/30/20	94,476,876	8	18,133,677
(Gain)/Loss	6/30/21	(2,019,602,367)	15	(238,877,201)
Chapter 56	6/30/21	68,352,955	16	7,763,012
(Gain)/Loss	6/30/22	864,535,501	15	102,256,674
TBTA Plan Changes[5]	6/30/22	6,338,139	7	1,375,468
Physically Taxing Carpenters[6]	6/30/22	2,138,641	7	464,117
(Gain)/Loss	6/30/23	1,555,363,328	15	183,967,320
Extend Overtime Removal Calculation[7]	6/30/23	4,879,378	16	554,163
Change FAS5 to FAS3 - Active[8]	6/30/23	196,959,902	16	22,369,217
Change FAS5 to FAS3 - DV[8]	6/30/23	5,155,049	2	5,705,694
TOTAL				$ 2,193,181,328

1 Change in post-retirement mortality assumptions including the change to the mortality improvement scale MP-2015.
2 Change in Accidental rates for Tier 3 22-year plan members of Sanitation and Correction using a more empirical methodology.
3 2019 A&M.
4 Revised 2021 A&M.
5 Chapter 693 of the Laws of 2023.
6 Chapter 708 of the Laws of 2023.
7 Chapter 55 of the Laws of 2024.
8 Chapter 56 of the Laws of 2024.

Graph III-3
Remaining UAL Amortizations as of June 30, 2023

Fiscal Year Ending	Amortization Payment Total ($ Millions)
2025	$ 2,193
2026	2,254
2027	2,353
2028	2,430
2029	2,476
2030	2,703
2031	2,831
2032	2,939
2033	189
2034	230
2035	(40)
2036	(56)
2037	181
2038	88
2039	(96)
2040	0
2041	0
2042	0
2043	0
2044	0

Schedule of Amortization Payments (Credits)

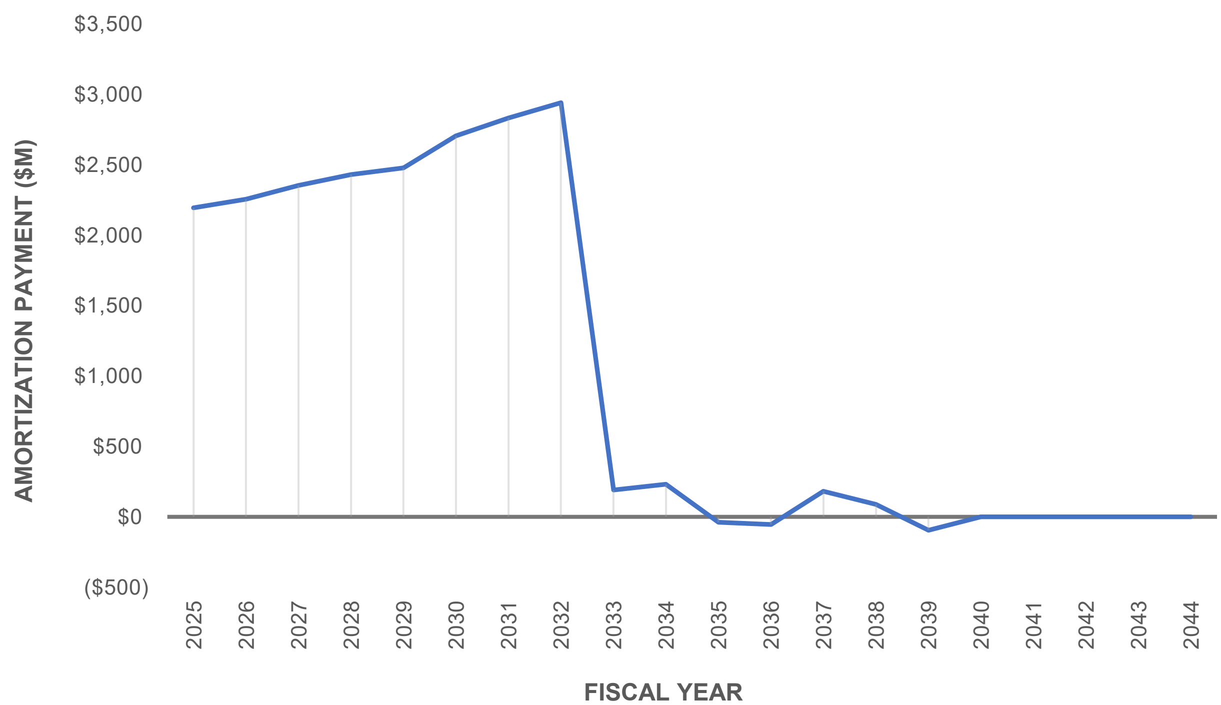


Table III-4
Reconciliation of Outstanding UAL Bases

Cost Component	Date Established	Original Amount	Amort Years	Outstanding Balance 6/30/2023	FY 2024 Payment on 12/31/2023	Outstanding Balance 6/30/2024	FY 2025 Payment on 12/31/2024	Additional Payments
Initial UAL	06/30/10	$ 20,194,114,494	22	$ 16,239,049,255	$ 2,163,200,961	$ 15,138,150,232	$ 2,228,096,987	7
(Gain)/Loss	06/30/11	(250,820,523)	15	(80,534,129)	(29,666,881)	(55,483,857)	(29,666,881)	1
(Gain)/Loss	06/30/12	(62,429,250)	15	(25,872,055)	(7,384,090)	(20,044,938)	(7,384,090)	2
(Gain)/Loss	06/30/13	83,180,893	15	41,728,187	9,838,578	34,472,055	9,838,578	3
(Gain)/Loss	06/30/14	(1,302,739,151)	15	(759,733,723)	(154,087,109)	(653,526,138)	(154,087,109)	4
Assumption Change	06/30/14	2,328,933,026	20	1,807,963,933	233,084,500	1,693,416,924	233,084,500	9
(Gain)/Loss	06/30/15	(426,054,441)	15	(280,929,498)	(50,393,432)	(248,467,194)	(50,393,432)	5
(Gain)/Loss	06/30/16	(256,448,676)	15	(187,357,017)	(30,332,576)	(169,095,747)	(30,332,576)	6
Assumption Change	06/30/16	19,238,347	20	16,645,631	1,925,414	15,819,161	1,925,414	11
SADB	06/30/16	20,783,169	15	15,183,818	2,458,219	13,703,884	2,458,219	6
SADB Sanitation Actives	06/30/16	4,530,309	11	2,337,735	667,208	1,811,211	667,208	2
(Gain)/Loss	06/30/17	(26,089,812)	15	(20,797,047)	(3,085,885)	(19,060,773)	(3,085,885)	7
Removal of COVSF Escalation Offset	06/30/17	1,497,838	19	1,331,602	154,027	1,265,487	154,027	11
Assumption Change	06/30/17	(988,954,970)	20	(895,380,977)	(98,976,686)	(855,675,368)	(98,976,686)	12
Method Change	06/30/17	816,476,035	20	739,221,827	81,714,634	706,441,081	81,714,634	12
OTB - City of New York Portion	06/30/17	53,833,920	15	42,912,779	6,367,440	39,330,142	6,367,440	7
OTB - State of New York Portion	06/30/17	53,833,920	15	42,912,779	6,367,440	39,330,142	6,367,440	7
(Gain)/Loss	06/30/18	(346,437,644)	15	(297,703,845)	(40,976,408)	(276,156,788)	(40,976,408)	8
(Gain)/Loss	06/30/19	120,225,130	15	110,301,250	14,220,148	103,312,902	14,220,148	9
Assumption Change	06/30/19	(312,415,373)	20	(305,533,228)	(31,267,188)	(294,577,533)	(31,267,188)	14
Method Change	06/30/19	(874,574,640)	20	(855,308,777)	(87,529,261)	(824,639,418)	(87,529,261)	14
Proval JS Coding Revisions	06/30/19	167,291,519	15	153,482,598	19,787,128	143,758,418	19,787,128	9
OTB - State of New York Portion	06/30/19	24,657,612	15	22,622,272	2,916,486	21,188,994	2,916,486	9
(Gain)/Loss	06/30/20	131,641,734	15	127,926,875	15,570,494	120,775,514	15,570,494	10
OWBPA	06/30/20	94,476,876	8	76,909,954	18,133,677	63,536,028	18,133,677	3
(Gain)/Loss	06/30/21	(2,019,602,367)	15	(2,065,146,256)	(238,877,201)	(1,962,610,004)	(238,877,201)	11
Chapter 56	06/30/21	68,352,955	16	70,227,179	7,763,012	67,112,960	7,763,012	12
(Gain)/Loss	06/30/22	864,535,501	15	925,052,985	102,256,674	884,031,575	102,256,674	12
Death Audit	06/30/22	(41,137,066)	2	(44,016,661)	(45,531,188)	0	0	0
TBTA Plan Change	06/30/22	6,338,139	7	6,781,809	1,375,468	5,833,740	1,375,468	4
Physcially Taxing Carpenters	06/30/22	2,138,641	7	2,288,346	464,117	1,968,443	464,117	4
Admin Expenses	06/30/22	106,537,272	2	113,994,881	117,917,222	0	0	0
Normal Cost	07/01/22	1,430,685,271	2	1,530,833,240	1,583,506,220	0	0	0
(Gain)/Loss	06/30/23	1,555,363,328	15	1,555,363,328	0	1,664,238,762	183,967,320	13
Extend Overtime Removal Calculation	06/30/23	4,879,378	16	4,879,378	0	5,220,934	554,163	14
Change FAS5 to FAS3 - Active	06/30/23	196,959,902	16	196,959,902	0	210,747,095	22,369,217	14
Change FAS5 to FAS3 - DV	06/30/23	5,155,049	2	5,155,049	0	5,515,904	5,705,694	0
Gulino Charges	07/01/23	149,286	2	0	0	159,736	165,232	0
Admin Expenses	06/30/23	107,157,710	2	107,157,710	0	114,658,750	118,603,933	0
Normal Cost	07/01/23	1,482,751,219	2	0	0	1,586,543,804	1,641,133,672	0
TOTAL				$ 18,140,911,088	$ 3,571,581,162	$ 17,303,006,120	$ 3,953,084,165	

Payment for amortization bases, normal costs and adminstrative expenses are deferred 1.5 years to the middle of the fiscal year under the One-Year Lag Methodology. The number of amortization payments is one less than the number of years amortized. Required contributions are the sum of all cost components after interest adjustments due to the lag.

Table III-4
Reconciliation of Outstanding UAL Bases (cont'd)

Total of Cost Components Summarized by Type	Outstanding Balance 6/30/2023	FY 2024 Payment on 12/31/2023	Outstanding Balance 6/30/2024	FY 2025 Payment on 12/31/2024
Initial UAL	$ 16,239,049,255	$ 2,163,200,961	$ 15,138,150,232	$ 2,228,096,987
Assumption Changes	623,695,359	104,766,040	558,983,184	104,766,040
(Gain)/Loss	(957,700,945)	(412,917,688)	(597,614,631)	(228,950,368)
Method Changes	101,826,816	(15,907,321)	125,409,359	29,623,867
Plan Changes	382,054,772	31,015,728	376,715,686	59,644,802
Admin Expenses	221,152,591	117,917,222	114,658,750	118,603,933
Normal Cost	1,530,833,240	1,583,506,220	1,586,543,804	1,641,133,672
Gulino Charges	0	0	159,736	165,232
TOTAL	$ 18,140,911,088	$ 3,571,581,162	$ 17,303,006,120	$ 3,953,084,165

	FY 2025
Normal Cost	$ 1,641,133,672
UAL Payment	2,193,181,328
Admin Expenses	118,603,933
Gulino Charges	165,232
Total	$ 3,953,084,165

	6/30/2023
(A) Actuarial Accrued Liability	$ 101,708,043,088
(B) Actuarial Value of Assets	83,567,132,000
(C) Unfunded Accrued Liabilities (A) - (B)	$ 18,140,911,088

Table III-5
Contribution History

Table III-5 compares actual contributions to the Actuarial Required Contributions for Fiscal Years 2016 through 2025.

($ Thousands)			
Fiscal Year Ended June 30	**Actuarial Required Contribution**	**Amount Contributed**	**Percentage of Required Contributed**
2016	$ 3,365,454	$ 3,365,454	100.0%
2017	3,328,193	3,328,193	100.0%
2018	3,377,024	3,377,024	100.0%
2019	3,694,365	3,681,747	99.7%
2020	3,726,701	3,713,825	99.7%
2021	3,762,898	3,762,898	100.0%
2022	3,831,464	3,831,464	100.0%
2023	3,456,775	3,456,775	100.0%
2024	3,571,581	3,571,581	100.0%
2025	3,953,084	3,953,084	100.0%

Table III-6
City Rates: Contributions as a Percentage of Salary

Table III-6 shows the City Rates defined to be the contributions as a percentage of salary for the Fiscal Years 2016 through 2025.

CITY RATES ($ Thousands)			
Fiscal Year Ended June 30	**Actuarial Required Contribution**	**Salary[1] at Beginning of Fiscal Year**	**City Rate**
2016	$ 3,365,454	$ 12,336,979	27.3%
2017	3,328,193	12,555,242	26.5%
2018	3,377,024	12,834,130	26.3%
2019	3,694,365	13,845,279	26.7%
2020	3,726,701	14,164,068	26.3%
2021	3,762,898	14,784,245	25.5%
2022	3,831,464	15,098,560	25.4%
2023	3,456,775	15,071,192	22.9%
2024	3,571,581	15,240,990	23.4%
2025	3,953,084	15,773,626	25.1%

[1] Includes assumed overtime paid, the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

Table III-7
Normal Cost Rates by Tier

Table III-7 shows the Normal Cost Rates as a percentage of salary by Tier.

NORMAL COST RATES AS OF JUNE 30, 2023					
	Tier 1	**Tier 2**	**Tier 3/4**	**Tier 6**[1]	**Total**
Total	7.5%	15.3%	13.9%	13.1%	13.5%
Employee	(3.1%)	(3.8%)	(3.3%)	(5.3%)	(4.2%)
Employer	4.4%	11.5%	10.6%	7.8%	9.3%

[1] Includes Tier 3 22-Year Plan.

SECTION IV – RESULTS BY CONTRIBUTING ENTITY

Table IV-1
Employer Contributions by Obligor

Transit Authority	NYC Transit Authority: CP Engineers	NYC Transit Authority: Transit Police	NYC Transit Authority: Others	**NYC Transit Authority Subtotal**
1. Normal Cost	$ 5,844,953	$ 0	$ 394,681,088	**$ 400,526,041**
2. Amortization of Unfunded Accrued Liability	25,993,555	24,861,477	408,721,508	**459,576,540**
3. Administrative Expenses	471,304	0	25,664,958	**26,136,262**
4. Gulino Charges	0	0	0	**0**
5. Actuarial Contribution (1. + 2. + 3. + 4.)	$ 32,309,812	$ 24,861,477	$ 829,067,554	**$ 886,238,843**

Housing Authority	NYC Housing Authority: Housing Police	NYC Housing Authority: Others	**NYC Housing Authority Subtotal**
1. Normal Cost	$ 0	$ 58,324,201	**$ 58,324,201**
2. Amortization of Unfunded Accrued Liability	11,151,101	119,554,536	**130,705,637**
3. Administrative Expenses	0	5,282,779	**5,282,779**
4. Gulino Charges	0	0	**0**
5. Actuarial Contribution (1. + 2. + 3. + 4.)	$ 11,151,101	$ 183,161,516	**$ 194,312,617**

Obligor	NYC Transit Authority	NYC Housing Authority	NYC Health and Hospitals Corporation	Triborough Bridge and Tunnel Authority	NYC Off-Track Betting Corporation	NYC Housing Development Corporation	NYC School Construction Authority
1. Normal Cost	**$ 400,526,041**	**$ 58,324,201**	**$ 237,195,255**	**$ 11,044,588**	**$ 0**	**$ 1,248,417**	**$ 983,439**
2. Amortization of Unfunded Accrued Liability	**459,576,540**	**130,705,637**	**282,962,278**	**26,237,604**	**20,874,552**	**1,570,611**	**3,089,031**
3. Administrative Expenses	**26,136,262**	**5,282,779**	**19,916,716**	**840,676**	**0**	**96,668**	**85,862**
4. Gulino Charges	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5. Actuarial Contribution (1. + 2. + 3. + 4.)	**$ 886,238,843**	**$ 194,312,617**	**$ 540,074,249**	**$ 38,122,868**	**$ 20,874,552**	**$ 2,915,696**	**$ 4,158,332**

Obligor	State Judiciary Employees	NYC Municipal Water Authority	CUNY Senior Colleges	Correction	Sanitation	All Others (i.e. New York City)	Total
1. Normal Cost	**$ 0**	**$ 102,001**	**$ 23,474,711**	**$ 193,280,736**	**$ 133,796,764**	**$ 581,157,519**	**$ 1,641,133,672**
2. Amortization of Unfunded Accrued Liability	**1,461,915**	**46,411**	**12,382,289**	**287,474,748**	**150,781,327**	**816,018,385**	**2,193,181,328**
3. Administrative Expenses	**0**	**9,092**	**1,914,110**	**5,803,232**	**6,205,304**	**52,313,232**	**118,603,933**
4. Gulino Charges	**0**	**0**	**0**	**0**	**0**	**165,232**	**165,232**
5. Actuarial Contribution (1. + 2. + 3. + 4.)	**$ 1,461,915**	**$ 157,504**	**$ 37,771,110**	**$ 486,558,716**	**$ 290,783,395**	**$ 1,449,654,368**	**$ 3,953,084,165**

Table IV-2
Accrued Liabilities by Obligor

Transit Authority	NYC Transit Authority: CP Engineers	NYC Transit Authority: Transit Police	NYC Transit Authority: Others	**NYC Transit Authority Subtotal**
Accrued Liability				
1. Active Members	$ 245,441,593	$ 0	$ 7,795,667,471	**$ 8,041,109,064**
2. Terminated Nonvested Members	508,256	0	23,012,307	**23,520,563**
3. Deferred Vested Members	16,680,903	0	422,676,001	**439,356,904**
4. Retirees and Beneficiaries	577,379,029	358,370,699	13,764,443,173	**14,700,192,901**
5. Unfunded VSF	0	35,431,618	0	**35,431,618**
6. Total Accrued Liability	$ 840,009,781	$ 393,802,317	$ 22,005,798,952	**$ 23,239,611,050**
Present Value of Benefits				
1. Active Members	$ 288,877,386	$ 0	$ 12,952,628,807	**$ 13,241,506,193**
2. Terminated Nonvested Members	508,256	0	23,012,307	**23,520,563**
3. Deferred Vested Members	16,680,903	0	422,676,001	**439,356,904**
4. Retirees and Beneficiaries	577,379,029	358,370,699	13,764,443,173	**14,700,192,901**
5. Unfunded VSF	0	35,431,618	0	**35,431,618**
6. Total Present Value of Benefits	$ 883,445,574	$ 393,802,317	$ 27,162,760,288	**$ 28,440,008,179**

Housing Authority	NYC Housing Authority: Housing Police	NYC Housing Authority: Others	**NYC Housing Authority Subtotal**
Accrued Liability			
1. Active Members	$ 0	$ 1,747,194,790	**$ 1,747,194,790**
2. Terminated Nonvested Members	0	9,271,766	**9,271,766**
3. Deferred Vested Members	0	239,784,522	**239,784,522**
4. Retirees and Beneficiaries	163,900,749	3,050,483,351	**3,214,384,100**
5. Unfunded VSF	23,882,874	0	**23,882,874**
6. Total Accrued Liability	$ 187,783,623	$ 5,046,734,429	**$ 5,234,518,052**
Present Value of Benefits			
1. Active Members	$ 0	$ 2,512,437,627	**$ 2,512,437,627**
2. Terminated Nonvested Members	0	9,271,766	**9,271,766**
3. Deferred Vested Members	0	239,784,522	**239,784,522**
4. Retirees and Beneficiaries	163,900,749	3,050,483,351	**3,214,384,100**
5. Unfunded VSF	23,882,874	0	**23,882,874**
6. Total Present Value of Benefits	$ 187,783,623	$ 5,811,977,266	**$ 5,999,760,889**

Table IV-2
Accrued Liabilities by Obligor (cont'd)

Obligor	NYC Transit Authority	NYC Housing Authority	NYC Health and Hospitals Corporation	Triborough Bridge and Tunnel Authority	NYC Off-Track Betting Corporation	NYC Housing Development Corporation	NYC School Construction Authority
Accrued Liability							
1. Active Members	$ 8,041,109,064	$ 1,747,194,790	$ 4,840,285,666	$ 344,887,393	$ 0	$ 26,185,782	$ 36,890,970
2. Terminated Nonvested Members	23,520,563	9,271,766	90,666,761	1,676,174	745,861	518,869	62,968
3. Deferred Vested Members	439,356,904	239,784,522	616,458,659	28,159,102	24,923,374	3,193,198	902,414
4. Retirees and Beneficiaries	14,700,192,901	3,214,384,100	8,295,943,445	766,722,547	346,149,601	26,434,166	41,864,214
5. Unfunded VSF	35,431,618	23,882,874	0	0	0	0	0
6. Total Accrued Liability	$ 23,239,611,050	$ 5,234,518,052	$ 13,843,354,531	$ 1,141,445,216	$ 371,818,836	$ 56,332,015	$ 79,720,566
Present Value of Benefits							
1. Active Members	$ 13,241,506,193	$ 2,512,437,627	$ 7,882,277,830	$ 446,211,679	$ 0	$ 40,036,560	$ 47,512,866
2. Terminated Nonvested Members	23,520,563	9,271,766	90,666,761	1,676,174	745,861	518,869	62,968
3. Deferred Vested Members	439,356,904	239,784,522	616,458,659	28,159,102	24,923,374	3,193,198	902,414
4. Retirees and Beneficiaries	14,700,192,901	3,214,384,100	8,295,943,445	766,722,547	346,149,601	26,434,166	41,864,214
5. Unfunded VSF	35,431,618	23,882,874	0	0	0	0	0
6. Total Present Value of Benefits	$ 28,440,008,179	$ 5,999,760,889	$ 16,885,346,695	$ 1,242,769,502	$ 371,818,836	$ 70,182,793	$ 90,342,462

Obligor	State Judiciary Employees	NYC Municipal Water Authority	CUNY Senior Colleges	Correction	Sanitation	All Others (i.e. New York City)	Total
Accrued Liability							
1. Active Members	$ 0	$ 3,035,982	$ 584,417,759	$ 2,456,830,361	$ 2,244,701,970	$ 16,191,916,043	$ 36,517,455,780
2. Terminated Nonvested Members	70,392	10,095	9,613,566	13,446,802	2,161,744	142,267,525	294,033,086
3. Deferred Vested Members	0	839,562	49,731,597	316,135,514	40,549,687	1,832,439,035	3,592,473,568
4. Retirees and Beneficiaries	6,957,837	1,562,965	620,606,409	7,495,910,543	5,014,041,195	20,406,962,218	60,937,732,141
5. Unfunded VSF	0	0	0	307,034,021	0	0	366,348,513
6. Total Accrued Liability	$ 7,028,229	$ 5,448,604	$ 1,264,369,331	$ 10,589,357,241	$ 7,301,454,596	$ 38,573,584,821	$ 101,708,043,088
Present Value of Benefits							
1. Active Members	$ 0	$ 4,357,931	$ 856,648,417	$ 4,051,297,021	$ 3,860,952,455	$ 24,021,149,659	$ 56,964,388,238
2. Terminated Nonvested Members	70,392	10,095	9,613,566	13,446,802	2,161,744	142,267,525	294,033,086
3. Deferred Vested Members	0	839,562	49,731,597	316,135,514	40,549,687	1,832,439,035	3,592,473,568
4. Retirees and Beneficiaries	6,957,837	1,562,965	620,606,409	7,495,910,543	5,014,041,195	20,406,962,218	60,937,732,141
5. Unfunded VSF	0	0	0	422,098,147	0	0	481,412,639
6. Total Present Value of Benefits	$ 7,028,229	$ 6,770,553	$ 1,536,599,989	$ 12,298,888,027	$ 8,917,705,081	$ 46,402,818,437	$ 122,270,039,672

Table IV-3
Participant Data by Obligor

Transit Authority	NYC Transit Authority: CP Engineers	NYC Transit Authority: Transit Police	NYC Transit Authority: Others	**NYC Transit Authority Subtotal**
1. Active Members				
a. Number	484	0	38,132	**38,616**
b. Annual Salary[1]	$ 63,654,046	$ 0	$ 3,466,293,855	**$ 3,529,947,901**
c. Average Salary	$ 131,517	$ 0	$ 90,902	**$ 91,412**
2. Terminated Nonvested Members	31	0	4,499	**4,530**
3. Deferred Vested Members	85	0	3,671	**3,756**
4. Retirees and Beneficiaries				
a. Number	1,207	1,521	35,421	**38,149**
b. Total Annual Benefits	$ 57,651,209	$ 48,009,077	$ 1,371,210,307	**$ 1,476,870,593**
c. Average Annual Benefit	$ 47,764	$ 31,564	$ 38,712	**$ 38,713**

Housing Authority	NYC Housing Authority: Housing Police	NYC Housing Authority: Others	**NYC Housing Authority Subtotal**
1. Active Members			
a. Number	0	8,931	**8,931**
b. Annual Salary[1]	$ 0	$ 713,488,956	**$ 713,488,956**
c. Average Salary	$ 0	$ 79,889	**$ 79,889**
2. Terminated Nonvested Members	0	1,763	**1,763**
3. Deferred Vested Members	0	1,967	**1,967**
4. Retirees and Beneficiaries			
a. Number	646	10,413	**11,059**
b. Total Annual Benefits	$ 22,040,884	$ 290,301,751	**$ 312,342,635**
c. Average Annual Benefit	$ 34,119	$ 27,879	**$ 28,243**

[1] Salaries shown are base salary plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in census data.

Table IV-3
Participant Data by Obligor (cont'd)

Obligor	NYC Transit Authority	NYC Housing Authority	NYC Health and Hospitals Corporation	Triborough Bridge and Tunnel Authority	NYC Off-Track Betting Corporation	NYC Housing Development Corporation	NYC School Construction Authority
1. Active Members							
a. Number	38,616	8,931	30,914	942	0	98	82
b. Annual Salary[1]	$ 3,529,947,901	$ 713,488,956	$ 2,689,939,778	$ 113,541,234	$ 0	$ 13,055,858	$ 11,596,509
c. Average Salary	$ 91,412	$ 79,889	$ 87,014	$ 120,532	$ 0	$ 133,223	$ 141,421
2. Terminated Nonvested Members	4,530	1,763	9,596	148	90	12	3
3. Deferred Vested Members	3,756	1,967	5,758	148	244	14	9
4. Retirees and Beneficiaries							
a. Number	38,149	11,059	28,144	1,651	988	54	78
b. Total Annual Benefits	$ 1,476,870,593	$ 312,342,635	$ 809,803,148	$ 71,950,698	$ 26,244,087	$ 2,382,174	$ 3,992,987
c. Average Annual Benefit	$ 38,713	$ 28,243	$ 28,774	$ 43,580	$ 26,563	$ 44,114	$ 51,192

Obligor	State Judiciary Employees	NYC Municipal Water Authority	CUNY Senior Colleges	Correction	Sanitation	All Others (i.e., New York City)	Total
1. Active Members							
a. Number	0	9	3,788	6,097	7,968	82,909	180,354
b. Annual Salary[1]	$ 0	$ 1,227,912	$ 258,518,563	$ 783,781,005	$ 838,084,609	$ 7,065,393,958	$ 16,018,576,283
c. Average Salary	$ 0	$ 136,435	$ 68,247	$ 128,552	$ 105,181	$ 85,219	$ 88,817
2. Terminated Nonvested Members	2	1	1,701	2,265	391	18,682	39,184
3. Deferred Vested Members	0	3	650	1,402	313	15,008	29,272
4. Retirees and Beneficiaries							
a. Number	31	2	2,838	13,479	11,014	62,909	170,396
b. Total Annual Benefits	$ 1,234,549	$ 102,143	$ 61,502,663	$ 641,368,539	$ 490,383,719	$ 2,007,476,647	$ 5,905,654,582
c. Average Annual Benefit	$ 39,824	$ 51,072	$ 21,671	$ 47,583	$ 44,524	$ 31,911	$ 34,658

[1] Salaries shown are base salary plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in census data.

SECTION V – (GAIN)/LOSS ANALYSIS

Table V-1
Development of Experience (Gain)/Loss

EXPERIENCE (GAIN) / LOSS as of June 30, 2023
($ Thousands)

	QPP	VSF	Total
1. Expected Accrued Liability (AL)			
a. AL at June 30, 2022	$ 97,476,629	$ 1,509,310	$ 98,985,939
b. Total Normal Cost and Administrative Expenses at June 30, 2022	2,107,411	16,057	2,123,468
c. Interest on 1.a. and 1.b. to June 30, 2023	6,970,883	106,776	7,077,659
d. Fiscal Year 2023 Benefit Payments	(6,200,358)	(117,396)	(6,317,754)
e. Interest on 1.d. to June 30, 2023	(213,343)	(4,039)	(217,382)
f. Extend Overtime Removal Calculation	4,879	0	4,879
g. Change FAS5 to FAS3 - Active	196,960	0	196,960
h. Change FAS5 to FAS3 - DV	5,155	0	5,155
i. Expected AL at June 30, 2023	$ 100,348,217	$ 1,510,708	$ 101,858,924
2. Actual AL at June 30, 2023	$ 101,341,695	$ 1,505,675	$ 102,847,369
3. Expected Total Actuarial Value of Assets (AVA)			
a. Total AVA at June 30, 2022	$ 80,653,520	$ 1,214,402	$ 81,867,922
b. Interest on 3.a. to June 30, 2023	5,645,747	85,008	5,730,755
c. Total Contributions Paid in Fiscal Year 2023	4,069,801	0	4,069,801
d. Interest on 3.c. to June 30, 2023	140,034	0	140,034
e. Fiscal Year 2023 Benefit Payments	(6,200,358)	(117,396)	$ (6,317,754)
f. Interest on 3.e. to June 30, 2023	(213,343)	(4,039)	(217,382)
g. Expected Total AVA at June 30, 2023	$ 84,095,401	$ 1,177,975	$ 85,273,376
4. Actual Total AVA at June 30, 2023	$ 83,567,132	$ 1,139,326	$ 84,706,458
5. Liability (Gain) / Loss (2. - 1.i.)	**$ 993,478**	**$ (5,033)**	**$ 988,445**
6. Actuarial Asset (Gain) / Loss (3.g. - 4.)	**$ 528,269**	**$ 38,649**	**$ 566,918**
7. Total Actuarial (Gain) / Loss (5. + 6.)	**$ 1,521,747**	**$ 33,616**	**$ 1,555,363**

SECTION VI – SCHEDULE OF FUNDING PROGRESS

A schedule of funding progress is provided below. This schedule of funding progress was previously required by GASB25, which has been superseded by GASB67, and is provided for historical context. These liability and asset measures are used to develop the Actuarial Contribution and are not suitable for other purposes including, but not limited to, settlement of plan obligations. For more information, see SECTION II – MARKET AND ACTUARIAL VALUES OF ASSETS.

Table VI-1
Schedule of Funding Progress

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM ($ Thousands)						
June 30 Valuation Date	(1) Actuarial Value of Assets (AVA)	(2) Accrued Liability (AL)	(3) Unfunded AL (UAL) (2)-(1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll[1]	(6) UAL as a % of Covered Payroll (3) / (5)
2014	$ 50,505,971	$ 74,123,437	$ 23,617,466	68.1%	$ 12,672,387	186.4%
2015	53,573,694	76,678,220	23,104,526	69.9%	12,917,467	178.9%
2016	56,491,829	79,081,183	22,589,354	71.4%	13,216,539	170.9%
2017	59,573,653	82,462,951	22,889,298	72.2%	14,065,242	162.7%
2018	63,615,892	85,845,125	22,229,233	74.1%	14,459,118	153.7%
2019	68,524,124	89,230,196	20,706,072	76.8%	14,981,461	138.2%
2020	71,778,640	91,942,981	20,164,341	78.1%	15,289,347	131.9%
2021	76,587,843	93,956,133	17,368,290	81.5%	15,294,726	113.6%
2022	80,653,520	97,771,537	17,118,017	82.5%	15,467,774	110.7%
2023	83,567,132	101,708,043	18,140,911	82.2%	16,018,576	113.2%

[1] Salaries shown are base salary plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in the census data.

SECTION VII – VARIABLE SUPPLEMENTS FUNDS (VSF)

NYCERS administers the Correction Officers' Variable Supplements Fund (COVSF), Housing Police Officer's Variable Supplements Fund (HPOVSF), Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF), Transit Police Officer's Variable Supplements Fund (TPOVSF), and the Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF).

They operate pursuant to the provisions of Title 13, Chapter 1 of the Administrative Code of the City of New York (ACCNY), and provide supplemental benefits as follows:

- COVSF: Retired Members of the Uniformed Correction Force (UCF). To be eligible to receive benefits, members of the UCF must retire on or after July 1, 1999 with at least 20 or 25 years of service, depending on the underlying plan, and be receiving a service retirement benefit from NYCERS.

- HPOVSF: NYCERS retirees who retired for service, with 20 or more years of service as Housing Police Officers and who retired on or after July 1, 1987.

- HPSOVSF: NYCERS retirees who retired for service, with 20 or more years of service as Housing Police Superior Officers and who retired on or after July 1, 1987.

- TPOVSF: NYCERS retirees who retired for service, with 20 or more years of service as Transit Police Officers and who retired on or after July 1, 1987.

- TPSOVSF: NYCERS retirees who retired for service, with 20 or more years of service as Transit Police Superior Officers and who retired on or after July 1, 1987.

The HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF are closed to new entrants, and all members are retired.

Table VII-1
VSF Accrued Liabilities

($ Thousands)		
Valuation Date	**June 30, 2023**	**June 30, 2022**
COVSF		
Active	$ 255,139	$ 253,820
Retiree	1,191,221	1,190,953
Total	$ 1,446,360	$ 1,444,773
HPOVSF		
Active	$ 0	$ 0
Retiree	9,041	9,829
Total	9,041	9,829
HPSOVSF		
Active	$ 0	$ 0
Retiree	14,842	15,905
Total	$ 14,842	$ 15,905
TPOVSF		
Active	$ 0	$ 0
Retiree	19,340	21,219
Total	$ 19,340	$ 21,219
TPSOVSF		
Active	$ 0	$ 0
Retiree	16,091	17,583
Total	$ 16,091	$ 17,583
Total VSF AL	$ 1,505,674	$ 1,509,309

Table VII-2
VSF Member Data

VARIABLE SUPPLEMENTS FUNDS MEMBERS INCLUDED IN THE JUNE 30, 2023 AND THE JUNE 30, 2022 ACTUARIAL VALUATIONS		
	June 30, 2023	**June 30, 2022**
COVSF		
Actives		
Number	6,097	6,738
Average Age	43.0	42.2
Retirees		
Number	9,148	9,056
Average Age	62.0	61.2
HPOVSF		
Actives		
Number	0	0
Average Age	0	0
Retirees		
Number	111	119
Average Age	79.6	78.6
HPSOVSF		
Actives		
Number	0	0
Average Age	0	0
Retirees		
Number	179	186
Average Age	79.1	78.1
TPOVSF		
Actives		
Number	0	0
Average Age	0	0
Retirees		
Number	234	250
Average Age	79.2	78.3
TPSOVSF		
Actives		
Number	0	0
Average Age	0	0
Retirees		
Number	194	206
Average Age	79.1	78.4

Table VII-3
VSF Statement of Assets

($ Thousands)				
Valuation Date	June 30, 2023		June 30, 2022	
	MVA[1]	AVA	MVA[2]	AVA
COVSF	$ 1,048,376	$ 1,139,326	$ 1,126,400	$ 1,214,402
HPOVSF	0	0	0	0
HPSOVSF	0	0	0	0
TPOVSF	0	0	0	0
TPSOVSF	0	0	0	0
TOTAL	$ 1,048,376	$ 1,139,326	$ 1,126,400	$ 1,214,402

[1] Includes Accrued Benefits Payable of $54,770,000 for COVSF.
[2] Includes Accrued Benefits Payable of $53,589,000 for COVSF.

Table VII-4
Development of COVSF Actuarial Value of Assets

($ Thousands)		
Valuation Date	**June 30, 2023**	**June 30, 2022**
1. Market Value of Assets (MVA)		
a. Beginning of Year (BOY)[1]	$ 1,126,400	$ 1,227,658
b. End of Year (EOY)[2]	$ 1,048,376	$ 1,126,400
2. Contributions		
a. Employee	$ 0	$ 0
b. Employer	0	0
c. Total Contributions	$ 0	$ 0
3. Net Investment Income		
a. Investment Income	$ 39,477	$ 2,507
b. Investment Expenses	0	0
c. Total Net Investment Income	$ 39,477	$ 2,507
4. Benefit Payments and Other Cash Flow	$ (107,308)	$ (103,765)
5. Accrued Transferable Earnings from NYCERS to COVSF - EOY	$ (10,193)	$ 0
6. Net Cash Flow (2.c. + 4. + 5.)	$ (117,501)	$ (103,765)
7. Expected Investment Return (EIR)	$ 75,156	$ 82,366
8. Unexpected Investment Return (UIR) (3.c. - 7.)	$ (35,679)	$ (79,859)
9. AVA @ EOY		
a. AVA @ BOY	$ 1,214,402	1,261,396
b. Net Cash Flow (6.)	(117,501)	(103,765)
c. Expected Investment Return (7.)	75,156	82,366
d. Phase in of UIR		
20% * UIR for prior year	$ (7,136)	$ (15,972)
20% * UIR for second prior year	(15,972)	(4,870)
20% * UIR for third prior year	(4,870)	(4,753)
20% * UIR for fourth prior year	$ (4,753)	N/A
20% * UIR for fifth prior year	N/A	N/A
Total	$ (32,731)	$ (25,595)
e. AVA (9.a. + 9.b. + 9.c. + 9.d.)	**$ 1,139,326**	**$ 1,214,402**

[1] Includes Accrued Benefits Payable for 6/30/2022 of $53,589,000 and Accrued Benefits Payable for 6/30/2021 of $52,271,000.

[2] Includes Accrued Benefits Payable for 6/30/2023 of $54,770,000 and Accrued Benefits Payable for 6/30/2022 of $53,589,000.

Table VII-5
Transferable Earnings Calculation as of June 30, 2023

($ Thousands)		
Total NYCERS Pension Fund		
1. FY2023 Equity Earnings	$	5,794,397
2. FY2023 Hypothetical Earnings	$	1,979,167
3. FY2023 Excess Earnings (1. - 2.)	$	3,815,230
4. Deficit at June 30, 2022	$	5,586,903
5. Hypothetical Interest Rate (HIR)		4.076%
6. Deficit with interest (4. x (1+HIR))	$	5,814,625
7. Potential Transferable Earnings (3. - 6.), not less than zero	$	0
	COVSF	
Allocations to VSF		
8. Allocation Percentage		5.254%
9. Potential Transferable Earnings (7. x 8.)	$	0
10. APV of Accumulated Plan Benefits	$	1,442,130
11. MVA Prior to Transferable Earnings	$	1,048,376
12. Unfunded APV of Accumulated Plan Benefits = (10. - 11.), not less than zero	$	393,754
13. Transferable Earnings Payable (Lesser of 9. and 12., not less than zero)	$	0

Summary of VSF Plan Provisions

A. Eligibility

Service Retirement with at least 20 or 25 years of allowable service, depending on the underlying plan, on or after July 1, 1999 for COVSF and on or after July 1, 1987 for HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF. This benefit is not payable to disability retirees, vested retirees, or beneficiaries of members who die while eligible for service retirement.

B. Benefits

The benefit is currently $12,000 per year, prorated in the first year and in the year of death based on the number of full months of retirement. The month of retirement and the month of death are not included in these two prorations. COVSF payments prior to Calendar Year 2019 were only paid if the assets in the COVSF were sufficient to pay the full amount due to all eligible retirees.

C. Cost-of-Living Benefits

Any AutoCOLA payable to a retiree reduces VSF benefits by an amount equal to such AutoCOLA until the attainment of age 62.

D. Form of Payment

Life annuity payable annually on or about December 15 for the current calendar year.

Summary of VSF Actuarial Assumptions and Methods

Assumptions not detailed below are as described in SECTION XII – ACTUARIAL ASSUMPTIONS AND METHODS.

1. **COLA**: 1.5% per year for AutoCOLA, used to estimate future COLA on the first $18,000 of NYCERS benefits which, in general, reduces benefits payable by the Fund until age 62.

2. **Actuarial Asset Valuation Method**: Information on the Market Value of Assets (MVA) of the Variable Supplements Funds (VSF) is provided by the Office of the Comptroller. The same asset smoothing method is used to determine the Actuarial Value of Assets (AVA) of the COVSF, HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF (referred to collectively as the NYCERS VSFs) as is used to determine the AVA of the Plan, except there is no corridor of 80% to 120% of the MVA for the VSFs. For more information, see SECTION II – MARKET AND ACTUARIAL VALUES OF ASSETS.

3. **Liability Method**: The obligations of NYCERS to the NYCERS VSFs are recognized through a methodology where the PV of future VSF transfers from NYCERS to the NYCERS VSFs is included directly as an actuarial liability of NYCERS. This amount is computed as the excess, if any, of the PV of benefits of each individual NYCERS VSF over the AVA of the respective, individual NYCERS VSF. Under EAN, a portion of the PV of future VSF transfers is reflected in the PV of future normal costs and a portion is reflected in the UAL.

4. **Transferable Earnings Calculation**: The ACCNY provides that NYCERS transfer to COVSF a portion of the amount by which earnings on equity investments of NYCERS exceed what the earnings would have been had such funds been invested at the Hypothetical Interest Rate, less any negative Cumulative Earnings Differentials and other limitations, determined as follows:

   a. *Hypothetical Interest Rate*: 115% of the 12-month average of monthly 10-year U.S. Treasury Note yields

   b. *Hypothetical Fixed Income Securities Earnings*: Investment earnings had equities been invested in fixed income securities earning the Hypothetical Interest Rate

   c. *Earnings Differential*: Difference between actual equity investment earnings and Hypothetical Fixed Income Securities Earnings

d. *Cumulative Earnings Differential*: The current year's Earnings Differential, offset by any negative Earnings Differentials from prior years, accumulated with interest at the corresponding year's Hypothetical Interest Rate

Under Chapter 255 of the Laws of 2000, NYCERS is required to make transfers to HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF sufficient to meet their annual benefit payments.

SECTION VIII – RISK AND UNCERTAINTY

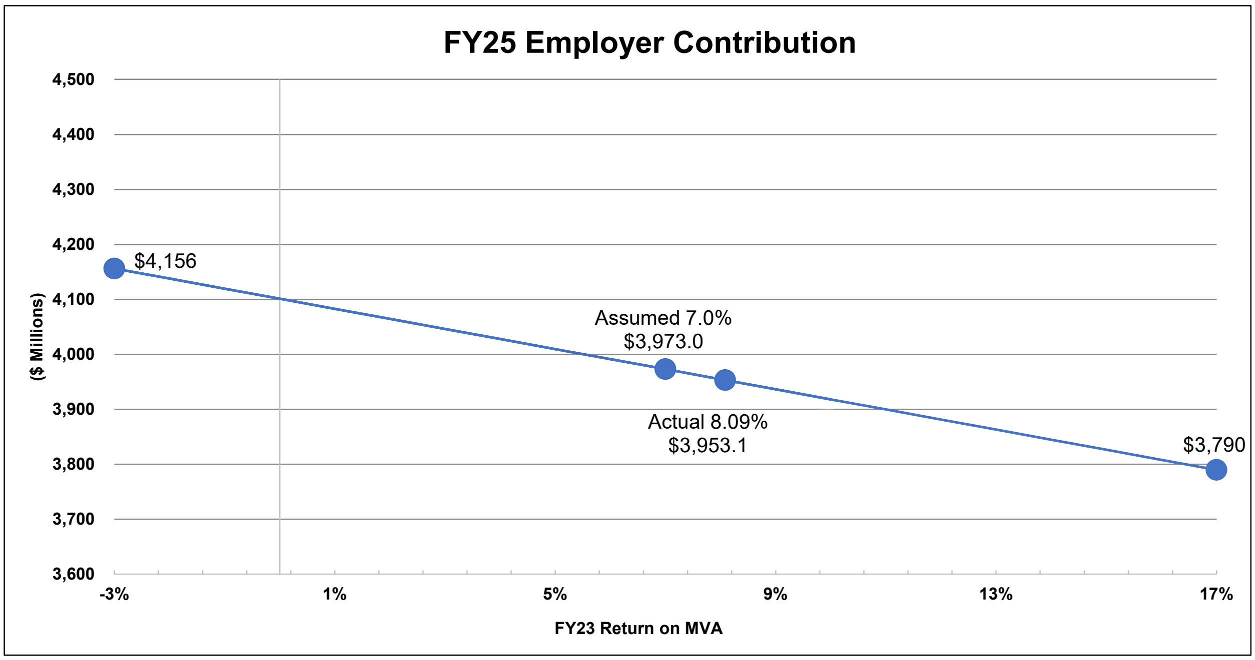
The funded status of NYCERS depends highly on the realization of the actuarial assumptions used, certain demographic characteristics of the Plan, and other factors. Risks faced by the Plan are described in this Section and have been separated into high, medium, and other risk categories.

High Risk Types

Investment Risk: The Risk of Not Realizing Expected Returns

The most substantial risk for most pension systems, NYCERS included, is the risk of investment returns being less than assumed. For NYCRS this assumed investment return is 7%.

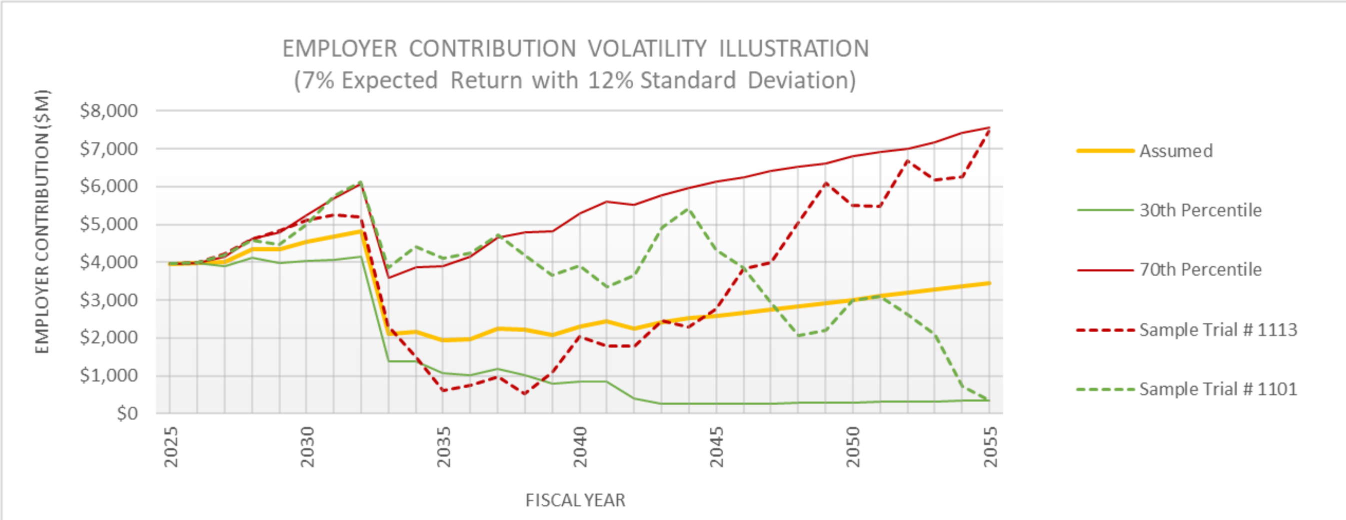
The graph below illustrates the potential FY25 employer contribution for a range of investment return outcomes if returns had differed from the assumed rate of return by up to 10% (i.e., from -3% to 17%). In addition, the actual investment return and employer contribution are shown.



Investment Risk: The Risk of Volatile Realized Returns

Even when long-term investment returns meet actuarial assumptions, investment volatility can contribute substantially to contribution and funded status volatility. The following charts illustrate the impact of investment return volatility on employer contributions and funded ratios based on 5,000 30-year investment return trials. Each stochastic investment return within each 30-year trial was generated from a normal distribution with an expected return of 7% and a standard deviation of 12%. Note that individual asset classes within the portfolio were NOT separately modeled and no attempt was made to rebalance the asset classes during the 30-year trials. The actual investment return for the next valuation year was known prior to the publication of this report and was also incorporated into this projection.

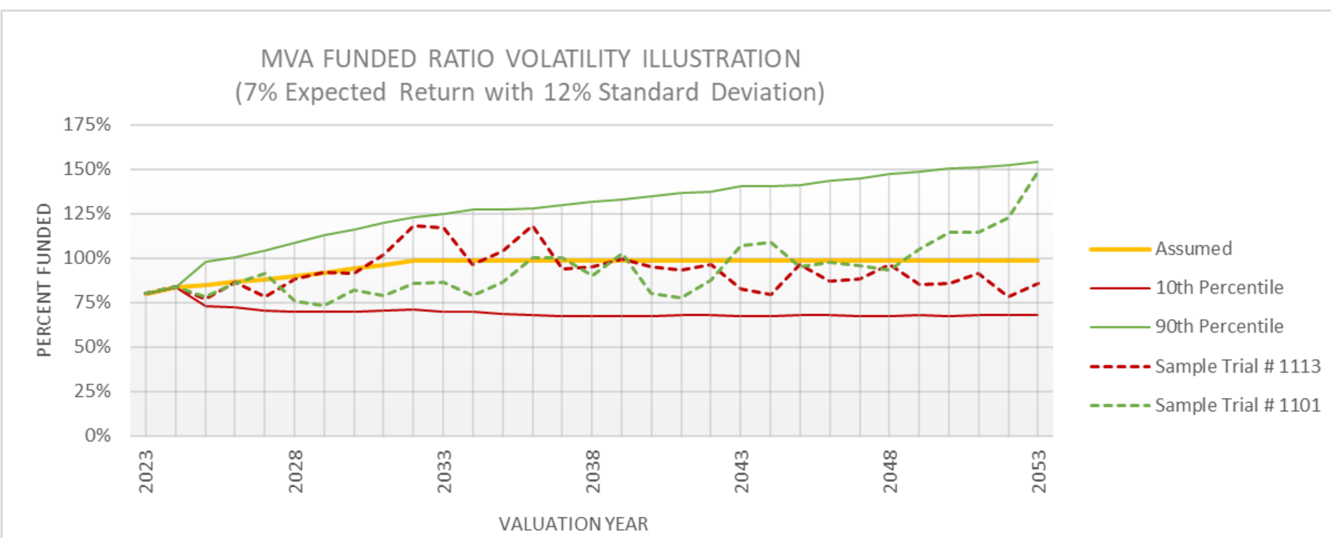
The yellow line in the charts shows the results if investment returns were exactly 7% as expected. The two solid lines show results for the indicated percentile range and together frame a range of results based on all 5,000 trials. The two dashed lines illustrate sample results from among the 5,000 trials.



Please note how in the two sample trials above (the dotted lines), the actual employer contribution fluctuates above and below the assumed contribution rate due to investment return volatility.

The impact on the funded status for these two trials can also be seen below, where for example, the green dotted line is close to 150% funding at the end of the 30-year period (below) with a corresponding employer contribution approaching $0 (above). The converse is shown in the red dotted line where at the end of the 30-year period, the employer contribution rate approaches $7.5B (above) with a corresponding funded ratio of approximately 86% (below).

On average, the 5,000 trials result in the yellow assumed line with a funded status approaching 100% achieved around the fiscal year ending in 2032.

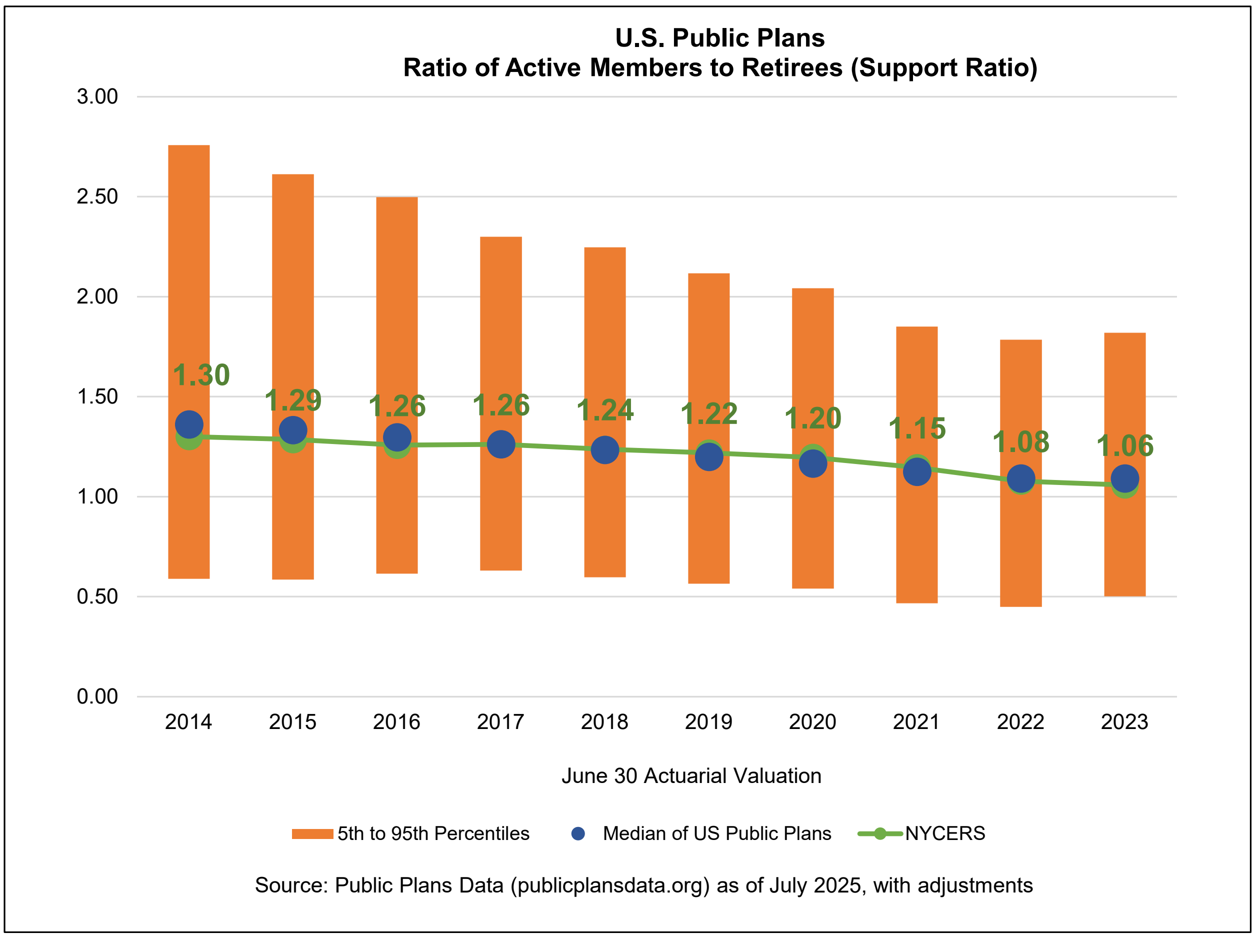


Maturity Risk: The Risk of Demographic Imbalance

As plans mature, contribution volatility can increase as retiree liabilities and total assets grow faster than active liabilities and payroll. In this subsection, the maturity of the Plan is examined with several metrics.

Ratio of Active Members to Retirees (Support Ratio)

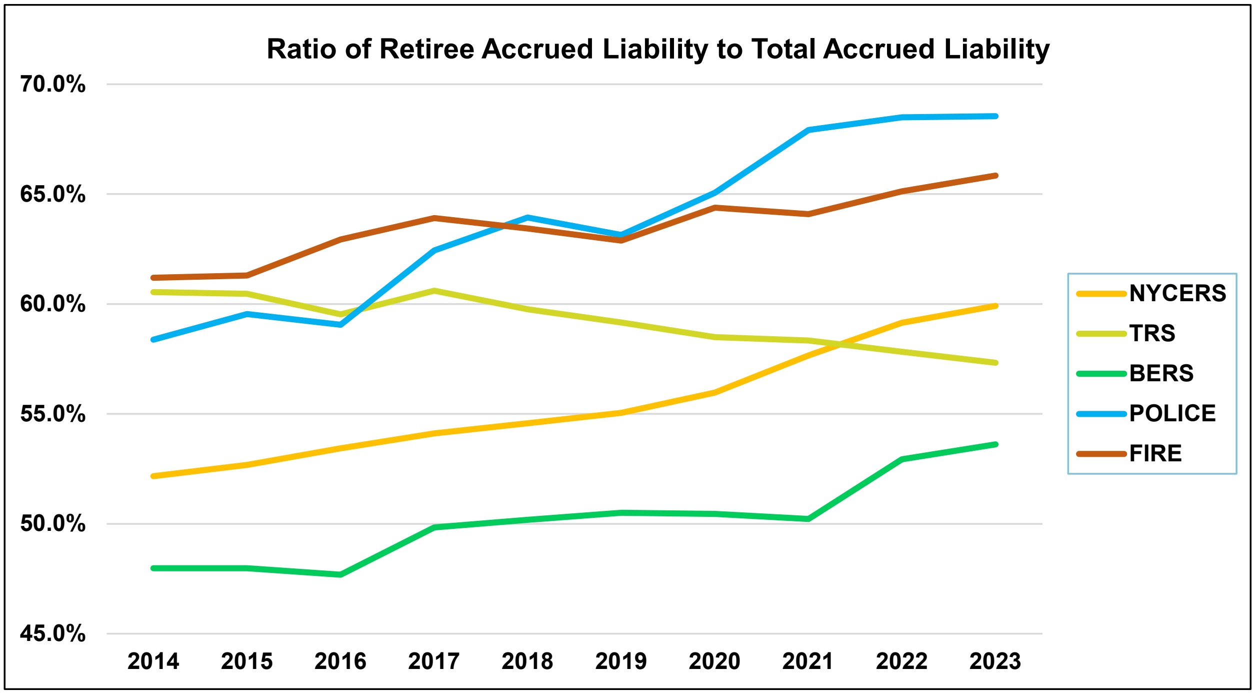
A plan's Support Ratio (i.e., the ratio of active members to retirees) is an indicator of the Plan's maturity level. Lower Support Ratios have higher contribution volatility. In a plan's early years, the ratio is very high as the plan contains mostly active members. As it matures, more active members transition to retirement, leading to a decrease in the Support Ratio over time that can result in a ratio near or below one. For NYCERS, as expected, this ratio has been declining over time as the Plan continues to mature.



The chart above shows U.S. public pension plan Support Ratios in comparison to the Plan's. The median Support Ratio amongst U.S. public pensions has declined from 1.36 in the 2014 valuation year to 1.09 in the 2023 valuation year. Likewise, over that same period, the Plan's Support Ratio declined from 1.30 to 1.06.

Ratio of Retiree Accrued Liability to Total Accrued Liability

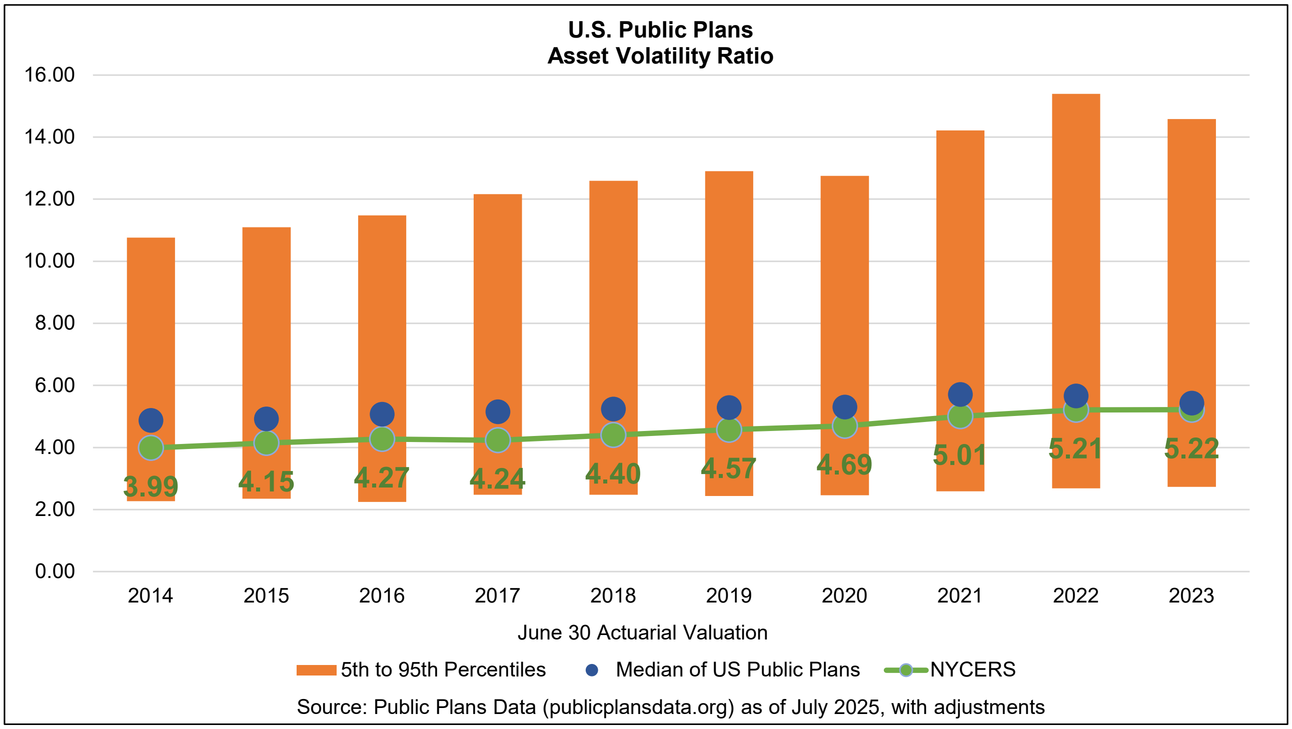
A plan's ratio of retiree liabilities to its total liabilities is also a measure of its maturity. A new pension plan begins with this ratio at zero; as the plan matures, the ratio increases. This ratio is shown in the graph below for NYCERS; the other New York City Retirement Systems[1] (NYCRS) are included for comparison. The ratio for NYCERS has been trending upward over time as expected as the Plan matures.



[1] Teachers' Retirement System (TRS); Board of Education Retirement System (BERS); Police Pension Fund (POLICE); Fire Pension Fund (FIRE)

Asset Volatility Ratio

Another way to look at plan maturity is the Asset Volatility Ratio (AVR), or ratio of assets to payroll. This ratio tends to rise as plans mature because assets generally need to accumulate to provide for benefit payments. The chart below compares the AVR (on an AVA basis) for NYCERS to the population of public pension systems.



As a plan matures, AVRs tend to increase, and the plan's actuarially-determined contribution becomes more sensitive to investment losses. For example, the same percentage of investment losses in more mature plans with a larger asset base can increase contributions as a percentage of payroll more than in less mature plans. Likewise, large investment gains in more mature plans decrease contributions as a percentage of payroll more than comparable gains would in less mature plans. This leads to additional volatility.

Based on these metrics, the Plan is maturing as expected and contribution volatility will likely increase over time. If contribution volatility is of concern, asset allocation adjustments can be considered as a means of reducing this volatility.

Medium Risk Types

Interest Rate Risk: The Risk of Reduction in the Long-Term Rate of Return

The Accrued Liability for the Plan depends heavily on the actuarial assumption used for future investment returns. While the returns themselves can produce substantial volatility, as detailed in the Investment Risk subsection above, the long-term rate of return assumption of 7.0% is highly dependent on the allocation of Plan assets.

If market conditions and/or the allocation of Plan assets no longer support a long-term rate of return assumption of 7.0%, the Actuarial Interest Rate (AIR) may have to be reduced, which can significantly increase the Accrued Liability, Unfunded Accrued Liability, Normal Cost, and resulting contribution of the Plan. The sensitivity of the Accrued Liability, the Unfunded Accrued Liability, and the Normal Cost of the Plan are shown below:

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

SENSITIVITY ANALYSIS AS OF JUNE 30, 2023

Valuation Date	**June 30, 2023**
Results at 7.0%	
1. Accrued Liability (AL)	$ 101,708,043,088
2. Actuarial Value of Assets (AVA)	83,567,132,000
3. Unfunded Accrued Liability (AVA Basis) (1. - 2.)	$ 18,140,911,088
4. Normal Cost	$ 1,641,133,672
Results at 6.0%	
1. Accrued Liability (AL)	$ 112,975,231,903
2. Actuarial Value of Assets (AVA)	83,567,132,000
3. Unfunded Accrued Liability (AVA Basis) (1. - 2.)	$ 29,408,099,903
4. Normal Cost	$ 2,180,276,089
Sensitivity Analysis for 1.0% Reduction in Interest Rate	
1. Increase in Accrued Liability	11%
2. Increase in Unfunded Accrued Liability	62%
3. Increase in Normal Cost	33%

Likewise, if the return assumption of 7.0% is too conservative, the Accrued Liability, Unfunded Accrued Liability, Normal Cost and resulting contributions to the Plan can be significantly overstated. The annual GASB reports published by the Office of the Actuary illustrate the interest rate sensitivity if the AIR is increased to 8.0%.

Another measure of the Plan's liabilities that illustrates Interest Rate Risk is the **Low-Default-Risk Obligation Measure (LDROM)** described in Actuarial Standard of Practice Number 4 (ASOP 4). In the Transmittal Memorandum for ASOP 4, the Actuarial Standards Board (ASB) indicates the following regarding LDROM:

"The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the "right" liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date."

The LDROM was calculated below using the same assumptions and methods used to determine the Plan's Accrued Liability except for the Actuarial Interest Rate (AIR). The AIR for LDROM purposes is derived from low-default-risk fixed income securities. The LDROM AIR used was 4.06%, the 20-Year U.S. Treasury Constant Maturity yield as of June 30, 2023. The Plan's LDROM and Accrued Liability are:

LDROM as of June 30, 2023 (4.06%)	$141,447,849,285
Plan's Accrued Liability as of June 30, 2023 (7.00%)	$101,708,043,088

The LDROM can be viewed in multiple ways to provide insight into Interest Rate Risk as it relates to the Plan's asset allocation and the value of benefit security provided members.

One view is that this measure illustrates the cost of changing the Plan's asset allocation to an all-bond portfolio with low default risk. The lower AIR of 4.06% is consistent with the expected yield for that asset allocation. Reducing the AIR from 7.00% to 4.06% would result in higher Plan liabilities, lower expected future investment earnings, and higher employer contribution rates.

Another view is that LDROM represents the approximate value in the financial marketplace of the accrued benefits promised to members using financial instruments with payment security consistent with the members' benefit security. In New York, benefit security is guaranteed in the State's Constitution. Retirement benefits for New York public employees cannot be reduced, regardless of interest rate or other risks described in this section. LDROM illustrates the additional market value cost of providing this low-default-risk protection.

In either case, the $39.7 billion difference between the LDROM and the Plan's Accrued Liability can be viewed as expected taxpayer savings from investing in the Plan's diversified portfolio compared to investing only in high quality bonds or purchasing that benefit security in the marketplace. Actual taxpayer savings are ultimately the difference between the bond portfolio returns and the Plan's current portfolio over the long term.

Longevity Risk: The Risk of Higher than Assumed Mortality Improvement

NYCERS faces risk in its assumption of future mortality rates. Actuarial experience studies were used to develop the base mortality rates assumed in the valuation; Society of Actuaries mortality improvement scale MP-2020 was subsequently applied to these base rates.[1]

This scale MP-2020 is an assumption regarding the *improvement* of future mortality rates as compared to mortality when the experience studies were completed. The scale was developed using large amounts of historical data from the Social Security Administration. Risk therefore exists such that the mortality improvement inherent in the Plan population is higher than the improvement seen in the population provided by the Social Security Administration. When mortality improvement is higher than assumed, plan participants will live longer than expected, and the plan will pay more pension benefits than had been previously funded.

Furthermore, while the scale uses recent experience to develop short-term mortality improvement rates, an actuarial assumption is applied to long-term mortality improvement rates based on expert opinion. This long-term rate assumption varies based on age and was developed by the Society of Actuaries' Retirement Plans Experience Committee to reflect historical mortality improvement. Risk to the Plan exists, however, if Plan mortality experience shows higher levels of long-term mortality improvement; expert opinion can in some cases be flawed, particularly when past experience is not indicative or predictive of future experience.

In a letter dated June 28, 2019, Buck analyzed historical Plan experience and noted "it appears that historical mortality improvement in NYC pensioners has kept pace with, and in some cases may have exceeded slightly, the mortality improvement trends in historical Social Security Administration graduated rates that are based on a broad US population" and that "continued use of MP-20xx mortality improvement scales seems reasonable." It may be prudent in future years, after longer trends can be observed, to quantify the effect of changing the ultimate mortality improvement rate to be higher than current levels.

Litigation Risk: The Risk of Legal Claims and Lawsuits

It is not uncommon for New York City to be a defendant in legal claims and lawsuits.[2] In its most recent claims report, the Comptroller reports that in FY2024, NYC settled 13,397 claims and lawsuits for $1.94 billion. On occasion, these settlements involve NYCRS. The 1996 case *Gulino v. Board of Education* awards damages to plaintiffs that in some cases include counterfactual service and salary in NYCRS. It remains a continuing risk that litigation may expand the scope of pension benefits beyond what is intended or codified in statute.

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[1] Retirement Plans Experience Committee. "Mortality Improvement Scale MP-2020 Report," Section 5. Society of Actuaries.

[2] https://comptroller.nyc.gov/newsroom/comptroller-landers-new-dashboard-tracks-city-claims-city-paid-nearly-2b-in-settlements-last-fiscal-year/

Credit/Solvency Risk: The Risk of Potential Insolvency of Contributing Entities

All public pension systems face credit risk in the event their sponsoring entities become unable to pay their debts and obligations. Credit rating agencies currently consider New York City bonds to be of high quality, and the Actuary believes the City faces low credit risk as a main contributing entity to NYCERS.

In addition, NYCERS is a multiple-employer plan with several contributing entities. NYCERS faces risk if contributing entities become insolvent while still carrying Unfunded Accrued Liability (e.g., Off-Track Betting Corporation (OTB)). Existing law and precedent transfer these amounts to other employers, creating imbalanced funding responsibility in the event of default.

Other Risk Types

Inflation Risk: The Risk of Higher than Assumed Inflation

NYCERS faces risk if inflation is higher than expected. Inflation is a key driver of the salary increase assumptions (affecting active members) and COLA assumptions (affecting both active members and pensioners/beneficiaries). A quantitative analysis is not available at this time. Notably, however, the pensioner COLA is limited to half of CPI on the first $18,000 of annual benefits, which limits the risk exposure to inflation.

Contribution Risk: The Risk that Future Contributions Are Less Than the Actuarially-Determined Contributions

Public pension systems can suffer from contribution risk when sponsoring governmental entities fail to make contributions as determined by the actuary under their funding policies.

The New York City Retirement Systems and Pension Funds face low contribution risk. City benefits are constitutionally protected, and with the exception of OTB, participating employers have generally contributed to the actuarial contribution as certified by the Actuary. The Actuary believes the City and the other participating employers will continue to do so in future years. See Table III-5 – CONTRIBUTION HISTORY.

Contribution risk may also increase in future years if the actuarial contribution determined for the Plan grows to be a larger part of the City budget. The five New York City Retirement Systems and Pension Funds currently require contributions of approximately 10% of the City's annual budget, and contribution risk may increase if this contribution rate becomes untenable.

Agency/Political Risk: The Risk of Stakeholder Influences

With assumed long-term asset returns and gradual amortization of unfunded liabilities, the funded status of the Plan is expected to improve over time. Many public pension systems suffer from agency risk, wherein different stakeholders or agents want to influence the cost calculations in directions favorable to their interests. Agents may also downplay other risks (e.g., investment risk) to advance specific agendas. These situations create cases where promises for future funding can be disregarded for political expediency or other priorities. In other cases, certain plan provisions or administrative practices intended to provide occasional clarity or relief become commonplace or intentionally sought for the benefit of members at the expense of taxpayers.

Intergenerational Equity Risk: The Risk of Inequity in the Actuarially-Determined Contributions

Intergenerational inequity could exist for certain stakeholders (e.g., public taxpayers). If, for example, liabilities are valued using overly conservative assumptions, aggressive funding patterns may occur, thus causing current taxpayers to shoulder a disproportionately high share of the funding burden, as compared to past and future taxpayers. The reverse can also be true if aggressive or unrealistic assumptions are used. As the Plan is ongoing, taxpayers across all generations should be expected to offer similar funding contributions over the lifetime of the Plan.

Additionally, in future years of higher or lower funded status, changes in the statute may take place that can improve or diminish plan provisions. If so, intergenerational equity risk could increase as taxpayers and plan members at that time may receive preferential or less preferential treatment over the taxpayers and plan members prior to and subsequent to them.

SECTION IX – SUMMARY OF PLAN PROVISIONS

A. Covered Employment

Membership in NYCERS is open to all employees of participating employers who are not eligible for membership in another retirement system. Membership in NYCERS may be voluntary or mandated. Participating Employers include the following:

Employer	Abbreviation
City of New York	NYC
City University of New York	CUNY
NYC Health and Hospitals Corporation	HHC
NYC Housing Authority	HA
NYC Housing Development Corporation	HDC
NYC Municipal Water Finance Authority	WFA
NYC School Construction Authority	SCA
NYC Transit Authority	TRN
NYC Triborough Bridge and Tunnel Authority	TBTA

NYCERS contains benefit plans that are grouped as follows:

Group	Eligible Employees	Abbreviation
General (GEN)	District Attorney Investigators	IDA
	Emergency Medical Technicians	EMT
	Fire Alarm Dispatchers	DIS
	Employed in a job title for special peace officers	SPO
	Employed in a job title for automotive service work	AUT
	Deputy Sheriffs	DSH
	Police Communication Technicians	PCT
	All others	OTH
Sanitation	Members of the uniformed force of the NYC Department of Sanitation (Uniformed Sanitation Force)	SAN
Transit	Employed in a Transit Operating Force position	TRN
TBTA	TBTA Officers, Sergeants, and Lieutenants employed in non-managerial positions	TBTA
Correction Officers	Members of the uniformed force of the NYC Department of Correction (Uniformed Correction Force)	COR

B. Tier Membership

Tier membership is based on the date that the member joined NYCERS. The tier status of earlier membership in NYCERS or another New York City or New York State public employee retirement system is reflected, but only if the service associated with that membership is purchased and included in Credited Service.

Tier by Group and Hire Date	IDA	COR	SAN	All Other Groups
Prior to July 1, 1973	Tier 1			
July 1, 1973 to July 26, 1976	Tier 2			
July 27, 1976 to March 31, 2012	Tier 2	Tier 3	Tier 4	
April 1, 2012 or after	Tier 3 22-year plan[1]			Tier 6

Unless otherwise noted, Tier 1 and Tier 2 provisions are hereafter omitted for brevity[2], as well as Tier 3 provisions for all groups other than Correction Officers.

For more information about benefits, see the applicable Summary Plan Descriptions at www.nycers.org. In the event of a conflict between this summary and applicable law, the applicable laws will govern.

C. Basic Member Contributions (BMC)

Basic Member Contributions earn 5% interest per year, compounded annually.

For COR Tier 3 members, all Tier 4 members, and Tier 3 22-year plan members, BMC details are shown in the table below:

Group/Plan(s)	Contribution Rate	Period
TRN 55/25 Tier 4 plans	2.0%	All service
Tier 3 and all other Tier 4 plans	3.0%	The first 10 years of service
Tier 3 22-year plans	3.0%	The first 25 years of service

For Tier 6 members, BMC are made for all years of Credited Service according to the following schedule:

Lookback Wages	BMC Contribution Rate
Less than $45,000	3.00%
$45,001 up to $55,000	3.50%
$55,001 up to $75,000	4.50%
$75,001 up to $100,000	5.75%
Greater than $100,000	6.00%

[1] Sometimes denoted Tier 3R for clarity.
[2] Approximately 0.1% of active members as of June 30, 2023 are members of Tier 1 and Tier 2.

The lookback wages used for determining the Tier 6 BMC contribution rate for a plan year are the actual wages earned two plan years prior to the plan year. A projected salary is used during the first three years of Credited Service. The BMC contribution rate was limited to 3% from April 1, 2012 through March 31, 2013.

D. Additional Member Contributions (AMC)

Additional Member Contributions including AMCs for work in physically taxing employment (AMC-PT) earn 5% interest per year, compounded annually. The AMC contribution rate as a percentage of Salary varies by plan in accordance with the following table:

Plan Description	AMC Rate	Years Required
Ch 96 55/25 plans	1.85%[1]	30
Ch 96 57/5 plans		
EMT 25-year plans	6.25%	30
DIS 25-year plans	6.00%	
PCT 25-year plans	6.00%	
DSH 25-year plans	6.75%	
SPO 25-year plans	6.25%	
AUT 25-year plans	4.83%	
SAN Tier 4	5.35%	20
SAN Tier 3 22-year enhanced disability plan	1.30%	25
COR Tier 3 20-year plan[2]	3.61% or 4.61%	20
COR Tier 3 22-year enhanced disability plan	0.90%	25
TBTA 20-year plans[2]	5.50% or 6.00%	20
All others	None	N/A

E. Credited Service

Credited Service is comprised of Membership Service, Part-time Service, Previous Service, Transferred Service, and Military Service.

- **Membership Service**: Service earned while a member of NYCERS.
- **Part-time Service**: Service that is prorated based on the number of hours or days worked in the year.
- **Previous Service:** Service earned prior to membership while employed by the City of New York, the State of New York, or any of its political subdivisions, or by another covered employer.

[1] Members in physically-taxing classifications contribute an additional 1.98%, on top of the 1.85%. Certain Tier 4 carpenter titles members who do not benefit from the PT plan are exempted from paying PT AMC.
[2] Contribution rate depends on member's job title.

- **Transferred Service:** Service earned as a member of another public retirement system in the City or State of New York.

- **Military Service**: Service for qualified time served in one of the armed forces of the United States.

Previous Service, Transferred Service, and Military Service must be purchased to count as Credited Service. Payments made for purchasing Military Service are considered employer contributions.

F. Salary

Salary is based on the annual wages earned in covered employment including overtime pay. Some limitations apply for the Salary used to determine Final Average Salary (FAS).

Tier 4: Wages greater than 110% of the average of the previous two years are excluded for purposes of determining FAS.

Tier 6 and Tier 3 22-year plans: Wages greater than 110% of the average of the previous four years are excluded for purposes of determining FAS. In addition, the following payments are also excluded from wages for purposes of determining FAS:

1. Wages greater than the annual salary paid to the Governor of the State of New York;

2. Lump sum payments for deferred compensation, sick leave, accumulated vacation or other credits for time not worked;

3. For Tier 6 members, overtime greater than the overtime ceiling of $15,000, effective April 1, 2012 and indexed annually by the Consumer Price Index (CPI-U);

4. Any form of termination pay;

5. Any additional compensation paid in anticipation of retirement; and

6. In the case of employees who receive wages from three or more employers in a twelve-month period, the wages paid by the third and each successive employer.

G. Final Average Salary

Service retirement, early retirement, disability retirement, and vested retirement benefits are based on FAS.

Tier 4: FAS is the highest average Salary earned in any three consecutive years of Credited Service or in the final 36 months of Credited Service if greater.

Tier 6 and Tier 3 22-year plans:

1. All plans other than those specified below: FAS is the highest average Salary earned in any three consecutive years of Credited Service or in the final 36 months of Credited Service if greater.

2. COR and SAN Tier 3 22-year enhanced disability benefits: FAS is the highest average Salary earned in any five consecutive years of Credit Service or in the final 60 months of Credited Service if greater (FAS5).

H. Service Retirement

1. Eligibility: The eligibility requirements for an unreduced service retirement are summarized in the table below:

Tier(s)	Plan Description	Minimum Age	Minimum Service
3	COR 20-year plan	N/A	20
3	COR 25-year plan	N/A	25
3	COR Basic 62/5 plan	62	5
4	Basic 62/5 plan	62	5
4	Chapter 96 55/25 plan[1]	55	25
4	Chapter 96 57/5 plan[1]	57	5
4	SAN Tier 4 regular	55	30
4	SAN 20-year plan	N/A	20
4 & 6	EMT, DIS, SPO, DSH, and PCT 25-year plans	N/A	25
4 & 6	AUT 25-year/age 50 plans	50	25
4 & 6	TRN 25-year/age 55 plans	55	25
4 & 6	TBT 20-year plans	N/A	20
3R	22-year plans	N/A	20
6	Basic 63/5 plan	63	5

2. Benefits:

<table>
<tr><th>Tier</th><th>Plan Description</th><th>Benefit Formula</th></tr>
<tr><td>4</td><td>Basic 62/5 plan</td><td rowspan="5"><u>If less than 20 years of Credited Service</u>:
1/60 times FAS times Credited Service
<u>If 20 or more years of Credited Service</u>:
Sum of 2.0% times FAS times Credited Service up to 30 years, plus 1.5% times FAS times Credited Service greater than 30 years</td></tr>
<tr><td>4</td><td>Chapter 96 55/25</td></tr>
<tr><td>4</td><td>Chapter 96 57/5</td></tr>
<tr><td>4</td><td>SAN Tier 4 regular</td></tr>
<tr><td>4 & 6</td><td>TRN 55/25 plan</td></tr>
</table>

[1] Members of Chapter 96 55/25 and 57/5 who work in a physically taxing employment are eligible for unreduced service retirement at age 50 with 25 years of service.

Tier	Plan Description	Benefit Formula
4	SAN 20-year plan	2.5% times FAS times Credited Service up to 20 years, plus 1.5% times Final Compensation[1] times additional Credited Service up to 10 more years
4 & 6	EMT, DIS, SPO, AUT, and PCT 25-year plans	2.0% times FAS times Credited Service up to 30 years
4 & 6	DSH 25-year plan	2.2% times FAS times Credited Service up to 25 years, plus 1.7% times FAS times additional Credited Service up to 5 more years
4 & 6	TBT 20-year plan	2.5% times FAS times Credited Service up to 20 years, plus 1.5% times FAS times additional Credited Service up to 10 more years
3	COR 20-year plan	2.5% times FAS times Credited Service up to 20 years, plus 1.67% times FAS times additional Credited Service up to 10 more years
3	COR 25-year plan	50% times FAS
3	COR 62/5 plan	If less than 20 years of Credited Service: 1/60 times FAS times Credited Service, minus 50% of your Primary Social Security Benefit If 20 or more years of Credited Service: Sum of 2.0% times FAS times Credited Service up to 30 years, minus 50% of your Primary Social Security Benefit
3R	22-year plans	2.1% times FAS times Credited Service up to 20 years, plus 4.0% times FAS times additional Credited Service up to 2 more years
6	Basic 63/5 plan	If less than 20 years of Credited Service: 1/60 times FAS times Credited Service If 20 or more years of Credited Service: 35% times FAS, plus 2.0% times FAS times Credited Service greater than 20 years

[1] Final Compensation here means FAS5 without the limitation that no year exceed 110% of the prior four-year average.

I. Early Retirement

1. Eligibility: Not all plans provide for early retirement. However, certain participants may be eligible to elect early retirement under the Tier 3, Tier 4, or Tier 6 Basic plan. The eligibility requirements for early retirement plans are summarized in the table below:

Tier	Plan Description	Minimum Age	Minimum Service
3	COR Tier 3 Basic 62/5 Plan	55	5
4	Basic 62/5 plan	55	5
6	Basic 63/5 plan	55	5

2. Benefits:

   The service benefit is reduced for early retirement based on the age at commencement.

   a. COR Tier 3 Basic 62/5 Plan:

      The service retirement benefit is reduced by 1/180 for each of the first 24 months that the age at commencement precedes age 62, and reduced 1/360 for each of the next 60 months that the age of commencement precedes age 60.

   b. Tier 4 Basic 62/5 Plan:

      The service retirement benefit is reduced by 0.50% for each of the first 24 months that the age at commencement precedes age 62, and reduced 0.25% for each of the next 60 months that the age of commencement precedes age 60:

Age	Early Retirement Factor
61	0.94
60	0.88
59	0.85
58	0.82
57	0.79
56	0.76
55	0.73

c. Tier 6 Basic 63/5 Plan:

The service retirement benefit is reduced by 13/2400 for each month (i.e., 6.5% per year) that the age of commencement precedes age 63.

J. Disability Retirement

1. Accidental Disability (ADR)

   a. Eligibility: No age or service requirement. Requires Medical Board determination that the active member is physically or mentally incapacitated due to an accident in the performance of duties and that the accident is not due to willful negligence of the member.

   b. Benefits:

      i. All plans other than those specified below: Greater of 1/60 times FAS times Credited Service or 1/3 times FAS. The member may elect a service retirement benefit, if eligible.

      ii. SAN, COR, and IDA Tier 3 22-year non-enhanced disability plan members: 50% x FAS

      iii. EMT, DSH, SAN Tier 3 22-year enhanced disability plan members, and COR Tier 3 22-year enhanced disability plan members: 75% x FAS

2. Ordinary Disability (ODR)

   a. Eligibility: 10 years of Credited Service. Requires Medical Board determination that the active member is physically or mentally incapacitated due to an accident while not in the performance of duties.

   b. Benefits: Greater of 1/60 times FAS times Credited Service or 1/3 times FAS. The member may elect a service retirement benefit, if eligible.

K. Death Benefits

1. Accidental Death Benefits (New York City-paid)

   a. Eligibility: No age or service requirement. Death due to the performance of duties while an active member.

   b. Benefits: A monthly pension is payable to the beneficiary equal to 50% of 1/12 of annual wages earned during the year prior to death. The benefit is based on 50% of 1/12 of the annual wage rate if the member had less than one year of Credited Service.

2. Special Accidental Death Benefits (New York State-paid)

   a. Eligibility: No age or service requirement. Death of a COR, DSH, EMT, SAN, or TBTA member due to the performance of duties while an active member. Payable to the surviving spouse or children until age 18 (or age 23, if a full-time student), if there is no surviving spouse. If there is no surviving spouse or no eligible children, it is payable to parents.

   b. Benefits: A monthly pension is payable to the beneficiary in an amount that when added to the New York City-paid Accidental Death Benefit (outlined in 1.) and any payable Social Security benefit is equal to the decedent's last year's wages including overtime and any other type of pensionable earnings.

3. Ordinary Death Benefit

   a. Eligibility:

      i. Active members: No age or service requirement. Death during active employment while not in the performance of duties.

      ii. Deferred vested members: Death after termination of employment and prior to benefit commencement.

      iii. Retired Members: Death after benefit commencement.

   b. Benefits:

      i. Active members: Refund of BMC and the employee portion of AMC, if any, with interest plus a salary-based death benefit. The salary-based death benefit is equal to one year's wages times completed years of Credited Service up to 3 years[1]. The salary-based portion of the death benefit is reduced 3% for each year the member remains in service beyond age 60 (to a maximum reduction of 30% at age 70).

      ii. Deferred vested members with 10 or more years of Credited Service: Refund of BMC and the employee portion of AMC, if any, with interest plus one half of the salary-based death benefit that would have been payable had the member died on the last day of active service as described above.

      iii. Deferred vested members with less than 10 years of Credited Service: Refund of BMC and the employee portion of AMC, if any, with interest.

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[1] SAN, COR, and Tier 3R IDA have a different benefit; other exclusions apply.

iv. Retirees: The pre-retirement, salary-based death benefit, if eligible[1], that would have been payable had the member died on the last day of active service times the Adjustment Factor described in the table below:

Year of Death	**Adjustment Factor**
1st year after retirement	50%
2nd year after retirement	25%
3rd year or later after retirement	10%, or if greater, the benefit is 10% of the pre-retirement, salary-based death benefit in effect at age 60.

c. Form of Payment: Lump sum.

L. Vested Retirement After Termination

1. Eligibility:

   a. Tier 4 plans: 5 years of Credited Service.

   b. Tier 6 plans: 5 years of Credited Service.

2. Benefits: The vested benefit is equal to the amount of the Service Retirement benefit (unless noted otherwise below), payable at the times specified below.

   a. Tier 4 EMT, DIS, SPO, DSH, AUT, PCT 25-year plans: When the member would have earned 25 years of Credited Service if he or she had continued working in covered employment.

   b. Tier 4 57/5 plans: Age 57.

   c. All other Tier 4 plans: Age 62.

   d. Tier 3 22-year plans: When the member would have earned 20 years of Credited Service if he or she had continued working in covered employment.

   e. Tier 6 plans: Age 63. In no case can the vested benefit be less than the annuity equivalent of the BMC.

M. Forms of Payment

1. Normal Form of Payment: Single Life Annuity.

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[1] SAN, COR, and Tier 3R IDA have a different benefit; other exclusions apply.

2. Optional Forms of Payment: Joint and Survivor Annuities, Certain and Life Annuities, and Pop-up Annuities.

N. Cost-of-Living Adjustments (COLA)

Annuity payments are increased annually on September 1st, but only after a pensioner has attained the applicable eligibility threshold. Some beneficiaries are not eligible for COLA increases. The COLA increase is equal to a base benefit times a COLA percentage. The COLA increase for a spouse receiving a joint & survivor annuity is one half of the COLA increase that would have been applicable to the member had he or she survived.

1. Eligibility Thresholds:

    a. Service Retirement and Vested Retirement: The earlier of (i) and (ii):

        i. Attainment of age 62 and 5 years since commencement

        ii. Attainment of age 55 and 10 years since commencement

    b. Disability Retirement: 5 years since commencement

    c. Beneficiaries of an Accidental Death benefit: 5 years since commencement

2. Eligible beneficiaries: Spouses receiving a joint & survivor annuity. All others are non-eligible.

3. Base Benefit: The lesser of $18,000 and the maximum retirement allowance plus the sum of prior years' COLA increases.

4. COLA percentage: 50% of the Consumer Price Index (CPI-U) based upon the 12 months ending March 31 prior to each September 1 effective date, rounded to the next higher 0.1%. Such percentage shall not be less than 1.0% nor greater than 3.0%.

O. Escalation

Applicable to Tier 3 22-year plan members who work past 22 years, with full escalation applicable after 25 years of service.

1. Eligibility: Service, vesting, disability retirement, and survivor benefits.

2. Full Escalation Date

a. Vested and Service Pensions: The first day of the month following the day which a member completes or would have completed 25 years of service.

b. Disability Pensions: The first day of the month following the day which a non-Enhanced Plan disability retiree first becomes eligible for ODR/ADR.

c. Death Benefits: The first day of the month following the day which a beneficiary first becomes eligible for a death benefit paid other than in a lump sum.

3. Amount

If a member first begins receiving benefits on the same date as the Full Escalation Date, the member will receive Full Escalation which is the lesser of 3.0% or the Cost-of-Living Index increase, as computed on the December 31 of each prior year for benefits being escalated the following April.

In the event of a decrease in the Cost-of-Living Index, the current benefit will be decreased by the lesser of 3% or the Cost-of-Living Index. However, the benefit will not be reduced below the benefit payable at the initial commencement date.

In addition, Cost-of-Living Index changes are computed on a cumulative basis so that any increases or decreases not affected in an adjustment are carried forward and applied in subsequent years.

4. Partial Escalation

Partial Escalation is calculated on benefits that commence prior to the member's Full Escalation Date. For each month that the benefit commencement date succeeds the date when a member completes or would have completed 22 years of service, a member will receive 1/36th of the Full Escalation, to a maximum of Full Escalation at 25 years of service.

P. Refund of BMC and AMC

Refunded with interest under some circumstances. AMC include Additional Member Contributions for work in physically taxing employment (AMC-PT). Only the employee portion of AMC is refunded.

1. Employee Portion of AMC: The employee portion of AMC is 50% for all plans that require AMC except for the EMT, DIS, SPO, DSH, AUT, and PCT plans, it is 100%.

2. Nonvested Termination: BMC and employee portion of AMC are refunded with interest.

3. Vested Termination:

   a. A member may elect a refund of BMC and the employee portion of AMC with interest in lieu of a pension benefit, but only if he or she has less than 10 years of Credited Service.

   b. A member of one of the EMT, DIS, SPO, DSH plans may elect a refund of AMC in lieu of remaining in their respective 25-year plan if he or she leaves service prior to earning 15 years of Credited Service as a member of their respective 25-year plan.

   c. A member of one of the AUT, PCT plans may elect a refund of AMC in lieu of remaining in their respective 25-year plan if he or she leaves service prior to earning 5 years of Credited Service as a member of their respective 25-year plan.

4. Ordinary Death: BMC and the employee portion of AMC are refunded with interest.

5. Accidental Death: The employee portion of AMC are refunded with interest.

6. Disability Retirement: The employee portion of AMC are refunded with interest.

7. Service Retirement: The employee portion of AMC are refunded with interest if the member retires on or after age 62. For retirement prior to age 62, the employee portion of AMC-PT are refunded if a member of the Chapter 96 55/25 plan retires on or after age 55 with 25 years of Credited Service or if a member of the Chapter 96 57/5 plan retires on or after age 57 with 25 years of Credited Service.

8. For members who participate in the Sanitation and Correction Tier 3 22-year enhanced disability plans, AMC are not refundable.

Q. Service and Early Retirement for Tier 4 Members with Tier 3 Rights

1. Eligibility: Age 55 and 5 years of Credited Service.

2. Benefits: These members may elect a Tier 3 benefit instead of a Tier 4 benefit. The benefit formula for Tier 3 is the same as the benefit formula for the Tier 4 Basic 62/5 plan except:

   a. Credited Service under the Tier 3 benefit formula is capped at 30 years,

   b. The Tier 3 benefit formula includes an offset starting at age 62 equal to 50% of the Primary Social Security benefit, and

c. The early retirement factors used to reduce benefits for early commencement are smaller and thus reduce benefits more for Tier 3 than the corresponding factors used under the Basic Tier 4 62/5 plan.

3. Cost-of-Living Adjustments: Tier 3 retirement benefits may be adjusted annually by Escalation. A Tier 3 retirement benefit cannot be less than the initial benefit payable at the commencement date.

   a. Full Escalation: Applicable for benefits commencing on or after age 65. Equal to the lesser of 3% and the Consumer Price Index (CPI-U) for increases in the CPI-U, and the greater of -3% and the Consumer Price Index (CPI-U) for decreases in the CPI-U.

   b. Partial Escalation: Applicable for benefits commencing after age 62 and prior to age 65. Equal to full escalation reduced by 1/36 times the number of months that the age at commencement precedes age 65.

R. Loans

A member generally may borrow up to 75% of the accumulated BMC with interest. A member’s unpaid loan balance will reduce his or her retirement benefit.

S. Others

None.

SECTION X – CHAPTER AMENDMENTS

The June 30, 2023 actuarial valuation results reflect the following Chapter amendments from the prior five years.

- **Chapter 56 of the Laws of 2024, Part QQ** reduces the number of years used to calculate the Final Average Salary from 5 years to 3 years for certain Tier 3 and Tier 6 NYCERS members.

- **Chapter 55 of the Laws of 2024, Part KK** extends Chapter 56 of the Laws of 2022 by excluding overtime and compensation earned for supplemental work from wages used to calculate Tier 6 Basic Member Contribution Rates for two additional years.

- **Chapter 716 of the Laws of 2023** (Chapter 716/23) amends certain Tier 2, 3, 4 and 6 death benefit provisions for NYCERS, TRS and BERS to ensure continued compliance with OWBPA.

- **Chapter 708 of the Laws of 2023** (Chapter 708/23) exempts certain Tier 4 carpenter titles members, who would not benefit from their NYCERS Physically Taxing (PT) plan due to their age upon commencement, from paying PT AMCs, and provides a refund of 50% (the employee portion) of prior PT AMC contributions paid with interest.

- **Chapter 693 of the Laws of 2023** (Chapter 693/23) removes the age requirement from the TBTA 50/20 plan for Tier 4 and Tier 6 NYCERS members.

- **Chapter 213 of the Laws of 2023** (Chapter 213/23) grants a 3% COLA increase to beneficiaries receiving Special Accidental Death Benefits pursuant to Section 208(f) of the General Municipal Law (GML). (Similar legislation was enacted in each of the previous years.)

- **Chapter 782 of the Laws of 2022** (Chapter 782/22) permits parents of a member to collect Special Accidental Death Benefit (SADB) if the member has no spouse or child under the age of 18 (or 23 if the child is a student).

- **Chapter 561 of the Laws of 2022** (Chapter 561/22) extends the deadline for filing a Notice of Participation in the World Trade Center Rescue, Recovery, or Cleanup Operations from September 11, 2022 to September 11, 2026.

- **Chapter 56 of the Laws of 2022** (Chapter 56/22) reduces the Tier 6 vesting requirement from 10 years to 5 years and allows for retirement with 5 years of service, and excludes certain forms of overtime and extracurricular compensation from the salary used to determine Tier 6 Basic Member Contribution rates during the specified period from 2022 to 2024.

- **Chapter 424 of the Laws of 2021** (Chapter 424/21) expands eligibility of certain public service employees for participation in the World Trade Center (WTC) Rescue, Recovery, or Clean-up Operations.

- **Chapter 89 of the Laws of 2020** (Chapter 89/20) provides death benefits to statutory beneficiaries of members whose death was a result of or was attributed to COVID-19.
  Chapter 78 of the Laws of 2021 (Chapter 78/21) amends Chapter 89/20 by extending the eligibility window of these death benefits through December 31, 2022.
  Chapter 783 of the Laws of 2022 (Chapter 783/22) extends the deadline for the COVID-19 Accidental Death Benefits from December 31, 2022 to December 31, 2024.

SECTION XI – SUBSEQUENT EVENTS

The following legislation was adopted after the June 30, 2023 valuation date and could have an impact on future years' valuations:

- **Chapter 162 of the Laws of 2024** (Chapter 162/24) **and Chapter 151 of the Laws of 2025** (Chapter 151/25) extend the 3% COLA increase to beneficiaries receiving Special Accidental Death Benefits. Note that the June 30, 2023 valuation assumes that future legislation on this 3% COLA increase will continue to pass in subsequent years. For more information on this COLA assumption, see Page 89.

SECTION XII – ACTUARIAL ASSUMPTIONS AND METHODS

The results in this valuation report are based upon standard actuarial models (including but not limited to Entry Age Normal and related parameters) that are widely used in actuarial practice. The models are intended to calculate the liabilities associated with these plan provisions using data and assumptions as of the measurement date, and using actuarial assumptions and methods further described below.

Most of this liability and cashflow modeling is currently implemented using ProVal, an actuarial valuation and projection software program developed by Winklevoss Technologies. These results are reviewed for accuracy, reasonability, and consistency with prior results, consistent with the requirements of Actuarial Standard of Practice 56. The model is also reviewed extensively when significant changes are made to the software and additionally typically biennially by outside actuarial auditors hired by the New York City Comptroller.

Pension payments that exceed the Internal Revenue Code Section 415 Limit which are expected to be made from the Excess Benefit Plan are excluded from this valuation. There were no other changes in actuarial assumptions and methods compared to the June 30, 2022 valuation.

Table XII-1
Active Retirement Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM PROBABILITIES OF SERVICE RETIREMENT: GENERAL					
Age	**Reduced Service Retirement**	**Unreduced Service Retirement For Members Mandated Into Their Retirement Program**		**Unreduced Service Retirement For Members Who Elected an Improved Retirement Program**	
		Year 1	**Ultimate**	**Year 1**	**Ultimate**
≤ 54	0.00%	8.00%	5.00%	40.00%	15.00%
55	3.50%	8.00%	5.00%	40.00%	15.00%
56	3.50%	8.00%	5.00%	40.00%	15.00%
57	3.50%	8.00%	5.00%	40.00%	15.00%
58	3.50%	8.00%	5.00%	40.00%	15.00%
59	5.25%	8.00%	5.00%	40.00%	15.00%
60	7.00%	8.00%	5.00%	40.00%	15.00%
61	8.00%	8.00%	7.50%	40.00%	15.00%
62	8.00%[1]	30.00%/8.00%[2]	10.00%	60.00%	25.00%
63	0.00%	20.00%/30.00%[3]	15.00%	40.00%	20.00%
64	0.00%	20.00%	15.00%	40.00%	20.00%
65	0.00%	30.00%	20.00%	60.00%	25.00%
66	0.00%	20.00%	15.00%	40.00%	20.00%
67	0.00%	20.00%	15.00%	40.00%	20.00%
68	0.00%	20.00%	15.00%	40.00%	20.00%
69	0.00%	20.00%	15.00%	40.00%	20.00%
70	0.00%	25.00%	25.00%	40.00%	25.00%
71	0.00%	25.00%	25.00%	40.00%	25.00%
72	0.00%	25.00%	25.00%	40.00%	25.00%
73	0.00%	25.00%	25.00%	40.00%	25.00%
74	0.00%	25.00%	25.00%	40.00%	25.00%
75	0.00%	25.00%	25.00%	40.00%	25.00%
76	0.00%	25.00%	25.00%	40.00%	25.00%
77	0.00%	25.00%	25.00%	40.00%	25.00%
78	0.00%	25.00%	25.00%	40.00%	25.00%
79	0.00%	25.00%	25.00%	40.00%	25.00%
≥ 80	N/A	100.00%	100.00%	100.00%	100.00%

[1] 8.00% only applies to Tier 6 members; 0.00% otherwise.
[2] 30.00% for Tiers 1-4 members and 8.00% for Tier 6 members.
[3] 20.00% for Tiers 1-4 members and 30.00% for Tier 6 members.

Table XII-1
Active Retirement Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF SERVICE RETIREMENT: CORRECTION

	Reduced Service Retirement Tiers 1-3		Reduced Service Retirement Tier 3R[1]	
	Age	**Rate**	**Service**	**Rate**
	≤ 54	0.00%	≤ 19	0.00%
	55	2.00%	20	5.00%
	56	2.00%	21	2.00%
	57	2.00%	22	5.00%
	58	2.00%	23	2.00%
	59	3.00%	24	2.00%
	60	4.00%	≥ 25	N/A
	61	5.00%		
	62	0.00%		
	≥ 63	N/A		

	Unreduced Service Retirement For Members Mandated Into Their Retirement Program		Unreduced Service Retirement For Members Who Elected an Improved Retirement Program	
Age	**Year 1**	**Ultimate**	**Year 1**	**Ultimate**
≤ 54	60.00%	20.00%	70.00%	20.00%
55	60.00%	20.00%	70.00%	20.00%
56	60.00%	20.00%	70.00%	20.00%
57	60.00%	20.00%	70.00%	20.00%
58	60.00%	20.00%	70.00%	20.00%
59	60.00%	20.00%	70.00%	20.00%
60	60.00%	20.00%	70.00%	20.00%
61	60.00%	30.00%	70.00%	30.00%
62	60.00%	40.00%	70.00%	40.00%
≥ 63	100.00%	100.00%	100.00%	100.00%

[1] Assumption also used for IDA Tier 3R members.

Table XII-1
Active Retirement Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF SERVICE RETIREMENT: SANITATION

Reduced Service Retirement Tiers 1-4		Reduced Service Retirement Tier 3R	
Age	**Rate**	**Service**	**Rate**
≤ 54	0.00%	≤ 19	0.00%
55	4.00%	20	5.00%
56	4.00%	21	2.00%
57	4.00%	22	5.00%
58	4.00%	23	2.00%
59	6.00%	24	2.00%
60	8.00%	≥ 25	N/A
61	10.00%		
62	0.00%		
63	0.00%		
64	0.00%		
65	0.00%		
66	0.00%		
67	0.00%		
68	0.00%		
69	0.00%		
≥ 70	N/A		

	Unreduced Service Retirement For Members Mandated Into Their Retirement Program		Unreduced Service Retirement For Members Who Elected an Improved Retirement Program	
Age	**Year 1**	**Ultimate**	**Year 1**	**Ultimate**
≤ 45	30.00%	10.00%	40.00%	15.00%
46	30.00%	10.00%	42.00%	15.00%
47	30.00%	10.00%	44.00%	15.00%
48	30.00%	10.00%	46.00%	15.00%
49	30.00%	10.00%	48.00%	15.00%
50	30.00%	10.00%	50.00%	15.00%
51	30.00%	10.00%	52.00%	15.00%
52	30.00%	10.00%	54.00%	15.00%
53	30.00%	10.00%	56.00%	15.00%
54	30.00%	10.00%	58.00%	15.00%
55	30.00%	10.00%	60.00%	15.00%
56	30.00%	10.00%	60.00%	16.00%
57	30.00%	10.00%	60.00%	17.00%
58	30.00%	10.00%	60.00%	18.00%
59	30.00%	10.00%	60.00%	19.00%
60	30.00%	10.00%	60.00%	20.00%
61	30.00%	15.00%	60.00%	25.00%
62	45.00%/30.00%[1]	20.00%/15.00%[2]	60.00%	30.00%
63	30.00%	15.00%	40.00%	20.00%
64	30.00%	15.00%	40.00%	20.00%
65	45.00%	20.00%	60.00%	30.00%
66	30.00%	15.00%	40.00%	20.00%
67	30.00%	15.00%	40.00%	20.00%
68	30.00%	15.00%	40.00%	20.00%
69	30.00%	15.00%	40.00%	20.00%
≥ 70	100.00%	100.00%	100.00%	100.00%

[1] 45.00% for Tier 1-4 members and 30.00% for Tier 3R members.
[2] 20.00% for Tier 1-4 members and 15.00% for Tier 3R members.

Table XII-1
Active Retirement Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF SERVICE RETIREMENT: TBTA

Age	Members Mandated Into Their Retirement Program			Members Who Elected an Improved Retirement Program	
	Reduced Service Retirement	Unreduced Service Retirement		Unreduced Service Retirement	
		Year 1	Ultimate	Year 1	Ultimate
≤ 54	0.00%	30.00%	20.00%	60.00%	30.00%
55	2.00%	30.00%	20.00%	60.00%	30.00%
56	2.00%	30.00%	20.00%	60.00%	30.00%
57	2.00%	30.00%	20.00%	60.00%	30.00%
58	2.00%	30.00%	20.00%	60.00%	30.00%
59	3.00%	30.00%	20.00%	60.00%	30.00%
60	4.00%	30.00%	20.00%	60.00%	30.00%
61	5.00%	30.00%	30.00%	60.00%	30.00%
62	0.00%	40.00%	40.00%	60.00%	40.00%
63	0.00%	30.00%	30.00%	40.00%	30.00%
64	0.00%	30.00%	30.00%	40.00%	30.00%
65	0.00%	40.00%	40.00%	60.00%	40.00%
66	0.00%	30.00%	30.00%	40.00%	30.00%
67	0.00%	30.00%	30.00%	40.00%	30.00%
68	0.00%	30.00%	30.00%	40.00%	30.00%
69	0.00%	30.00%	30.00%	40.00%	30.00%
70	0.00%	30.00%	30.00%	40.00%	30.00%
71	0.00%	30.00%	30.00%	40.00%	30.00%
72	0.00%	30.00%	30.00%	40.00%	30.00%
73	0.00%	30.00%	30.00%	40.00%	30.00%
74	0.00%	30.00%	30.00%	40.00%	30.00%
75	0.00%	30.00%	30.00%	40.00%	30.00%
76	0.00%	30.00%	30.00%	40.00%	30.00%
77	0.00%	30.00%	30.00%	40.00%	30.00%
78	0.00%	30.00%	30.00%	40.00%	30.00%
79	0.00%	30.00%	30.00%	40.00%	30.00%
≥ 80	N/A	100.00%	100.00%	100.00%	100.00%

Table XII-1
Active Retirement Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM PROBABILITIES OF SERVICE RETIREMENT: TRANSIT					
Age	**Reduced Service Retirement**	**Unreduced Service Retirement For Members Mandated Into Their Retirement Program**		**Unreduced Service Retirement For Members Who Elected an Improved Retirement Program**	
		Year 1	**Ultimate**	**Year 1**	**Ultimate**
≤ 54	0.00%	30.00%	15.00%	25.00%	15.00%
55	2.00%	30.00%	15.00%	25.00%	15.00%
56	2.00%	30.00%	15.00%	25.00%	15.00%
57	2.00%	30.00%	15.00%	25.00%	15.00%
58	2.00%	30.00%	15.00%	25.00%	15.00%
59	3.00%	30.00%	15.00%	25.00%	15.00%
60	4.00%	35.00%	15.00%	30.00%	15.00%
61	5.00%	45.00%	20.00%	40.00%	20.00%
62	5.00%[1]	20.00%	20.00%	50.00%	40.00%
63	0.00%	20.00%	20.00%	40.00%	30.00%
64	0.00%	20.00%	20.00%	40.00%	30.00%
65	0.00%	25.00%	25.00%	50.00%	40.00%
66	0.00%	20.00%	20.00%	40.00%	30.00%
67	0.00%	20.00%	20.00%	40.00%	30.00%
68	0.00%	20.00%	20.00%	40.00%	30.00%
69	0.00%	20.00%	20.00%	40.00%	30.00%
70	0.00%	25.00%	25.00%	40.00%	30.00%
71	0.00%	25.00%	25.00%	40.00%	30.00%
72	0.00%	25.00%	25.00%	40.00%	30.00%
73	0.00%	25.00%	25.00%	40.00%	30.00%
74	0.00%	25.00%	25.00%	40.00%	30.00%
75	0.00%	25.00%	25.00%	40.00%	30.00%
76	0.00%	25.00%	25.00%	40.00%	30.00%
77	0.00%	25.00%	25.00%	40.00%	30.00%
78	0.00%	25.00%	25.00%	40.00%	30.00%
79	0.00%	25.00%	25.00%	40.00%	30.00%
≥ 80	N/A	100.00%	100.00%	100.00%	100.00%

[1] 5.00% only applies to Tier 6 members; 0.00% otherwise.

Table XII-2
Active Termination Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF TERMINATION

	Probabilities of Termination				
Years of Service	**General**	**Correction**	**Sanitation**	**TBTA**	**Transit**
0	8.40%	7.50%	4.00%	9.00%	9.00%
1	7.00%	6.00%	2.00%	4.50%	4.50%
2	5.60%	4.50%	1.00%	2.00%	2.00%
3	4.20%	3.00%	1.00%	1.50%	1.50%
4	4.20%	2.25%	1.00%	1.25%	1.25%
5	4.20%	1.50%	1.00%	1.10%	1.10%
6	4.00%	1.35%	0.90%	1.10%	1.10%
7	3.80%	1.20%	0.80%	1.10%	1.10%
8	3.60%	1.05%	0.70%	1.10%	1.10%
9	3.40%	0.90%	0.60%	1.10%	1.10%
10	3.20%	0.75%	0.50%	1.10%	1.10%
11	3.00%	0.75%	0.50%	1.00%	1.00%
12	2.80%	0.75%	0.50%	0.90%	0.90%
13	2.60%	0.75%	0.50%	0.80%	0.80%
14	2.40%	0.75%	0.50%	0.70%	0.70%
15	2.20%	0.75%	0.50%	0.55%	0.55%
16	2.00%	0.75%	0.50%	0.55%	0.55%
17	1.80%	0.75%	0.50%	0.55%	0.55%
18	1.60%	0.75%	0.50%	0.55%	0.55%
19	1.40%	0.75%	0.50%	0.55%	0.55%
20+	1.40%	0.75%	0.50%	0.55%	0.55%

Table XII-3
Active Disability Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: GENERAL

	Ordinary Disability		Accidental Disability	
Age	**Males**	**Females**	**Males**	**Females**
15	0.140%	0.140%	0.028%	0.014%
16	0.140%	0.140%	0.028%	0.014%
17	0.140%	0.140%	0.028%	0.014%
18	0.140%	0.140%	0.028%	0.014%
19	0.140%	0.140%	0.028%	0.014%
20	0.140%	0.140%	0.028%	0.014%
21	0.140%	0.140%	0.028%	0.014%
22	0.140%	0.140%	0.028%	0.014%
23	0.140%	0.140%	0.028%	0.014%
24	0.140%	0.140%	0.028%	0.014%
25	0.140%	0.140%	0.028%	0.014%
26	0.140%	0.140%	0.028%	0.014%
27	0.140%	0.140%	0.028%	0.014%
28	0.140%	0.140%	0.028%	0.014%
29	0.140%	0.140%	0.028%	0.014%
30	0.140%	0.140%	0.028%	0.014%
31	0.154%	0.140%	0.028%	0.014%
32	0.168%	0.140%	0.028%	0.014%
33	0.182%	0.140%	0.028%	0.014%
34	0.196%	0.140%	0.028%	0.014%
35	0.210%	0.140%	0.028%	0.014%
36	0.224%	0.147%	0.028%	0.014%
37	0.238%	0.154%	0.028%	0.014%
38	0.252%	0.161%	0.028%	0.014%
39	0.266%	0.168%	0.028%	0.014%
40	0.280%	0.175%	0.028%	0.014%
41	0.294%	0.182%	0.028%	0.014%
42	0.308%	0.189%	0.028%	0.014%
43	0.322%	0.196%	0.028%	0.014%
44	0.336%	0.203%	0.028%	0.014%
45	0.350%	0.210%	0.028%	0.014%
46	0.364%	0.238%	0.028%	0.014%
47	0.378%	0.266%	0.028%	0.014%
48	0.392%	0.294%	0.028%	0.014%
49	0.406%	0.322%	0.028%	0.014%
50	0.420%	0.350%	0.028%	0.014%
51	0.434%	0.378%	0.028%	0.014%
52	0.448%	0.406%	0.028%	0.014%
53	0.462%	0.434%	0.028%	0.014%
54	0.476%	0.462%	0.028%	0.014%
55	0.490%	0.490%	0.028%	0.014%
56	0.490%	0.490%	0.028%	0.014%
57	0.490%	0.490%	0.028%	0.014%
58	0.490%	0.490%	0.028%	0.014%
59	0.490%	0.490%	0.028%	0.014%
60	0.490%	0.490%	0.028%	0.014%
61	0.490%	0.490%	0.028%	0.014%
62	0.490%	0.490%	0.028%	0.014%
63	0.490%	0.490%	0.028%	0.014%
64	0.490%	0.490%	0.028%	0.014%
65	0.490%	0.490%	0.028%	0.014%
66	0.490%	0.490%	0.028%	0.014%
67	0.490%	0.490%	0.028%	0.014%
68	0.490%	0.490%	0.028%	0.014%
69	0.490%	0.490%	0.028%	0.014%
70	0.490%	0.490%	0.028%	0.014%
71	0.490%	0.490%	0.028%	0.014%
72	0.490%	0.490%	0.028%	0.014%
73	0.490%	0.490%	0.028%	0.014%
74	0.490%	0.490%	0.028%	0.014%
75	0.490%	0.490%	0.028%	0.014%
76	0.490%	0.490%	0.028%	0.014%
77	0.490%	0.490%	0.028%	0.014%
78	0.490%	0.490%	0.028%	0.014%
79	0.490%	0.490%	0.028%	0.014%
≥ 80	N/A	N/A	N/A	N/A

Table XII-3
Active Disability Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: UNIFORMED GROUPS

	Correction			Sanitation		
Age	**Ordinary Disability**	**Accidental Disability: Tier 3R Non-enhanced Plan**	**Accidental Disability: All Other Plans**	**Ordinary Disability**	**Accidental Disability: Tier 3R Non-enhanced Plan**	**Accidental Disability: All Other Plans**
15	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
16	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
17	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
18	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
19	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
20	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
21	0.100%	0.138%	0.263%	0.100%	0.050%	0.100%
22	0.100%	0.138%	0.275%	0.100%	0.050%	0.100%
23	0.100%	0.150%	0.288%	0.100%	0.050%	0.100%
24	0.100%	0.150%	0.300%	0.100%	0.050%	0.100%
25	0.100%	0.163%	0.313%	0.100%	0.050%	0.100%
26	0.100%	0.163%	0.325%	0.120%	0.055%	0.110%
27	0.100%	0.175%	0.338%	0.140%	0.060%	0.120%
28	0.100%	0.175%	0.350%	0.160%	0.065%	0.130%
29	0.100%	0.188%	0.363%	0.180%	0.070%	0.140%
30	0.100%	0.188%	0.375%	0.200%	0.075%	0.150%
31	0.120%	0.200%	0.388%	0.220%	0.080%	0.160%
32	0.140%	0.200%	0.400%	0.240%	0.085%	0.170%
33	0.160%	0.213%	0.413%	0.260%	0.090%	0.180%
34	0.180%	0.213%	0.425%	0.280%	0.095%	0.190%
35	0.200%	0.225%	0.438%	0.300%	0.100%	0.200%
36	0.220%	0.225%	0.450%	0.320%	0.105%	0.210%
37	0.240%	0.238%	0.463%	0.340%	0.110%	0.220%
38	0.260%	0.238%	0.475%	0.360%	0.115%	0.230%
39	0.280%	0.250%	0.488%	0.380%	0.120%	0.240%
40	0.300%	0.250%	0.500%	0.400%	0.125%	0.250%
41	0.320%	0.263%	0.513%	0.420%	0.130%	0.260%
42	0.340%	0.263%	0.525%	0.440%	0.135%	0.270%
43	0.360%	0.275%	0.538%	0.460%	0.140%	0.280%
44	0.380%	0.275%	0.550%	0.480%	0.145%	0.290%
45	0.400%	0.288%	0.563%	0.500%	0.150%	0.300%
46	0.420%	0.288%	0.575%	0.520%	0.170%	0.340%
47	0.440%	0.300%	0.588%	0.540%	0.190%	0.380%
48	0.460%	0.300%	0.600%	0.560%	0.210%	0.420%
49	0.480%	0.313%	0.613%	0.580%	0.230%	0.460%
50	0.500%	0.313%	0.625%	0.600%	0.250%	0.500%
51	0.520%	0.325%	0.650%	0.620%	0.280%	0.560%
52	0.540%	0.338%	0.675%	0.640%	0.310%	0.620%
53	0.560%	0.350%	0.700%	0.660%	0.340%	0.680%
54	0.580%	0.363%	0.725%	0.680%	0.370%	0.740%
55	0.600%	0.375%	0.750%	0.700%	0.400%	0.800%
56	0.620%	0.388%	0.775%	0.720%	0.440%	0.880%
57	0.640%	0.400%	0.800%	0.740%	0.480%	0.960%
58	0.660%	0.413%	0.825%	0.760%	0.520%	1.040%
59	0.680%	0.425%	0.850%	0.780%	0.560%	1.120%
60	0.700%	0.438%	0.875%	0.800%	0.600%	1.200%
61	0.720%	0.450%	0.900%	0.820%	0.650%	1.300%
62	0.740%	0.463%	0.925%	0.840%	0.700%	1.400%
63	N/A	N/A	N/A	0.860%	0.750%	1.500%
64	N/A	N/A	N/A	0.880%	0.800%	1.600%
65	N/A	N/A	N/A	0.900%	0.850%	1.700%
66	N/A	N/A	N/A	0.920%	0.910%	1.820%
67	N/A	N/A	N/A	0.940%	0.970%	1.940%
68	N/A	N/A	N/A	0.960%	1.030%	2.060%
69	N/A	N/A	N/A	0.980%	1.090%	2.180%
≥ 70	N/A	N/A	N/A	N/A	N/A	N/A

Table XII-3
Active Disability Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: OTHERS

	TBTA		Transit	
Age	Ordinary Disability	Accidental Disability	Ordinary Disability	Accidental Disability
15	0.100%	0.020%	0.100%	0.020%
16	0.100%	0.020%	0.100%	0.020%
17	0.100%	0.020%	0.100%	0.020%
18	0.100%	0.020%	0.100%	0.020%
19	0.100%	0.020%	0.100%	0.020%
20	0.100%	0.020%	0.100%	0.020%
21	0.100%	0.020%	0.100%	0.020%
22	0.100%	0.020%	0.100%	0.020%
23	0.100%	0.020%	0.100%	0.020%
24	0.100%	0.020%	0.100%	0.020%
25	0.100%	0.020%	0.100%	0.020%
26	0.100%	0.020%	0.100%	0.020%
27	0.100%	0.020%	0.100%	0.020%
28	0.100%	0.020%	0.100%	0.020%
29	0.100%	0.020%	0.100%	0.020%
30	0.100%	0.020%	0.100%	0.020%
31	0.120%	0.020%	0.120%	0.020%
32	0.140%	0.020%	0.140%	0.020%
33	0.160%	0.020%	0.160%	0.020%
34	0.180%	0.020%	0.180%	0.020%
35	0.200%	0.020%	0.200%	0.020%
36	0.220%	0.020%	0.220%	0.020%
37	0.240%	0.020%	0.240%	0.020%
38	0.260%	0.020%	0.260%	0.020%
39	0.280%	0.020%	0.280%	0.020%
40	0.300%	0.020%	0.300%	0.020%
41	0.320%	0.020%	0.320%	0.020%
42	0.340%	0.020%	0.340%	0.020%
43	0.360%	0.020%	0.360%	0.020%
44	0.380%	0.020%	0.380%	0.020%
45	0.400%	0.020%	0.400%	0.020%
46	0.420%	0.020%	0.420%	0.020%
47	0.440%	0.020%	0.440%	0.020%
48	0.460%	0.020%	0.460%	0.020%
49	0.480%	0.020%	0.480%	0.020%
50	0.500%	0.020%	0.500%	0.020%
51	0.520%	0.020%	0.520%	0.020%
52	0.540%	0.020%	0.540%	0.020%
53	0.560%	0.020%	0.560%	0.020%
54	0.580%	0.020%	0.580%	0.020%
55	0.600%	0.020%	0.600%	0.020%
56	0.600%	0.020%	0.600%	0.020%
57	0.600%	0.020%	0.600%	0.020%
58	0.600%	0.020%	0.600%	0.020%
59	0.600%	0.020%	0.600%	0.020%
60	0.600%	0.020%	0.600%	0.020%
61	0.600%	0.020%	0.600%	0.020%
62	0.600%	0.020%	0.600%	0.020%
63	0.600%	0.020%	0.600%	0.020%
64	0.600%	0.020%	0.600%	0.020%
65	0.600%	0.020%	0.600%	0.020%
66	0.600%	0.020%	0.600%	0.020%
67	0.600%	0.020%	0.600%	0.020%
68	0.600%	0.020%	0.600%	0.020%
69	0.600%	0.020%	0.600%	0.020%
70	0.600%	0.020%	0.600%	0.020%
71	0.600%	0.020%	0.600%	0.020%
72	0.600%	0.020%	0.600%	0.020%
73	0.600%	0.020%	0.600%	0.020%
74	0.600%	0.020%	0.600%	0.020%
75	0.600%	0.020%	0.600%	0.020%
76	0.600%	0.020%	0.600%	0.020%
77	0.600%	0.020%	0.600%	0.020%
78	0.600%	0.020%	0.600%	0.020%
79	0.600%	0.020%	0.600%	0.020%
≥ 80	N/A	N/A	N/A	N/A

Table XII-4
Active Mortality Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS: CORRECTION AND SANITATION BASE RATES

	Correction			Sanitation		
	Ordinary Death		Accidental Death	Ordinary Death		Accidental Death
Age	**Males**	**Females**	**All**	**Males**	**Females**	**All**
15	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
16	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
17	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
18	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
19	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
20	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
21	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
22	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
23	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
24	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
25	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
26	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
27	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
28	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
29	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
30	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
31	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
32	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
33	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
34	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
35	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
36	0.030%	0.018%	0.005%	0.060%	0.036%	0.010%
37	0.035%	0.021%	0.005%	0.070%	0.042%	0.010%
38	0.040%	0.024%	0.005%	0.080%	0.048%	0.010%
39	0.045%	0.027%	0.005%	0.090%	0.054%	0.010%
40	0.050%	0.030%	0.005%	0.100%	0.060%	0.010%
41	0.055%	0.033%	0.005%	0.110%	0.066%	0.010%
42	0.060%	0.036%	0.005%	0.120%	0.072%	0.010%
43	0.065%	0.039%	0.005%	0.130%	0.078%	0.010%
44	0.070%	0.042%	0.005%	0.140%	0.084%	0.010%
45	0.075%	0.045%	0.005%	0.150%	0.090%	0.010%
46	0.080%	0.048%	0.005%	0.160%	0.096%	0.010%
47	0.085%	0.051%	0.005%	0.170%	0.102%	0.010%
48	0.090%	0.054%	0.005%	0.180%	0.108%	0.010%
49	0.095%	0.057%	0.005%	0.190%	0.114%	0.010%
50	0.100%	0.060%	0.005%	0.200%	0.120%	0.010%
51	0.105%	0.064%	0.005%	0.210%	0.128%	0.010%
52	0.110%	0.068%	0.005%	0.220%	0.136%	0.010%
53	0.115%	0.072%	0.005%	0.230%	0.144%	0.010%
54	0.120%	0.076%	0.005%	0.240%	0.152%	0.010%
55	0.125%	0.080%	0.005%	0.250%	0.160%	0.010%
56	0.130%	0.084%	0.005%	0.260%	0.168%	0.010%
57	0.135%	0.088%	0.005%	0.270%	0.176%	0.010%
58	0.140%	0.092%	0.005%	0.280%	0.184%	0.010%
59	0.145%	0.096%	0.005%	0.290%	0.192%	0.010%
60	0.150%	0.100%	0.005%	0.300%	0.200%	0.010%
61	0.160%	0.105%	0.005%	0.320%	0.210%	0.010%
62	0.170%	0.110%	0.005%	0.340%	0.220%	0.010%
63	N/A	N/A	N/A	0.360%	0.230%	0.010%
64	N/A	N/A	N/A	0.380%	0.240%	0.010%
65	N/A	N/A	N/A	0.400%	0.250%	0.010%
66	N/A	N/A	N/A	0.440%	0.280%	0.010%
67	N/A	N/A	N/A	0.480%	0.310%	0.010%
68	N/A	N/A	N/A	0.520%	0.340%	0.010%
69	N/A	N/A	N/A	0.560%	0.370%	0.010%
≥ 70	N/A	N/A	N/A	N/A	N/A	N/A

Table XII-4
Active Mortality Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS:
PLAN GROUPS OTHER THAN CORRECTION AND SANITATION
BASE RATES

	General			Transit and TBTA		
	Ordinary Death		Accidental Death	Ordinary Death		Accidental Death
Age	Males	Females	All	Males	Females	All
15	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
16	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
17	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
18	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
19	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
20	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
21	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
22	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
23	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
24	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
25	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
26	0.0264%	0.0192%	0.0000%	0.0264%	0.0192%	0.0060%
27	0.0288%	0.0204%	0.0000%	0.0288%	0.0204%	0.0060%
28	0.0312%	0.0216%	0.0000%	0.0312%	0.0216%	0.0060%
29	0.0336%	0.0228%	0.0000%	0.0336%	0.0228%	0.0060%
30	0.0360%	0.0240%	0.0000%	0.0360%	0.0240%	0.0060%
31	0.0384%	0.0252%	0.0000%	0.0384%	0.0252%	0.0060%
32	0.0408%	0.0264%	0.0000%	0.0408%	0.0264%	0.0060%
33	0.0432%	0.0276%	0.0000%	0.0432%	0.0276%	0.0060%
34	0.0456%	0.0288%	0.0000%	0.0456%	0.0288%	0.0060%
35	0.0480%	0.0300%	0.0000%	0.0480%	0.0300%	0.0060%
36	0.0504%	0.0312%	0.0000%	0.0504%	0.0312%	0.0060%
37	0.0528%	0.0324%	0.0000%	0.0528%	0.0324%	0.0060%
38	0.0552%	0.0336%	0.0000%	0.0552%	0.0336%	0.0060%
39	0.0576%	0.0348%	0.0000%	0.0576%	0.0348%	0.0060%
40	0.0600%	0.0360%	0.0000%	0.0600%	0.0360%	0.0060%
41	0.0660%	0.0408%	0.0000%	0.0660%	0.0408%	0.0060%
42	0.0720%	0.0456%	0.0000%	0.0720%	0.0456%	0.0060%
43	0.0780%	0.0504%	0.0000%	0.0780%	0.0504%	0.0060%
44	0.0840%	0.0552%	0.0000%	0.0840%	0.0552%	0.0060%
45	0.0900%	0.0600%	0.0000%	0.0900%	0.0600%	0.0060%
46	0.0960%	0.0660%	0.0000%	0.0960%	0.0660%	0.0060%
47	0.1020%	0.0720%	0.0000%	0.1020%	0.0720%	0.0060%
48	0.1080%	0.0780%	0.0000%	0.1080%	0.0780%	0.0060%
49	0.1140%	0.0840%	0.0000%	0.1140%	0.0840%	0.0060%
50	0.1200%	0.0900%	0.0000%	0.1200%	0.0900%	0.0060%
51	0.1320%	0.0960%	0.0000%	0.1320%	0.0960%	0.0060%
52	0.1440%	0.1020%	0.0000%	0.1440%	0.1020%	0.0060%
53	0.1560%	0.1080%	0.0000%	0.1560%	0.1080%	0.0060%
54	0.1680%	0.1140%	0.0000%	0.1680%	0.1140%	0.0060%
55	0.1800%	0.1200%	0.0000%	0.1800%	0.1200%	0.0060%
56	0.1920%	0.1260%	0.0000%	0.1920%	0.1260%	0.0060%
57	0.2040%	0.1320%	0.0000%	0.2040%	0.1320%	0.0060%
58	0.2160%	0.1380%	0.0000%	0.2160%	0.1380%	0.0060%
59	0.2280%	0.1440%	0.0000%	0.2280%	0.1440%	0.0060%
60	0.2400%	0.1500%	0.0000%	0.2400%	0.1500%	0.0060%
61	0.2520%	0.1560%	0.0000%	0.2520%	0.1560%	0.0060%
62	0.2640%	0.1620%	0.0000%	0.2640%	0.1620%	0.0060%
63	0.2760%	0.1680%	0.0000%	0.2760%	0.1680%	0.0060%
64	0.2880%	0.1740%	0.0000%	0.2880%	0.1740%	0.0060%
65	0.3000%	0.1800%	0.0000%	0.3000%	0.1800%	0.0060%
66	0.3240%	0.1920%	0.0000%	0.3240%	0.1920%	0.0060%
67	0.3480%	0.2040%	0.0000%	0.3480%	0.2040%	0.0060%
68	0.3720%	0.2160%	0.0000%	0.3720%	0.2160%	0.0060%
69	0.3960%	0.2280%	0.0000%	0.3960%	0.2280%	0.0060%
70	0.4000%	0.2400%	0.0000%	0.4000%	0.2400%	0.0060%
71	0.4240%	0.2580%	0.0000%	0.4240%	0.2580%	0.0060%
72	0.4480%	0.2760%	0.0000%	0.4480%	0.2760%	0.0060%
73	0.4720%	0.2940%	0.0000%	0.4720%	0.2940%	0.0060%
74	0.4960%	0.3120%	0.0000%	0.4960%	0.3120%	0.0060%
75	0.5200%	0.3300%	0.0000%	0.5200%	0.3300%	0.0060%
76	0.5680%	0.3660%	0.0000%	0.5680%	0.3660%	0.0060%
77	0.6160%	0.4020%	0.0000%	0.6160%	0.4020%	0.0060%
78	0.6640%	0.4380%	0.0000%	0.6640%	0.4380%	0.0060%
79	0.7120%	0.4740%	0.0000%	0.7120%	0.4740%	0.0060%
≥ 80	N/A	N/A	N/A	N/A	N/A	N/A

Table XII-5
Service Retiree Mortality Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR SERVICE RETIREES:
PLAN GROUPS OTHER THAN HOUSING POLICE AND TRANSIT POLICE
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.0105%	0.0092%	68	1.8256%	1.3605%
16	0.0142%	0.0112%	69	1.9386%	1.4332%
17	0.0191%	0.0122%	70	2.0542%	1.5007%
18	0.0222%	0.0133%	71	2.2359%	1.6745%
19	0.0240%	0.0143%	72	2.4230%	1.8463%
20	0.0251%	0.0145%	73	2.6165%	2.0157%
21	0.0268%	0.0153%	74	2.8157%	2.1838%
22	0.0284%	0.0161%	75	3.0220%	2.3492%
23	0.0301%	0.0171%	76	3.4928%	2.6652%
24	0.0315%	0.0183%	77	3.9787%	2.9831%
25	0.0327%	0.0195%	78	4.4792%	3.3011%
26	0.0342%	0.0208%	79	4.9963%	3.6207%
27	0.0354%	0.0221%	80	5.5282%	3.9391%
28	0.0371%	0.0236%	81	6.1051%	4.4386%
29	0.0394%	0.0252%	82	6.6894%	4.9473%
30	0.0427%	0.0270%	83	7.2805%	5.4665%
31	0.0495%	0.0330%	84	7.8749%	5.9942%
32	0.0562%	0.0384%	85	8.4753%	6.5354%
33	0.0625%	0.0431%	86	9.6136%	7.4659%
34	0.0682%	0.0471%	87	10.8005%	8.3995%
35	0.0743%	0.0511%	88	12.0443%	9.3428%
36	0.0780%	0.0542%	89	13.3397%	10.2918%
37	0.0818%	0.0579%	90	14.6958%	11.2477%
38	0.0861%	0.0618%	91	16.4185%	12.8868%
39	0.0917%	0.0666%	92	18.1416%	14.4887%
40	0.0997%	0.0719%	93	19.8574%	16.0801%
41	0.1394%	0.0775%	94	21.6187%	17.5854%
42	0.1774%	0.0859%	95	23.5884%	19.0626%
43	0.2143%	0.0968%	96	25.4266%	20.2474%
44	0.2507%	0.1111%	97	27.2119%	21.2937%
45	0.2875%	0.1287%	98	29.0202%	22.0663%
46	0.3207%	0.1501%	99	30.6654%	22.5443%
47	0.3534%	0.1748%	100	32.1584%	22.6473%
48	0.3849%	0.2022%	101	33.7521%	23.5294%
49	0.4150%	0.2319%	102	35.1259%	24.5619%
50	0.4431%	0.2633%	103	36.3671%	25.7825%
51	0.5156%	0.2999%	104	37.3834%	27.1635%
52	0.5928%	0.3376%	105	38.1051%	28.6530%
53	0.6740%	0.3762%	106	38.4698%	30.2169%
54	0.7583%	0.4151%	107	38.6325%	31.8182%
55	0.8440%	0.4540%	108	38.8076%	33.4131%
56	0.9048%	0.5132%	109	38.9794%	34.9566%
57	0.9604%	0.5735%	110	50.0000%	50.0000%
58	1.0101%	0.6353%	111	50.0000%	50.0000%
59	1.0536%	0.6981%	112	50.0000%	50.0000%
60	1.0919%	0.7631%	113	50.0000%	50.0000%
61	1.1835%	0.8329%	114	50.0000%	50.0000%
62	1.2676%	0.8908%	115	50.0000%	50.0000%
63	1.3473%	0.9493%	116	50.0000%	50.0000%
64	1.4238%	1.0146%	117	50.0000%	50.0000%
65	1.4985%	1.0876%	118	50.0000%	50.0000%
66	1.6059%	1.1681%	119	50.0000%	50.0000%
67	1.7146%	1.2609%	120	100.0000%	100.0000%

Table XII-5
Service Retiree Mortality Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR SERVICE RETIREES:
HOUSING POLICE AND TRANSIT POLICE
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.0100%	0.0084%	68	1.4988%	1.0632%
16	0.0135%	0.0103%	69	1.6917%	1.1644%
17	0.0181%	0.0112%	70	1.8929%	1.2629%
18	0.0217%	0.0131%	71	2.1028%	1.4563%
19	0.0240%	0.0140%	72	2.3212%	1.6586%
20	0.0251%	0.0142%	73	2.5833%	1.8689%
21	0.0268%	0.0150%	74	2.8558%	2.0889%
22	0.0284%	0.0158%	75	3.1397%	2.3314%
23	0.0301%	0.0168%	76	3.4343%	2.6045%
24	0.0315%	0.0179%	77	3.7415%	2.8700%
25	0.0327%	0.0191%	78	4.2304%	3.1787%
26	0.0342%	0.0204%	79	4.7399%	3.4795%
27	0.0354%	0.0217%	80	5.2682%	3.8105%
28	0.0371%	0.0231%	81	5.7202%	4.3289%
29	0.0394%	0.0247%	82	6.1782%	4.8678%
30	0.0427%	0.0265%	83	7.0179%	5.4288%
31	0.0492%	0.0316%	84	7.8631%	5.9122%
32	0.0556%	0.0360%	85	8.7167%	6.3661%
33	0.0616%	0.0398%	86	9.5810%	7.1650%
34	0.0669%	0.0427%	87	10.4516%	8.0050%
35	0.0724%	0.0455%	88	11.8437%	8.8541%
36	0.0755%	0.0474%	89	13.2486%	9.6498%
37	0.0779%	0.0497%	90	14.6752%	10.5687%
38	0.0808%	0.0521%	91	16.3354%	12.0267%
39	0.0845%	0.0551%	92	18.0374%	13.4340%
40	0.0901%	0.0588%	93	19.7642%	14.8636%
41	0.1003%	0.0633%	94	21.5622%	16.4543%
42	0.1106%	0.0702%	95	23.4692%	17.7952%
43	0.1212%	0.0792%	96	25.3619%	19.0707%
44	0.1323%	0.0907%	97	27.1816%	20.2419%
45	0.1439%	0.1052%	98	29.0095%	21.1759%
46	0.1563%	0.1228%	99	30.6920%	21.8544%
47	0.1693%	0.1427%	100	32.1584%	22.1859%
48	0.1827%	0.1652%	101	33.7521%	23.0680%
49	0.1964%	0.1865%	102	35.1259%	24.0803%
50	0.2104%	0.1992%	103	36.3671%	25.2770%
51	0.2802%	0.2104%	104	37.3834%	26.6309%
52	0.3506%	0.2186%	105	38.1051%	28.0912%
53	0.4209%	0.2250%	106	38.4698%	29.6244%
54	0.4903%	0.2863%	107	38.6325%	31.1943%
55	0.5297%	0.3409%	108	38.8076%	32.7579%
56	0.5857%	0.3910%	109	38.9794%	34.2712%
57	0.6387%	0.4376%	110	50.0000%	50.0000%
58	0.6875%	0.4613%	111	50.0000%	50.0000%
59	0.7316%	0.5005%	112	50.0000%	50.0000%
60	0.7720%	0.5393%	113	50.0000%	50.0000%
61	0.8439%	0.5785%	114	50.0000%	50.0000%
62	0.9155%	0.6152%	115	50.0000%	50.0000%
63	0.9888%	0.6536%	116	50.0000%	50.0000%
64	1.0644%	0.7279%	117	50.0000%	50.0000%
65	1.1433%	0.8032%	118	50.0000%	50.0000%
66	1.2263%	0.8884%	119	50.0000%	50.0000%
67	1.3135%	0.9736%	120	100.0000%	100.0000%

Table XII-6
Disabled Retiree Mortality Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: GENERAL PLANS
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.2163%	0.1980%	68	3.8171%	2.9280%
16	0.2927%	0.2680%	69	3.8682%	2.9997%
17	0.3945%	0.3612%	70	3.9318%	3.0865%
18	0.4581%	0.3913%	71	4.1518%	3.1548%
19	0.4963%	0.4214%	72	4.3957%	3.4254%
20	0.5178%	0.4416%	73	4.6660%	3.7295%
21	0.5589%	0.4807%	74	4.9632%	3.9658%
22	0.6029%	0.5231%	75	5.2904%	4.2453%
23	0.6500%	0.5662%	76	5.7355%	4.5234%
24	0.7005%	0.6186%	77	6.2253%	4.7961%
25	0.7524%	0.6680%	78	6.7606%	5.1502%
26	0.8054%	0.7165%	79	7.3471%	5.5873%
27	0.8591%	0.7727%	80	7.9843%	6.0964%
28	0.9126%	0.8346%	81	8.6745%	6.6521%
29	0.9647%	0.9008%	82	9.4240%	7.2551%
30	1.0136%	0.9373%	83	10.2386%	7.9112%
31	1.0584%	0.9629%	84	11.1186%	8.6209%
32	1.0978%	0.9955%	85	12.0742%	9.3370%
33	1.1310%	1.0289%	86	12.8184%	10.0511%
34	1.1597%	1.0577%	87	13.3550%	10.8029%
35	1.1838%	1.0841%	88	14.0470%	11.4531%
36	1.2035%	1.1092%	89	14.7705%	12.5564%
37	1.2211%	1.1344%	90	15.5356%	14.1031%
38	1.2388%	1.1618%	91	17.3803%	15.7291%
39	1.2591%	1.1939%	92	19.4620%	17.1860%
40	1.2846%	1.2249%	93	21.5002%	18.5029%
41	1.3114%	1.2570%	94	23.5320%	19.6588%
42	1.3750%	1.2982%	95	25.5906%	20.8223%
43	1.4416%	1.3497%	96	27.4494%	21.5778%
44	1.5115%	1.4058%	97	29.1839%	21.9133%
45	1.5849%	1.4809%	98	30.8635%	22.0663%
46	1.6617%	1.5639%	99	32.2842%	23.0087%
47	1.7422%	1.6535%	100	33.4447%	23.1230%
48	1.8267%	1.7359%	101	35.1022%	23.6022%
49	1.9153%	1.8218%	102	36.5309%	24.5619%
50	2.0462%	1.8919%	103	37.8218%	25.7825%
51	2.2291%	1.9830%	104	38.8787%	27.1635%
52	2.4215%	2.0502%	105	39.6293%	28.6530%
53	2.6231%	2.1047%	106	40.0086%	30.2169%
54	2.8293%	2.1904%	107	40.1778%	31.8182%
55	3.0344%	2.2636%	108	40.3599%	33.4131%
56	3.1146%	2.3429%	109	40.5386%	34.9566%
57	3.1774%	2.4285%	110	50.0000%	50.0000%
58	3.2218%	2.5412%	111	50.0000%	50.0000%
59	3.2493%	2.5588%	112	50.0000%	50.0000%
60	3.2648%	2.5795%	113	50.0000%	50.0000%
61	3.3472%	2.6067%	114	50.0000%	50.0000%
62	3.4295%	2.6272%	115	50.0000%	50.0000%
63	3.5199%	2.6579%	116	50.0000%	50.0000%
64	3.6208%	2.7759%	117	50.0000%	50.0000%
65	3.7368%	2.8107%	118	50.0000%	50.0000%
66	3.7511%	2.8328%	119	50.0000%	50.0000%
67	3.7776%	2.8725%	120	100.0000%	100.0000%

Table XII-6
Disabled Retiree Mortality Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: CORRECTION
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.1529%	0.1504%	68	2.0976%	1.9435%
16	0.2068%	0.2034%	69	2.2316%	2.0901%
17	0.2788%	0.2742%	70	2.3817%	2.2370%
18	0.3328%	0.3273%	71	2.5774%	2.3979%
19	0.3687%	0.3507%	72	2.7948%	2.5741%
20	0.3762%	0.3604%	73	3.0370%	2.7665%
21	0.3973%	0.3851%	74	3.3054%	3.0122%
22	0.4195%	0.4042%	75	3.6032%	3.3026%
23	0.4428%	0.4278%	76	3.9499%	3.6022%
24	0.4673%	0.4574%	77	4.3346%	3.9080%
25	0.4920%	0.4832%	78	4.7588%	4.2919%
26	0.5163%	0.5076%	79	5.2279%	4.7080%
27	0.5402%	0.5362%	80	5.7433%	5.1937%
28	0.5630%	0.5555%	81	6.3425%	5.7290%
29	0.5840%	0.5755%	82	6.9496%	6.3165%
30	0.6026%	0.5962%	83	7.5636%	6.9627%
31	0.6179%	0.6177%	84	8.1812%	7.7122%
32	0.6297%	0.6268%	85	8.8050%	8.4245%
33	0.6376%	0.6361%	86	9.7703%	9.0849%
34	0.6427%	0.6422%	87	10.8005%	9.7986%
35	0.6554%	0.6466%	88	12.0443%	10.5221%
36	0.6683%	0.6504%	89	13.3397%	11.5771%
37	0.6814%	0.6538%	90	14.6958%	12.7805%
38	0.6949%	0.6583%	91	16.4185%	14.0140%
39	0.7086%	0.6655%	92	18.1416%	15.1826%
40	0.7225%	0.6718%	93	19.8574%	16.3730%
41	0.7368%	0.6785%	94	21.6187%	18.3891%
42	0.7513%	0.6898%	95	23.5884%	20.4768%
43	0.7661%	0.7059%	96	25.4266%	21.5778%
44	0.7812%	0.7241%	97	27.2119%	21.9133%
45	0.7966%	0.7516%	98	29.0202%	22.0663%
46	0.8123%	0.7820%	99	30.6654%	23.0087%
47	0.8283%	0.8124%	100	32.1584%	23.1230%
48	0.8446%	0.8431%	101	33.7521%	23.6022%
49	0.8613%	0.8604%	102	35.1259%	24.5619%
50	0.8782%	0.8758%	103	36.3671%	25.7825%
51	0.8956%	0.8871%	104	37.3834%	27.1635%
52	0.9574%	0.8938%	105	38.1051%	28.6530%
53	1.0214%	0.8945%	106	38.4698%	30.2169%
54	1.0859%	0.9896%	107	38.6325%	31.8182%
55	1.1487%	1.0949%	108	38.8076%	33.4131%
56	1.2131%	1.1161%	109	38.9794%	34.9566%
57	1.2733%	1.1402%	110	50.0000%	50.0000%
58	1.3280%	1.1770%	111	50.0000%	50.0000%
59	1.3775%	1.2195%	112	50.0000%	50.0000%
60	1.4231%	1.2648%	113	50.0000%	50.0000%
61	1.4854%	1.3147%	114	50.0000%	50.0000%
62	1.5489%	1.3627%	115	50.0000%	50.0000%
63	1.6175%	1.4176%	116	50.0000%	50.0000%
64	1.6924%	1.5072%	117	50.0000%	50.0000%
65	1.7762%	1.5987%	118	50.0000%	50.0000%
66	1.8712%	1.7097%	119	50.0000%	50.0000%
67	1.9777%	1.8212%	120	100.0000%	100.0000%

Table XII-6
Disabled Retiree Mortality Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: SANITATION
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.1891%	0.1809%	68	2.4678%	1.9435%
16	0.2558%	0.2447%	69	2.6254%	2.0901%
17	0.3448%	0.3299%	70	2.8020%	2.2370%
18	0.4004%	0.3831%	71	3.0322%	2.3979%
19	0.4338%	0.4126%	72	3.2880%	2.5741%
20	0.4426%	0.4240%	73	3.5729%	2.7665%
21	0.4674%	0.4530%	74	3.8887%	3.0122%
22	0.4935%	0.4755%	75	4.2391%	3.3026%
23	0.5209%	0.5033%	76	4.6469%	3.6022%
24	0.5498%	0.5381%	77	5.0995%	3.9080%
25	0.5788%	0.5685%	78	5.5986%	4.2919%
26	0.6074%	0.5972%	79	6.1505%	4.7080%
27	0.6355%	0.6308%	80	6.7568%	5.1937%
28	0.6623%	0.6535%	81	7.4618%	5.7290%
29	0.6871%	0.6771%	82	8.1760%	6.3165%
30	0.7089%	0.7014%	83	8.8984%	6.9627%
31	0.7269%	0.7267%	84	9.6249%	7.7122%
32	0.7408%	0.7374%	85	10.3588%	8.4245%
33	0.7501%	0.7484%	86	11.4945%	9.0849%
34	0.7561%	0.7555%	87	12.6389%	9.7986%
35	0.7710%	0.7607%	88	13.8008%	10.5221%
36	0.7862%	0.7652%	89	14.9732%	11.5771%
37	0.8017%	0.7692%	90	16.1654%	12.7805%
38	0.8175%	0.7745%	91	18.1783%	14.0140%
39	0.8336%	0.7829%	92	20.1433%	15.1826%
40	0.8500%	0.7904%	93	22.0331%	16.3730%
41	0.8668%	0.7982%	94	23.8872%	18.3891%
42	0.8839%	0.8115%	95	25.7371%	20.4768%
43	0.9013%	0.8305%	96	27.1672%	21.5778%
44	0.9191%	0.8519%	97	28.5248%	21.9133%
45	0.9372%	0.8842%	98	29.8950%	22.0663%
46	0.9556%	0.9200%	99	31.1005%	23.0087%
47	0.9745%	0.9558%	100	32.1584%	23.1230%
48	0.9937%	0.9919%	101	33.7521%	23.6022%
49	1.0133%	1.0122%	102	35.1259%	24.5619%
50	1.0332%	1.0303%	103	36.3671%	25.7825%
51	1.0536%	1.0437%	104	37.3834%	27.1635%
52	1.1263%	1.0515%	105	38.1051%	28.6530%
53	1.2016%	1.0523%	106	38.4698%	30.2169%
54	1.2775%	1.0767%	107	38.6325%	31.8182%
55	1.3514%	1.0949%	108	38.8076%	33.4131%
56	1.4272%	1.1161%	109	38.9794%	34.9566%
57	1.4980%	1.1402%	110	50.0000%	50.0000%
58	1.5624%	1.1770%	111	50.0000%	50.0000%
59	1.6206%	1.2195%	112	50.0000%	50.0000%
60	1.6742%	1.2648%	113	50.0000%	50.0000%
61	1.7475%	1.3147%	114	50.0000%	50.0000%
62	1.8222%	1.3627%	115	50.0000%	50.0000%
63	1.9029%	1.4176%	116	50.0000%	50.0000%
64	1.9910%	1.5072%	117	50.0000%	50.0000%
65	2.0897%	1.5987%	118	50.0000%	50.0000%
66	2.2014%	1.7097%	119	50.0000%	50.0000%
67	2.3267%	1.8212%	120	100.0000%	100.0000%

Table XII-6
Disabled Retiree Mortality Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: TRANSIT AND TBTA
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.2122%	0.1981%	68	3.7437%	2.9280%
16	0.2871%	0.2680%	69	3.7938%	2.9997%
17	0.3869%	0.3612%	70	3.8562%	3.0865%
18	0.4493%	0.3913%	71	4.0719%	3.1548%
19	0.4867%	0.4214%	72	4.3111%	3.4254%
20	0.5079%	0.4416%	73	4.5762%	3.7295%
21	0.5481%	0.4807%	74	4.8677%	3.9658%
22	0.5913%	0.5231%	75	5.1886%	4.2453%
23	0.6375%	0.5662%	76	5.6252%	4.5234%
24	0.6871%	0.6186%	77	6.1056%	4.7961%
25	0.7380%	0.6680%	78	6.6306%	5.1502%
26	0.7899%	0.7165%	79	7.2058%	5.5873%
27	0.8426%	0.7727%	80	7.8307%	6.0964%
28	0.8951%	0.8346%	81	8.5077%	6.6521%
29	0.9462%	0.9008%	82	9.2427%	7.2551%
30	0.9941%	0.9373%	83	10.0417%	7.9112%
31	1.0381%	0.9629%	84	10.9048%	8.6209%
32	1.0767%	0.9955%	85	11.8420%	9.3370%
33	1.1093%	1.0289%	86	12.5719%	10.0511%
34	1.1374%	1.0577%	87	13.0981%	10.8029%
35	1.1611%	1.0841%	88	13.7768%	11.4531%
36	1.1803%	1.1092%	89	14.4864%	12.5564%
37	1.1976%	1.1344%	90	15.2369%	14.1031%
38	1.2150%	1.1618%	91	17.0460%	15.7291%
39	1.2349%	1.1939%	92	19.0878%	17.1860%
40	1.2599%	1.2249%	93	21.0868%	18.5029%
41	1.2862%	1.2570%	94	23.0794%	19.6588%
42	1.3485%	1.2982%	95	25.0984%	21.1183%
43	1.4139%	1.3497%	96	26.9216%	22.4310%
44	1.4825%	1.4058%	97	28.6226%	23.5901%
45	1.5544%	1.4809%	98	30.2699%	24.4460%
46	1.6298%	1.5639%	99	31.6634%	24.9756%
47	1.7087%	1.6535%	100	32.8016%	25.0896%
48	1.7915%	1.7359%	101	34.4271%	26.0668%
49	1.8784%	1.8218%	102	35.8284%	27.2107%
50	2.0069%	1.8919%	103	37.0944%	28.5630%
51	2.1863%	1.9830%	104	38.1311%	30.0929%
52	2.3750%	2.0502%	105	38.8672%	31.7431%
53	2.5726%	2.1047%	106	39.2392%	33.4756%
54	2.7749%	2.1904%	107	39.4052%	35.2496%
55	2.9761%	2.2636%	108	39.5838%	37.0164%
56	3.0547%	2.3429%	109	39.7590%	38.7265%
57	3.1163%	2.4285%	110	50.0000%	50.0000%
58	3.1599%	2.5412%	111	50.0000%	50.0000%
59	3.1868%	2.5588%	112	50.0000%	50.0000%
60	3.2020%	2.5795%	113	50.0000%	50.0000%
61	3.2829%	2.6067%	114	50.0000%	50.0000%
62	3.3636%	2.6272%	115	50.0000%	50.0000%
63	3.4522%	2.6579%	116	50.0000%	50.0000%
64	3.5511%	2.7759%	117	50.0000%	50.0000%
65	3.6650%	2.8107%	118	50.0000%	50.0000%
66	3.6789%	2.8328%	119	50.0000%	50.0000%
67	3.7049%	2.8725%	120	100.0000%	100.0000%

Table XII-6
Disabled Retiree Mortality Rates (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR DISABLED RETIREES:
HOUSING POLICE AND TRANSIT POLICE
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.0138%	0.0095%	68	1.8368%	1.2141%
16	0.0187%	0.0117%	69	2.0342%	1.3912%
17	0.0252%	0.0127%	70	2.2544%	1.5837%
18	0.0301%	0.0148%	71	2.5045%	1.7848%
19	0.0334%	0.0159%	72	2.7644%	1.9944%
20	0.0347%	0.0168%	73	3.0535%	2.2258%
21	0.0371%	0.0185%	74	3.3359%	2.4880%
22	0.0402%	0.0205%	75	3.6300%	2.7766%
23	0.0431%	0.0227%	76	4.1253%	3.0785%
24	0.0467%	0.0251%	77	4.6178%	3.3525%
25	0.0503%	0.0274%	78	5.1289%	3.6752%
26	0.0544%	0.0298%	79	5.5682%	4.1794%
27	0.0586%	0.0322%	80	6.0116%	4.7030%
28	0.0633%	0.0348%	81	6.7832%	5.2484%
29	0.0681%	0.0374%	82	7.6009%	5.7185%
30	0.0730%	0.0400%	83	8.4279%	6.1948%
31	0.0781%	0.0425%	84	9.2040%	7.0110%
32	0.0830%	0.0450%	85	10.1002%	7.8321%
33	0.0898%	0.0476%	86	11.5115%	8.6046%
34	0.0933%	0.0491%	87	12.7944%	9.3702%
35	0.0972%	0.0512%	88	14.1662%	10.2595%
36	0.1019%	0.0534%	89	15.7578%	11.5941%
37	0.1080%	0.0563%	90	17.3856%	12.9378%
38	0.1153%	0.0590%	91	19.0388%	14.3081%
39	0.1286%	0.0629%	92	20.6360%	15.3704%
40	0.1417%	0.0688%	93	22.5718%	16.4875%
41	0.1550%	0.0766%	94	24.4562%	17.6613%
42	0.1690%	0.0865%	95	26.1404%	18.7606%
43	0.1838%	0.0992%	96	28.0695%	19.7397%
44	0.1997%	0.1148%	97	29.6855%	20.6328%
45	0.2170%	0.1330%	98	30.9177%	21.2676%
46	0.2279%	0.1538%	99	32.6552%	21.8544%
47	0.2387%	0.1769%	100	33.9880%	22.1859%
48	0.2492%	0.2017%	101	34.9681%	23.0680%
49	0.3237%	0.2316%	102	35.9346%	24.0803%
50	0.3948%	0.2637%	103	36.6434%	25.2770%
51	0.4620%	0.2870%	104	37.3834%	26.6309%
52	0.5249%	0.3323%	105	38.1051%	28.0912%
53	0.5528%	0.3677%	106	38.4698%	29.6244%
54	0.5891%	0.4196%	107	38.6325%	31.1943%
55	0.6260%	0.4722%	108	38.8076%	32.7579%
56	0.6814%	0.5135%	109	38.9794%	34.2712%
57	0.7288%	0.5258%	110	50.0000%	50.0000%
58	0.7710%	0.5452%	111	50.0000%	50.0000%
59	0.8525%	0.5823%	112	50.0000%	50.0000%
60	0.9273%	0.6153%	113	50.0000%	50.0000%
61	1.0007%	0.6486%	114	50.0000%	50.0000%
62	1.0735%	0.7169%	115	50.0000%	50.0000%
63	1.1411%	0.7851%	116	50.0000%	50.0000%
64	1.2250%	0.8630%	117	50.0000%	50.0000%
65	1.3055%	0.9419%	118	50.0000%	50.0000%
66	1.4653%	1.0252%	119	50.0000%	50.0000%
67	1.6473%	1.1204%	120	100.0000%	100.0000%

Table XII-7
Beneficiary Mortality Rates

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

PROBABILITIES OF MORTALITY FOR BENEFICIARIES: ALL PLAN GROUPS
BASE RATES

Age	Males	Females	Age	Males	Females
15	0.0105%	0.0092%	68	1.8256%	1.3605%
16	0.0142%	0.0112%	69	1.9386%	1.4332%
17	0.0191%	0.0122%	70	2.0542%	1.5007%
18	0.0222%	0.0133%	71	2.2359%	1.6745%
19	0.0240%	0.0143%	72	2.4230%	1.8463%
20	0.0251%	0.0145%	73	2.6165%	2.0157%
21	0.0268%	0.0153%	74	2.8157%	2.1838%
22	0.0284%	0.0161%	75	3.0220%	2.3492%
23	0.0301%	0.0171%	76	3.4928%	2.6652%
24	0.0315%	0.0183%	77	3.9787%	2.9831%
25	0.0327%	0.0195%	78	4.4792%	3.3011%
26	0.0342%	0.0208%	79	4.9963%	3.6207%
27	0.0354%	0.0221%	80	5.5282%	3.9391%
28	0.0371%	0.0236%	81	6.1051%	4.4386%
29	0.0394%	0.0252%	82	6.6894%	4.9473%
30	0.0427%	0.0270%	83	7.2805%	5.4665%
31	0.0495%	0.0330%	84	7.8749%	5.9942%
32	0.0562%	0.0384%	85	8.4753%	6.5354%
33	0.0625%	0.0431%	86	9.6136%	7.4659%
34	0.0682%	0.0471%	87	10.8005%	8.3995%
35	0.0743%	0.0511%	88	12.0443%	9.3428%
36	0.0780%	0.0542%	89	13.3397%	10.2918%
37	0.0818%	0.0579%	90	14.6958%	11.2477%
38	0.0861%	0.0618%	91	16.4185%	12.8868%
39	0.0917%	0.0666%	92	18.1416%	14.4887%
40	0.0997%	0.0719%	93	19.8574%	16.0801%
41	0.1394%	0.0775%	94	21.6187%	17.5854%
42	0.1774%	0.0859%	95	23.5884%	19.0626%
43	0.2143%	0.0968%	96	25.4266%	20.2474%
44	0.2507%	0.1111%	97	27.2119%	21.2937%
45	0.2875%	0.1287%	98	29.0202%	22.0663%
46	0.3207%	0.1501%	99	30.6654%	22.5443%
47	0.3534%	0.1748%	100	32.1584%	22.6473%
48	0.3849%	0.2022%	101	33.7521%	23.5294%
49	0.4150%	0.2319%	102	35.1259%	24.5619%
50	0.4431%	0.2633%	103	36.3671%	25.7825%
51	0.5156%	0.2999%	104	37.3834%	27.1635%
52	0.5928%	0.3376%	105	38.1051%	28.6530%
53	0.6740%	0.3762%	106	38.4698%	30.2169%
54	0.7583%	0.4151%	107	38.6325%	31.8182%
55	0.8440%	0.4540%	108	38.8076%	33.4131%
56	0.9048%	0.5132%	109	38.9794%	34.9566%
57	0.9604%	0.5735%	110	50.0000%	50.0000%
58	1.0101%	0.6353%	111	50.0000%	50.0000%
59	1.0536%	0.6981%	112	50.0000%	50.0000%
60	1.0919%	0.7631%	113	50.0000%	50.0000%
61	1.1835%	0.8329%	114	50.0000%	50.0000%
62	1.2676%	0.8908%	115	50.0000%	50.0000%
63	1.3473%	0.9493%	116	50.0000%	50.0000%
64	1.4238%	1.0146%	117	50.0000%	50.0000%
65	1.4985%	1.0876%	118	50.0000%	50.0000%
66	1.6059%	1.1681%	119	50.0000%	50.0000%
67	1.7146%	1.2609%	120	100.0000%	100.0000%

Table XII-8
Salary Scale

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

ANNUAL RATES OF MERIT AND SALARY INCREASE

Years of Service	General		Correction		Sanitation		TBTA		Transit	
	Merit Increase	Salary Increase[1]	Merit Increase	Salary Increase[1]	Merit Increase	Salary Increase[1]	Merit Increase	Salary Increase[1]	Merit Increase	Salary Increase[1]
0	6.00%	9.00%	11.00%	14.00%	4.00%	7.00%	8.00%	11.00%	16.00%	19.00%
1	5.00%	8.00%	10.00%	13.00%	6.00%	9.00%	7.00%	10.00%	11.00%	14.00%
2	4.00%	7.00%	9.00%	12.00%	8.00%	11.00%	6.00%	9.00%	7.00%	10.00%
3	3.00%	6.00%	8.00%	11.00%	13.00%	16.00%	5.00%	8.00%	6.00%	9.00%
4	2.50%	5.50%	46.00%	49.00%	22.00%	25.00%	4.00%	7.00%	3.00%	6.00%
5	2.00%	5.00%	1.20%	4.20%	15.00%	18.00%	3.00%	6.00%	2.00%	5.00%
6	1.90%	4.90%	1.40%	4.40%	1.00%	4.00%	2.00%	5.00%	1.50%	4.50%
7	1.80%	4.80%	1.60%	4.60%	1.10%	4.10%	1.00%	4.00%	1.50%	4.50%
8	1.70%	4.70%	1.80%	4.80%	1.20%	4.20%	0.80%	3.80%	1.50%	4.50%
9	1.60%	4.60%	3.20%	6.20%	2.10%	5.10%	0.60%	3.60%	1.50%	4.50%
10	1.50%	4.50%	2.00%	5.00%	1.40%	4.40%	0.50%	3.50%	1.50%	4.50%
11	1.50%	4.50%	1.90%	4.90%	1.30%	4.30%	0.50%	3.50%	1.50%	4.50%
12	1.50%	4.50%	1.80%	4.80%	1.20%	4.20%	0.50%	3.50%	1.50%	4.50%
13	1.50%	4.50%	1.70%	4.70%	1.10%	4.10%	0.50%	3.50%	1.50%	4.50%
14	1.50%	4.50%	2.90%	5.90%	2.00%	5.00%	0.50%	3.50%	1.50%	4.50%
15	1.50%	4.50%	1.50%	4.50%	1.00%	4.00%	0.50%	3.50%	1.50%	4.50%
16	1.45%	4.45%	1.40%	4.40%	1.00%	4.00%	0.50%	3.50%	1.50%	4.50%
17	1.40%	4.40%	1.30%	4.30%	0.90%	3.90%	0.50%	3.50%	1.50%	4.50%
18	1.35%	4.35%	1.20%	4.20%	0.80%	3.80%	0.50%	3.50%	1.50%	4.50%
19	1.30%	4.30%	2.40%	5.40%	1.60%	4.60%	0.50%	3.50%	1.50%	4.50%
20	1.25%	4.25%	1.00%	4.00%	0.70%	3.70%	0.50%	3.50%	1.50%	4.50%
21	1.20%	4.20%	0.90%	3.90%	0.60%	3.60%	0.50%	3.50%	1.50%	4.50%
22	1.15%	4.15%	0.80%	3.80%	0.50%	3.50%	0.50%	3.50%	1.50%	4.50%
23	1.10%	4.10%	0.70%	3.70%	0.50%	3.50%	0.50%	3.50%	1.00%	4.00%
24	1.05%	4.05%	0.60%	3.60%	0.50%	3.50%	0.50%	3.50%	1.00%	4.00%
≥ 25	1.00%	4.00%	0.50%	3.50%	0.50%	3.50%	0.50%	3.50%	1.00%	4.00%

[1] Salary Increase is General Wage Increase of 3.00% plus the Merit Increase.

Table XII-9
Overtime

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM OVERTIME ASSUMPTION: GROUPS OTHER THAN CORRECTION		
Plan Group	**Overtime Type**	**Assumption**
General	All Overtime	5.00%
Sanitation	Baseline	12.00%
	Dual Service	16.00%
	Dual Disability	8.00%
TBTA	Baseline	20.00%
	Dual Service	24.00%
	Dual Disability	18.00%
Transit	Baseline	8.00%
	Dual Service	10.00%
	Dual Disability	6.00%

Table XII-9
Overtime (cont'd)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM OVERTIME ASSUMPTION: CORRECTION		
	Correction	
Years of Service	**Baseline and Dual Service**	**Dual Disability**
0-15	15.00%	8.00%
16	16.50%	9.00%
17	18.00%	10.00%
18	19.50%	11.00%
19	21.00%	12.00%
20+	22.50%	13.00%

Additional Assumptions and Methods

1. **Actuarial Interest Rate (AIR)**: 7.0% per annum, net of investment expenses.

2. **Mortality Assumption**: The mortality base tables are projected from 2012 using mortality improvement table MP-2020. The post-commencement base tables are also multiplied by adjustment factors to convert them from lives-weighted to amounts-weighted tables to account for socioeconomic effects on mortality. The adjustment factors used are as follows:

Group	Service Retiree Adjustment Factor		Disabled Retiree Adjustment Factor		Beneficiary Adjustment Factor	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
General	0.890	0.951	0.962	1.000	0.890	0.951
Correction	0.890	0.873	0.835	0.770	0.890	0.951
Sanitation	0.940	0.922	1.000	1.000	0.890	0.951
Transit/TBTA	0.950	1.098	1.010	0.900	0.890	0.951
Housing Police/Transit Police	0.910	0.910	0.876	0.876	0.890	0.951

3. **Marital Assumption**: All active members are assumed to be married, male employees are assumed to be four years older than their female spouses, and female employees are assumed to be two years younger than their male spouses.

4. **Credited Service:** Calculated in whole year increments for valuation purposes.

5. **Loans**: Except for Death Benefits, it is assumed that eligible members take a loan at retirement equal to 25% of their member contribution balances.

6. **Inflation**: The long-term Consumer Price Index inflation rate is assumed to be 2.5% per year. AutoCOLA is assumed to be 1.5% per year, and Escalation is assumed to be 2.5% per year. Beneficiaries receiving Special Accidental Death Benefits are assumed to receive increases at 3.0% per year. The assumed 30-year Treasury rate for annuitization of outstanding loans at retirement is 3.5%.

7. **Form of Payment**: Retiring members are assumed to elect the Maximum Retirement Allowance (i.e., single life annuity) form of payment.

8. **Actuarial Asset Valuation Method (AAVM):**

   The Actuary reset the Actuarial Value of Assets to Market Value as of June 30, 2019.

   Beginning with the June 30, 2020 actuarial valuation, the asset smoothing method recognizes investment returns greater or less than expected over a period of five years, phasing these gains and losses into AVA at a rate of 20% per year.

   The expected investment return is derived using the Actuarial Interest Rate of 7%, beginning-of-fiscal-year MVA, and net cash flows which are assumed to occur midyear.

   The AVA is further constrained to be within a corridor of 80% to 120% of the MVA.

   For more information, see SECTION II – MARKET AND ACTUARIAL VALUES OF ASSETS.

9. **Actuarial Cost Method**: The Entry Age Normal (EAN) cost method of funding is used by the Actuary to calculate the Employer Contribution.

   Under this method, the Present Value (PV) of Future Benefits (PVFB) of each individual included in the actuarial valuation is allocated on a level basis over the expected earnings (or service) of the individual between entry age and assumed exit age(s). The employer portion of this PVFB allocated to a valuation year is the Normal Cost. The portion of this PVFB not provided for at a valuation date by the PV of Future Normal Costs or future member contributions is the Accrued Liability (AL).

   The excess, if any, of the AL over the Actuarial Value of Assets (AVA) is the Unfunded Accrued Liability (UAL).

   Under this method, actuarial gains and losses, as they occur, reduce and increase the UAL, respectively, and are explicitly identified and amortized. Increases or decreases in obligations due to benefit changes, actuarial assumption changes, and actuarial method changes are also explicitly identified and amortized.

   The explicit UALs that are developed under EAN each year are financed over fixed periods. For more information see Page 12.

   Under EAN, the Normal Cost as a percentage of pay remains stable by individual and changes gradually over time for the entire plan as the characteristics of the group changes (e.g., more Tier 6 active members decrease the average Normal Cost as a percentage of pay).

10. **Allowances for Administrative Expenses**: The Employer Contribution for a fiscal year is increased by the interest-adjusted amount of administrative expenses paid from NYCERS during the second prior fiscal year.

11. **One-Year Lag Methodology (OYLM)**: One-Year Lag Methodology uses a June 30, XX valuation date to determine Fiscal Year XX+2 employer contributions as follows:

    a. Normal Cost

       The normal cost as of July 1, XX (calculated in the June 30, XX valuation) is rolled forward with the assumed AIR of 7.0% to the mid-point of Fiscal Year XX+2 (i.e., December 31, XX+1).

    b. Administrative Expenses

       A reimbursement for administrative expenses deducted from plan assets during the year ending June 30, XX is rolled forward with the assumed AIR of 7.0% to the mid-point of Fiscal Year XX+2.

    c. UAL Payments

       New amortization bases for gains and losses, method and assumption changes, and any benefit improvements are established each year XX such that the UAL as of June 30, XX is equal to the sum of the:

       1) Outstanding prior amortization bases;

       2) Unpaid prior year normal cost with interest;

       3) Unreimbursed administrative expenses with interest, and

       4) New amortization bases.

       The UAL payment is the sum of the payments on the amortization bases scheduled for Fiscal Year XX+2.

12. **Excess Benefit Plan:** The valuation excludes liabilities and costs, if any, associated with benefits in excess of the Internal Revenue Code Section 415 limitation.

13. **Group Life Insurance Plan:** The Employer Contribution includes an amount to fund the Group Life Insurance Plan. The Group Life Insurance amounts used in the valuation are as follows:

Group	Amount
General	
EMT	40,000
IDA	50,000
DIS	25,000
SPO,AUT,DSH,PCT	34,000
All Others	31,000
Correction	0
Sanitation	4,000
TBTA	16,000
Transit	1,000

14. **Obligors Allocation:** By statute, employer contributions are determined for NYCERS in total.

For purposes of allocating the employer contributions to the Obligors, the following are determined explicitly for each Obligor:

a. Present Value of Future Benefits

b. Present Value of Future Salaries

c. Entry Age Normal Accrued Liability

d. Present Value of Future Normal Costs

e. Present Value of Future Employee Contributions

f. Normal Cost

Administrative Expenses are allocated to each Obligor, pro-rata, in proportion to active member valuation salaries.

Actuarial Value of Assets are determined explicitly for each Obligor.

The contribution components are then determined for each Obligor.

SECTION XIII – SUMMARY OF DEMOGRAPHIC DATA

The June 30, 2023 and June 30, 2022 actuarial valuations are based upon census data as of those dates, including the data for the cost for certain cases processed through June 30, 2023 due to Gulino settlement, submitted by the Plan's administrative staff, by the participating employers' payroll facilities, by the Office of the Payroll Administration, and by the Financial Information Services Agency. Financial information was provided by the Office of the Comptroller as of June 30, 2023 and June 30, 2022.

Beginning at June 30, 2020, NYCERS members who are no longer on payroll but not otherwise classified have been classified as Terminated Nonvested, or Deferred Vested members, using actuarial judgement and consideration of available data, including leave of absence data when available.

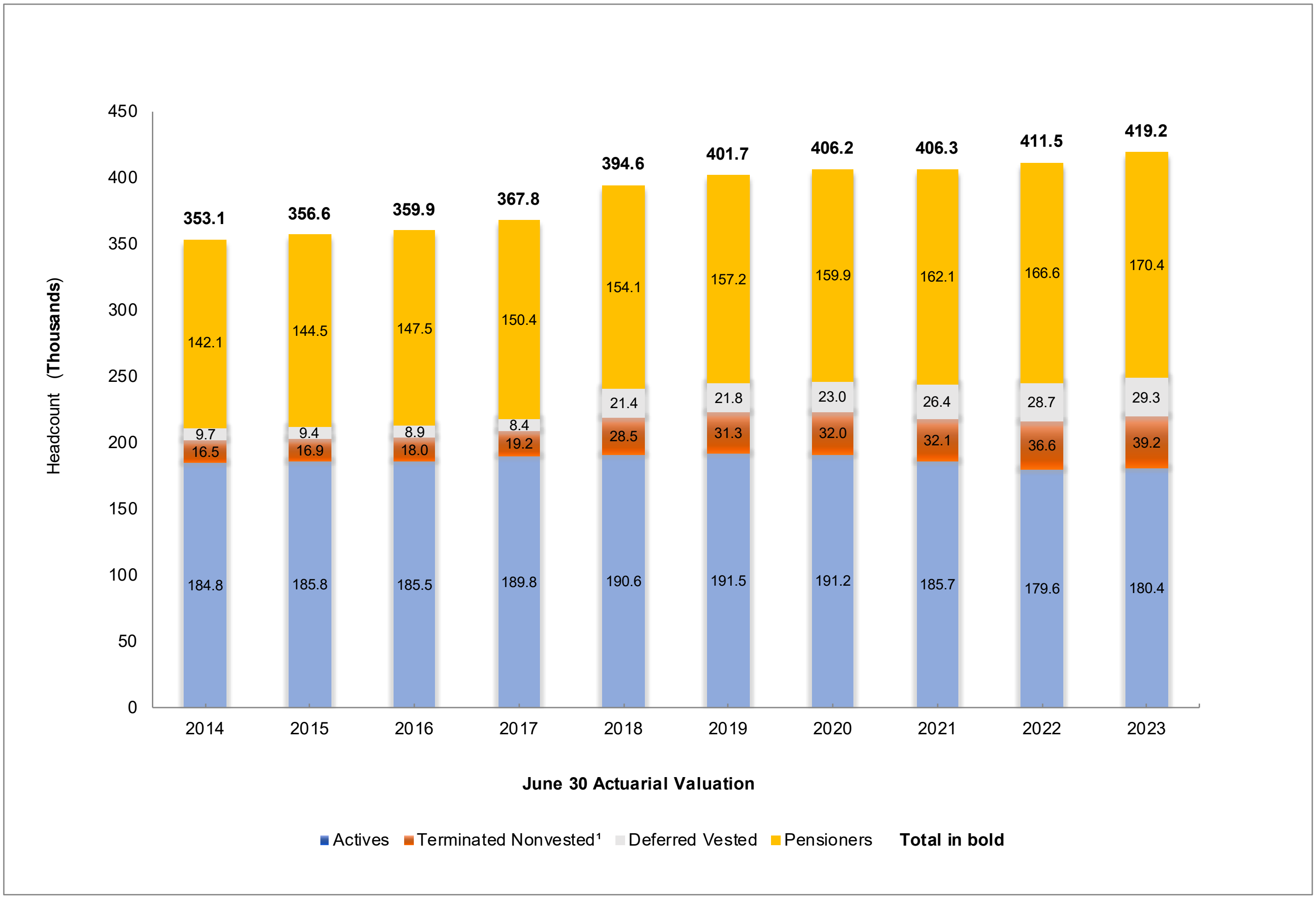
Consistent with Actuarial Standards of Practice, the Office of the Actuary has reviewed census data and financial information for consistency and reasonability but has not audited it. The accuracy of the results and calculations contained in this Report are dependent on the accuracy of this census data and financial information. To the extent any such data or information provided is materially inaccurate or incomplete, the results contained herein will require revision.

Table XIII-1
Status Reconciliation

CHANGES IN THE NUMBER OF ACTIVES AND PENSIONERS DURING THE FISCAL YEAR CLASSIFIED BY STATUS

Status	(1) Active Members	(2) Terminated Nonvested	(3) Deferred Vested	(4) Service Pension	(5) Ordinary Disability	(6) Accidental Disability	(7) Accidental Death	(8) Other Beneficiary	(9) Pensioners Subtotal (4) to (8)	(10) Grand Total (1) + (2) + (3) + (9)
Number at June 30, 2022	**179,596**	**36,636**	**28,684**	136,565	9,016	4,657	433	15,960	**166,631**	**411,547**
New Entrants	**13,595**	**794**	**0**	0	0	0	0	0	**0**	**14,389**
Rehires	**5,384**	**(1,833)**	**(2,035)**	0	0	0	0	0	**0**	**1,516**
Leaving Active Payroll	**(5,781)**	**5,781**	**0**	0	0	0	0	0	**0**	**0**
Vested Termination	**(5,620)**	**(237)**	**5,857**	0	0	0	0	0	**0**	**0**
Non-Vested Termination / Cashout	**(784)**	**(1,903)**	**(521)**	0	0	0	0	0	**0**	**(3,208)**
Accidental Death	**(2)**	**0**	**(10)**	0	0	0	12	0	**12**	**0**
Ordinary Death	**(287)**	**(28)**	**(152)**	0	0	0	0	0	**0**	**(467)**
Service Retirement	**(5,583)**	**(21)**	**(2,358)**	7,962	0	0	0	0	**7,962**	**0**
Ordinary Disability Retirement	**(63)**	**(1)**	**(164)**	0	228	0	0	0	**228**	**0**
Accidental Disability Retirement	**(101)**	**(4)**	**(33)**	0	0	138	0	0	**138**	**0**
Reclassifications	**0**	**0**	**0**	(124)	63	61	9	(9)	**0**	**0**
Death with Beneficiary	**0**	**0**	**0**	(839)	(64)	(13)	0	916	**0**	**0**
Death without Beneficiary	**0**	**0**	**0**	(3,436)	(263)	(133)	(6)	(910)	**(4,748)**	**(4,748)**
Pension Payroll Adjustments	**0**	**0**	**4**	(89)	(4)	(2)	22	246	**173**	**177**
Net Change	**758**	**2,548**	**588**	3,474	(40)	51	37	243	**3,765**	**7,659**
Number at June 30, 2023	**180,354**	**39,184**	**29,272**	140,039	8,976	4,708	470	16,203	**170,396**	**419,206**

Graph XIII-2
Headcount Summary by Status



[1] Actives Off Payroll prior to June 30, 2020.

Table XIII-3
Summary of Active Membership

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM ACTIVE MEMBERS INCLUDED IN THE JUNE 30, 2023 AND THE JUNE 30, 2022 ACTUARIAL VALUATIONS		
	June 30, 2023	**June 30, 2022**
Number		
Males	99,590	99,092
Females	80,764	80,504
Total	180,354	179,596
Annual Salary[1]		
Males	$ 9,316,058,251	$ 9,001,226,389
Females	6,702,518,032	6,466,547,281
Total	$ 16,018,576,283	$ 15,467,773,670
Average Salary[1]		
Males	$ 93,544	$ 90,837
Females	82,989	80,326
Total Average	$ 88,817	$ 86,125
Average Age		
Males	47.7	47.7
Females	48.0	48.0
Total Average	47.8	47.9
Average Past Service		
Males	11.8	12.1
Females	11.7	12.0
Total Average	11.8	12.0

[1] Salaries shown are base salary plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effectve dates, if any.

Graph XIII-4
Active Membership by Tier

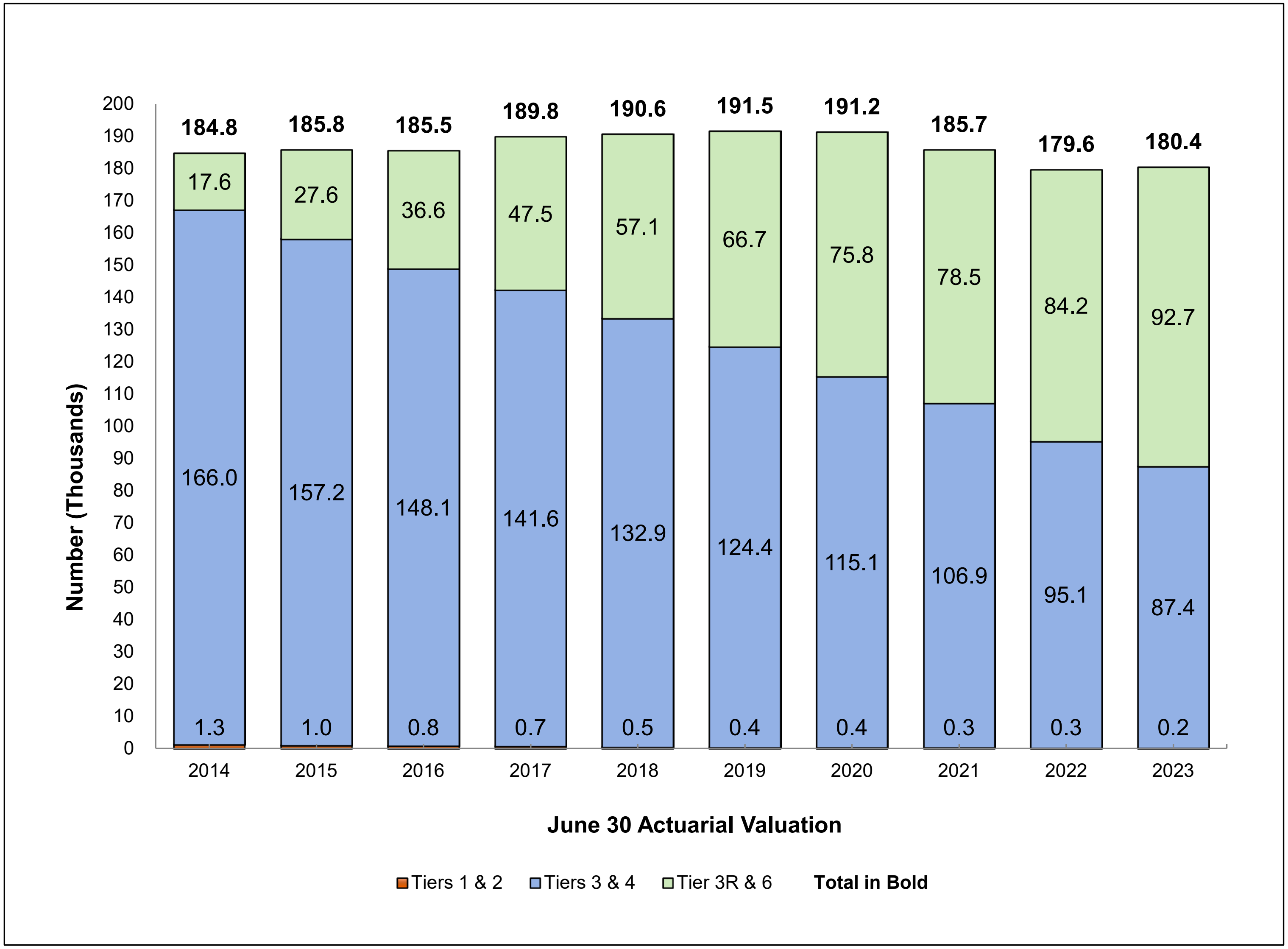


Table XIII-5
Schedule of Active Member Salary Data

June 30 Actuarial Valuation	Number	Annual Salary	Average Annual Salary	Percentage Increase/ (Decrease) In Avg. Salary
2014	184,762	$12,672,386,846	$68,588	0.9%
2015	185,758	12,917,466,528	69,539	1.4%
2016	185,481	13,216,539,355	71,255	2.5%
2017	189,792	14,065,241,654	74,109	4.0%
2018	190,572	14,459,118,057	75,872	2.4%
2019	191,501	14,981,461,175	78,232	3.1%
2020	191,237	15,289,347,449	79,950	2.2%
2021	185,732	15,294,725,839	82,348	3.0%
2022	179,596	15,467,773,670	86,125	4.6%
2023	180,354	16,018,576,283	88,817	3.1%

Salaries shown are base salary plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in census data.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023

Transit Authority

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	17	0	0	0	0	0	0	0	0	**17**
20 TO 24	366	69	0	0	0	0	0	0	0	**435**
25 TO 29	967	259	1	0	0	0	0	0	0	**1,227**
30 TO 34	1,818	1,155	114	20	0	0	0	0	0	**3,107**
35 TO 39	1,801	2,013	618	132	12	0	0	0	0	**4,576**
40 TO 44	1,324	1,985	978	545	145	0	0	0	0	**4,977**
45 TO 49	954	1,633	979	940	613	73	2	0	0	**5,194**
50 TO 54	657	1,354	926	1,139	1,179	551	178	10	0	**5,994**
55 TO 59	430	1,117	793	1,173	1,399	674	445	103	1	**6,135**
60 TO 64	202	685	619	831	1,093	482	313	195	31	**4,451**
65 TO 69	53	311	287	364	426	195	103	91	42	**1,872**
70 & UP	10	67	83	132	156	70	40	28	45	**631**
TOTAL	**8,599**	**10,648**	**5,398**	**5,276**	**5,023**	**2,045**	**1,081**	**427**	**119**	**38,616**
SALARIES (IN THOUSANDS):										
UNDER 20	922	0	0	0	0	0	0	0	0	**922**
20 TO 24	22,178	6,321	0	0	0	0	0	0	0	**28,499**
25 TO 29	65,481	22,803	81	0	0	0	0	0	0	**88,364**
30 TO 34	129,670	101,743	11,022	2,341	0	0	0	0	0	**244,777**
35 TO 39	131,349	180,174	58,153	13,592	1,410	0	0	0	0	**384,679**
40 TO 44	97,828	178,588	93,633	55,309	15,929	0	0	0	0	**441,287**
45 TO 49	69,973	146,912	93,013	94,140	64,976	7,884	225	0	0	**477,123**
50 TO 54	48,885	122,986	88,031	112,796	122,810	59,316	20,088	1,322	0	**576,232**
55 TO 59	32,754	101,440	75,204	116,132	143,239	72,612	50,122	12,212	115	**603,831**
60 TO 64	15,552	63,075	57,807	80,888	109,772	50,905	34,888	22,626	3,293	**438,806**
65 TO 69	4,444	28,037	26,994	34,962	42,961	20,018	10,830	10,806	4,948	**184,000**
70 & UP	993	6,107	7,698	12,529	14,751	7,179	3,993	3,093	5,086	**61,427**
TOTAL [1]	**620,029**	**958,185**	**511,637**	**522,688**	**515,847**	**217,915**	**120,145**	**50,059**	**13,442**	**3,529,948**
AVERAGE SALARIES: [2]										
UNDER 20	54,242	0	0	0	0	0	0	0	0	**54,242**
20 TO 24	60,596	91,606	0	0	0	0	0	0	0	**65,515**
25 TO 29	67,715	88,042	80,578	0	0	0	0	0	0	**72,016**
30 TO 34	71,326	88,089	96,688	117,048	0	0	0	0	0	**78,782**
35 TO 39	72,931	89,505	94,099	102,969	117,516	0	0	0	0	**84,064**
40 TO 44	73,888	89,969	95,740	101,484	109,857	0	0	0	0	**88,665**
45 TO 49	73,347	89,964	95,009	100,149	105,997	108,001	112,257	0	0	**91,860**
50 TO 54	74,406	90,831	95,066	99,030	104,164	107,652	112,852	132,245	0	**96,135**
55 TO 59	76,173	90,814	94,835	99,005	102,387	107,732	112,634	118,562	115,103	**98,424**
60 TO 64	76,990	92,081	93,388	97,338	100,431	105,613	111,463	116,033	106,217	**98,586**
65 TO 69	83,841	90,152	94,056	96,051	100,846	102,657	105,148	118,747	117,815	**98,291**
70 & UP	99,291	91,142	92,743	94,913	94,555	102,562	99,820	110,452	113,012	**97,348**
TOTAL	**72,105**	**89,987**	**94,783**	**99,069**	**102,697**	**106,560**	**111,143**	**117,235**	**112,955**	**91,412**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

Housing Authority

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	2	0	0	0	0	0	0	0	0	**2**
20 TO 24	76	1	0	0	0	0	0	0	0	**77**
25 TO 29	269	58	1	0	0	0	0	0	0	**328**
30 TO 34	474	214	92	3	0	0	0	0	0	**783**
35 TO 39	446	270	237	79	0	0	0	0	0	**1,032**
40 TO 44	388	256	220	117	101	1	0	0	0	**1,083**
45 TO 49	326	226	233	140	246	103	3	0	0	**1,277**
50 TO 54	248	176	190	167	283	281	150	6	0	**1,501**
55 TO 59	189	162	181	135	226	221	283	77	0	**1,474**
60 TO 64	105	103	117	92	193	122	150	75	11	**968**
65 TO 69	36	34	49	30	62	23	25	29	14	**302**
70 & UP	10	13	7	12	25	10	11	8	8	**104**
TOTAL	**2,569**	**1,513**	**1,327**	**775**	**1,136**	**761**	**622**	**195**	**33**	**8,931**
SALARIES (IN THOUSANDS):										
UNDER 20	74	0	0	0	0	0	0	0	0	**74**
20 TO 24	3,915	59	0	0	0	0	0	0	0	**3,975**
25 TO 29	15,756	3,904	64	0	0	0	0	0	0	**19,723**
30 TO 34	30,064	15,645	6,423	186	0	0	0	0	0	**52,319**
35 TO 39	29,950	20,276	18,112	6,501	0	0	0	0	0	**74,839**
40 TO 44	25,525	20,351	18,891	10,467	8,014	110	0	0	0	**83,357**
45 TO 49	21,856	18,124	19,874	13,245	21,602	9,949	228	0	0	**104,878**
50 TO 54	17,270	15,170	17,048	14,657	24,590	26,083	14,400	698	0	**129,916**
55 TO 59	13,828	13,060	15,199	11,378	18,683	19,448	27,135	7,876	0	**126,607**
60 TO 64	7,459	8,384	9,611	7,483	16,269	11,478	14,179	7,306	1,048	**83,217**
65 TO 69	2,749	2,654	3,934	2,423	5,599	2,297	2,398	2,713	1,264	**26,030**
70 & UP	298	1,058	739	1,070	2,153	976	891	747	623	**8,554**
TOTAL [1]	**168,743**	**118,686**	**109,895**	**67,409**	**96,910**	**70,342**	**59,231**	**19,340**	**2,934**	**713,489**
AVERAGE SALARIES: [2]										
UNDER 20	36,951	0	0	0	0	0	0	0	0	**36,951**
20 TO 24	51,516	59,388	0	0	0	0	0	0	0	**51,618**
25 TO 29	58,572	67,306	63,754	0	0	0	0	0	0	**60,132**
30 TO 34	63,426	73,108	69,819	62,103	0	0	0	0	0	**66,818**
35 TO 39	67,153	75,098	76,422	82,285	0	0	0	0	0	**72,519**
40 TO 44	65,785	79,496	85,866	89,457	79,347	110,392	0	0	0	**76,969**
45 TO 49	67,042	80,196	85,297	94,606	87,814	96,595	75,955	0	0	**82,129**
50 TO 54	69,635	86,196	89,726	87,766	86,890	92,823	96,002	116,292	0	**86,553**
55 TO 59	73,164	80,615	83,974	84,285	82,667	87,999	95,882	102,289	0	**85,893**
60 TO 64	71,042	81,394	82,145	81,341	84,296	94,082	94,529	97,409	95,244	**85,968**
65 TO 69	76,351	78,053	80,279	80,750	90,300	99,884	95,932	93,561	90,281	**86,192**
70 & UP	29,796	81,383	105,564	89,156	86,138	97,559	80,968	93,364	77,818	**82,249**
TOTAL	**65,684**	**78,444**	**82,814**	**86,980**	**85,308**	**92,433**	**95,227**	**99,179**	**88,914**	**79,889**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

Health and Hospitals Corporation

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	1	0	0	0	0	0	0	0	0	**1**
20 TO 24	218	0	0	0	0	0	0	0	0	**218**
25 TO 29	1,216	37	0	0	0	0	0	0	0	**1,253**
30 TO 34	2,074	385	32	0	0	0	0	0	0	**2,491**
35 TO 39	2,139	831	317	55	0	0	0	0	0	**3,342**
40 TO 44	1,985	920	597	314	45	1	0	0	0	**3,862**
45 TO 49	1,674	917	737	524	244	18	0	0	0	**4,114**
50 TO 54	1,375	879	774	756	424	157	61	1	0	**4,427**
55 TO 59	1,030	802	841	857	615	395	303	46	0	**4,889**
60 TO 64	652	617	675	697	490	371	341	154	15	**4,012**
65 TO 69	241	257	314	286	221	140	126	77	42	**1,704**
70 & UP	43	75	115	108	83	54	52	35	36	**601**
TOTAL	**12,648**	**5,720**	**4,402**	**3,597**	**2,122**	**1,136**	**883**	**313**	**93**	**30,914**
SALARIES (IN THOUSANDS):										
UNDER 20	47	0	0	0	0	0	0	0	0	**47**
20 TO 24	12,875	0	0	0	0	0	0	0	0	**12,875**
25 TO 29	89,341	3,190	0	0	0	0	0	0	0	**92,531**
30 TO 34	166,664	35,847	2,797	0	0	0	0	0	0	**205,308**
35 TO 39	174,808	76,384	29,911	5,255	0	0	0	0	0	**286,359**
40 TO 44	157,155	81,975	54,375	28,896	4,305	98	0	0	0	**326,804**
45 TO 49	132,514	80,364	68,544	51,177	23,534	1,987	0	0	0	**358,120**
50 TO 54	111,001	76,182	68,828	73,009	41,746	17,687	6,046	142	0	**394,640**
55 TO 59	80,795	65,868	72,800	78,567	58,903	40,222	33,602	4,419	0	**435,177**
60 TO 64	51,477	53,451	57,320	61,770	45,844	37,331	36,556	16,029	1,501	**361,278**
65 TO 69	20,767	23,337	29,614	24,137	20,064	13,655	12,462	8,337	4,711	**157,086**
70 & UP	4,938	7,501	11,188	9,340	8,347	4,601	6,081	3,518	4,202	**59,715**
TOTAL [1]	**1,002,381**	**504,100**	**395,377**	**332,150**	**202,742**	**115,582**	**94,748**	**32,445**	**10,414**	**2,689,940**
AVERAGE SALARIES: [2]										
UNDER 20	47,443	0	0	0	0	0	0	0	0	**47,443**
20 TO 24	59,058	0	0	0	0	0	0	0	0	**59,058**
25 TO 29	73,471	86,205	0	0	0	0	0	0	0	**73,847**
30 TO 34	80,359	93,109	87,414	0	0	0	0	0	0	**82,420**
35 TO 39	81,724	91,918	94,357	95,551	0	0	0	0	0	**85,685**
40 TO 44	79,171	89,104	91,080	92,024	95,673	98,343	0	0	0	**84,620**
45 TO 49	79,160	87,638	93,004	97,665	96,451	110,376	0	0	0	**87,049**
50 TO 54	80,728	86,669	88,925	96,573	98,458	112,658	99,110	141,722	0	**89,144**
55 TO 59	78,442	82,130	86,564	91,677	95,777	101,828	110,899	96,070	0	**89,011**
60 TO 64	78,952	86,631	84,918	88,622	93,558	100,622	107,202	104,086	100,040	**90,049**
65 TO 69	86,172	90,806	94,314	84,394	90,787	97,539	98,908	108,272	112,176	**92,187**
70 & UP	114,828	100,011	97,285	86,478	100,565	85,206	116,946	100,526	116,719	**99,360**
TOTAL	**79,252**	**88,129**	**89,818**	**92,341**	**95,543**	**101,745**	**107,302**	**103,660**	**111,977**	**87,014**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

	Triborough Bridge and Tunnel Authority									
AGE \ SVC	**UNDER 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & UP**	**ALL YEARS**
NUMBER:										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	0	0	0	0	0	0	0	0	0	**0**
25 TO 29	9	4	0	0	0	0	0	0	0	**13**
30 TO 34	21	17	2	0	0	0	0	0	0	**40**
35 TO 39	14	34	20	6	0	0	0	0	0	**74**
40 TO 44	19	48	32	20	13	0	0	0	0	**132**
45 TO 49	14	36	58	43	63	6	0	0	0	**220**
50 TO 54	11	22	34	44	64	16	3	0	0	**194**
55 TO 59	6	11	19	31	25	15	12	3	0	**122**
60 TO 64	4	13	17	19	14	10	12	7	1	**97**
65 TO 69	0	6	3	8	9	2	3	3	1	**35**
70 & UP	0	0	4	1	3	0	4	0	3	**15**
TOTAL	**98**	**191**	**189**	**172**	**191**	**49**	**34**	**13**	**5**	**942**
SALARIES (IN THOUSANDS):										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	0	0	0	0	0	0	0	0	0	**0**
25 TO 29	771	424	0	0	0	0	0	0	0	**1,195**
30 TO 34	1,955	1,616	250	0	0	0	0	0	0	**3,821**
35 TO 39	1,393	3,802	2,316	863	0	0	0	0	0	**8,373**
40 TO 44	1,942	5,510	3,756	2,625	1,767	0	0	0	0	**15,601**
45 TO 49	1,529	4,368	6,718	5,382	8,249	776	0	0	0	**27,022**
50 TO 54	1,080	2,624	3,800	5,415	7,827	2,298	417	0	0	**23,460**
55 TO 59	669	1,282	1,964	3,817	3,332	2,036	1,567	380	0	**15,048**
60 TO 64	490	1,575	1,779	2,308	1,648	1,533	1,918	1,264	88	**12,602**
65 TO 69	0	894	411	919	996	374	472	342	125	**4,534**
70 & UP	0	0	554	77	277	0	578	0	400	**1,885**
TOTAL [1]	**9,830**	**22,095**	**21,547**	**21,405**	**24,097**	**7,017**	**4,952**	**1,985**	**614**	**113,541**
AVERAGE SALARIES: [2]										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	0	0	0	0	0	0	0	0	0	**0**
25 TO 29	85,669	106,011	0	0	0	0	0	0	0	**91,928**
30 TO 34	93,102	95,074	124,886	0	0	0	0	0	0	**95,529**
35 TO 39	99,471	111,810	115,792	143,828	0	0	0	0	0	**113,148**
40 TO 44	102,214	114,799	117,386	131,251	135,954	0	0	0	0	**118,191**
45 TO 49	109,247	121,320	115,827	125,156	130,942	129,381	0	0	0	**122,828**
50 TO 54	98,178	119,251	111,771	123,062	122,297	143,645	138,857	0	0	**120,930**
55 TO 59	111,498	116,574	103,382	123,127	133,292	135,735	130,606	126,545	0	**123,342**
60 TO 64	122,607	121,150	104,631	121,474	117,698	153,289	159,811	180,522	88,122	**129,920**
65 TO 69	0	149,065	136,938	114,877	110,718	186,775	157,483	113,876	125,435	**129,536**
70 & UP	0	0	138,380	76,709	92,250	0	144,378	0	133,365	**125,639**
TOTAL	**100,302**	**115,680**	**114,008**	**124,448**	**126,163**	**143,206**	**145,633**	**152,686**	**122,730**	**120,532**

Note: Age is nearest birthday. Service is nearest year.
[1] Total may not add due to rounding.
[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

CUNY Senior Colleges

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	14	0	0	0	0	0	0	0	0	**14**
25 TO 29	62	9	0	0	0	0	0	0	0	**71**
30 TO 34	160	95	10	0	0	0	0	0	0	**265**
35 TO 39	154	164	75	18	0	0	0	0	0	**411**
40 TO 44	101	142	84	76	13	0	0	0	0	**416**
45 TO 49	97	104	95	97	54	2	0	0	0	**449**
50 TO 54	98	100	103	112	88	37	9	0	0	**547**
55 TO 59	86	141	72	115	96	62	20	4	0	**596**
60 TO 64	72	107	78	98	85	58	29	22	4	**553**
65 TO 69	24	73	39	47	45	27	16	10	6	**287**
70 & UP	17	35	26	31	23	20	11	9	7	**179**
TOTAL	**885**	**970**	**582**	**594**	**404**	**206**	**85**	**45**	**17**	**3,788**
SALARIES (IN THOUSANDS):										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	618	0	0	0	0	0	0	0	0	**618**
25 TO 29	3,363	411	0	0	0	0	0	0	0	**3,774**
30 TO 34	8,923	5,653	784	0	0	0	0	0	0	**15,360**
35 TO 39	9,126	10,059	5,958	1,524	0	0	0	0	0	**26,667**
40 TO 44	6,687	9,518	6,094	6,469	1,029	0	0	0	0	**29,797**
45 TO 49	5,755	6,675	7,183	7,866	4,407	192	0	0	0	**32,079**
50 TO 54	5,950	6,966	7,880	8,453	7,451	3,110	603	0	0	**40,414**
55 TO 59	4,834	8,342	4,966	8,511	7,593	5,196	1,982	427	0	**41,850**
60 TO 64	4,178	6,366	5,442	6,827	6,541	4,620	2,641	1,986	408	**39,009**
65 TO 69	998	4,100	2,486	2,828	3,283	2,126	1,407	889	375	**18,492**
70 & UP	884	1,822	1,225	1,800	1,392	1,493	709	601	532	**10,458**
TOTAL [1]	**51,316**	**59,911**	**42,018**	**44,278**	**31,697**	**16,738**	**7,342**	**3,903**	**1,315**	**258,519**
AVERAGE SALARIES: [2]										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	44,131	0	0	0	0	0	0	0	0	**44,131**
25 TO 29	54,246	45,662	0	0	0	0	0	0	0	**53,158**
30 TO 34	55,768	59,507	78,436	0	0	0	0	0	0	**57,964**
35 TO 39	59,263	61,333	79,443	84,669	0	0	0	0	0	**64,884**
40 TO 44	66,206	67,026	72,552	85,120	79,160	0	0	0	0	**71,628**
45 TO 49	59,334	64,182	75,608	81,097	81,613	96,147	0	0	0	**71,445**
50 TO 54	60,715	69,659	76,501	75,477	84,672	84,067	66,984	0	0	**73,882**
55 TO 59	56,208	59,160	68,972	74,005	79,096	83,810	99,125	106,625	0	**70,219**
60 TO 64	58,023	59,495	69,769	69,666	76,954	79,651	91,066	90,273	102,048	**70,540**
65 TO 69	41,580	56,166	63,748	60,170	72,963	78,743	87,926	88,929	62,439	**64,433**
70 & UP	52,000	52,070	47,103	58,049	60,534	74,643	64,473	66,748	75,982	**58,422**
TOTAL	**57,984**	**61,764**	**72,196**	**74,543**	**78,459**	**81,251**	**86,380**	**86,723**	**77,335**	**68,247**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

All Other Non-NYC Entities

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	1	0	0	0	0	0	0	0	0	**1**
25 TO 29	4	0	0	0	0	0	0	0	0	**4**
30 TO 34	4	5	0	0	0	0	0	0	0	**9**
35 TO 39	10	3	1	0	0	0	0	0	0	**14**
40 TO 44	9	6	4	3	1	0	0	0	0	**23**
45 TO 49	6	6	5	3	0	0	0	0	0	**20**
50 TO 54	7	4	11	4	5	5	0	0	0	**36**
55 TO 59	3	0	8	10	5	3	5	1	0	**35**
60 TO 64	2	2	2	3	4	4	9	3	1	**30**
65 TO 69	1	1	2	0	2	2	3	1	0	**12**
70 & UP	0	1	1	0	0	2	1	0	0	**5**
TOTAL	**47**	**28**	**34**	**23**	**17**	**16**	**18**	**5**	**1**	**189**
SALARIES (IN THOUSANDS):										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	63	0	0	0	0	0	0	0	0	**63**
25 TO 29	341	0	0	0	0	0	0	0	0	**341**
30 TO 34	384	633	0	0	0	0	0	0	0	**1,017**
35 TO 39	1,082	430	101	0	0	0	0	0	0	**1,612**
40 TO 44	1,185	851	558	480	109	0	0	0	0	**3,182**
45 TO 49	709	797	623	301	0	0	0	0	0	**2,431**
50 TO 54	898	615	1,733	726	695	729	0	0	0	**5,397**
55 TO 59	343	0	1,158	1,177	634	449	761	160	0	**4,683**
60 TO 64	426	322	305	414	488	718	1,464	461	108	**4,706**
65 TO 69	133	69	170	0	341	303	397	182	0	**1,596**
70 & UP	0	213	173	0	0	372	94	0	0	**853**
TOTAL [1]	**5,564**	**3,930**	**4,822**	**3,098**	**2,268**	**2,572**	**2,716**	**803**	**108**	**25,880**
AVERAGE SALARIES: [2]										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	63,000	0	0	0	0	0	0	0	0	**63,000**
25 TO 29	85,151	0	0	0	0	0	0	0	0	**85,151**
30 TO 34	95,890	126,643	0	0	0	0	0	0	0	**112,975**
35 TO 39	108,169	143,185	101,177	0	0	0	0	0	0	**115,173**
40 TO 44	131,695	141,756	139,382	159,839	109,445	0	0	0	0	**138,360**
45 TO 49	118,223	132,794	124,595	100,498	0	0	0	0	0	**121,528**
50 TO 54	128,254	153,830	157,584	181,462	139,068	145,852	0	0	0	**149,916**
55 TO 59	114,458	0	144,810	117,729	126,888	149,646	152,165	159,870	0	**133,806**
60 TO 64	213,019	161,175	152,250	137,969	122,073	179,592	162,655	153,678	107,775	**156,872**
65 TO 69	133,350	68,775	85,142	0	170,328	151,561	132,462	182,087	0	**132,972**
70 & UP	0	213,465	173,250	0	0	185,941	94,041	0	0	**170,528**
TOTAL	**118,382**	**140,356**	**141,812**	**134,698**	**133,422**	**160,723**	**150,897**	**160,598**	**107,775**	**136,933**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

New York City: Sanitation

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	0	0	0	0	0	0	0	0	0	**0**
25 TO 29	215	85	0	0	0	0	0	0	0	**300**
30 TO 34	575	410	25	0	0	0	0	0	0	**1,010**
35 TO 39	514	572	370	217	1	0	0	0	0	**1,674**
40 TO 44	296	392	346	635	50	1	0	0	0	**1,720**
45 TO 49	152	239	217	596	192	21	0	0	0	**1,417**
50 TO 54	58	119	138	388	180	64	16	0	0	**963**
55 TO 59	16	58	60	208	122	47	43	8	0	**562**
60 TO 64	3	24	26	85	46	18	28	16	1	**247**
65 TO 69	0	0	2	23	6	5	11	5	5	**57**
70 & UP	0	0	1	4	2	0	1	6	4	**18**
TOTAL	**1,829**	**1,899**	**1,185**	**2,156**	**599**	**156**	**99**	**35**	**10**	**7,968**

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
SALARIES (IN THOUSANDS):										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	0	0	0	0	0	0	0	0	0	**0**
25 TO 29	13,225	8,459	0	0	0	0	0	0	0	**21,684**
30 TO 34	35,555	41,500	2,856	0	0	0	0	0	0	**79,911**
35 TO 39	32,643	60,661	43,367	27,844	121	0	0	0	0	**164,635**
40 TO 44	18,467	41,756	40,114	79,511	6,912	176	0	0	0	**186,936**
45 TO 49	9,445	25,872	25,323	74,165	26,081	2,604	0	0	0	**163,490**
50 TO 54	3,709	12,964	16,301	47,197	23,522	8,637	2,250	0	0	**114,579**
55 TO 59	1,029	6,246	7,028	25,143	15,397	6,140	6,108	1,271	0	**68,361**
60 TO 64	161	2,596	2,844	10,130	5,854	2,203	3,529	1,968	103	**29,388**
65 TO 69	0	0	244	2,651	726	651	1,332	599	685	**6,887**
70 & UP	0	0	99	424	228	0	144	854	464	**2,213**
TOTAL [1]	**114,234**	**200,052**	**138,175**	**267,065**	**78,841**	**20,410**	**13,364**	**4,692**	**1,252**	**838,085**

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
AVERAGE SALARIES: [2]										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	0	0	0	0	0	0	0	0	0	**0**
25 TO 29	61,511	99,517	0	0	0	0	0	0	0	**72,279**
30 TO 34	61,836	101,219	114,233	0	0	0	0	0	0	**79,120**
35 TO 39	63,507	106,050	117,208	128,313	120,727	0	0	0	0	**98,348**
40 TO 44	62,389	106,520	115,936	125,214	138,245	175,898	0	0	0	**108,684**
45 TO 49	62,139	108,249	116,697	124,439	135,841	123,987	0	0	0	**115,378**
50 TO 54	63,942	108,939	118,122	121,641	130,677	134,954	140,637	0	0	**118,981**
55 TO 59	64,320	107,689	117,127	120,879	126,208	130,632	142,044	158,867	0	**121,639**
60 TO 64	53,518	108,182	109,371	119,171	127,266	122,370	126,041	123,030	103,482	**118,980**
65 TO 69	0	0	121,953	115,258	120,921	130,197	121,121	119,757	136,994	**120,832**
70 & UP	0	0	99,189	106,097	113,801	0	144,010	142,266	116,009	**122,934**
TOTAL	**62,457**	**105,346**	**116,603**	**123,870**	**131,621**	**130,834**	**134,985**	**134,051**	**125,249**	**105,181**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

New York City: Correction

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	17	0	0	0	0	0	0	0	0	**17**
25 TO 29	67	94	1	0	0	0	0	0	0	**162**
30 TO 34	86	564	66	0	0	0	0	0	0	**716**
35 TO 39	53	590	506	226	1	0	0	0	0	**1,376**
40 TO 44	42	384	377	618	43	0	0	0	0	**1,464**
45 TO 49	24	193	201	462	153	7	0	0	0	**1,040**
50 TO 54	6	85	127	327	111	42	6	0	0	**704**
55 TO 59	1	47	55	182	65	29	19	5	0	**403**
60 TO 64	1	17	18	71	23	12	3	8	3	**156**
65 TO 69	1	2	7	17	5	3	3	5	6	**49**
70 & UP	0	0	0	3	1	0	0	0	6	**10**
TOTAL	**298**	**1,976**	**1,358**	**1,906**	**402**	**93**	**31**	**18**	**15**	**6,097**
SALARIES (IN THOUSANDS):										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	1,079	0	0	0	0	0	0	0	0	**1,079**
25 TO 29	4,555	10,588	60	0	0	0	0	0	0	**15,203**
30 TO 34	6,291	67,653	8,601	0	0	0	0	0	0	**82,544**
35 TO 39	4,017	71,472	65,947	30,698	139	0	0	0	0	**172,274**
40 TO 44	3,225	46,874	49,305	85,779	6,233	0	0	0	0	**191,416**
45 TO 49	1,640	23,491	26,407	63,830	22,363	1,096	0	0	0	**138,827**
50 TO 54	446	10,431	16,729	45,218	16,056	6,216	988	0	0	**96,085**
55 TO 59	62	5,961	7,249	25,293	9,293	4,295	3,050	796	0	**55,999**
60 TO 64	92	2,064	2,317	9,988	3,414	1,777	487	1,281	491	**21,910**
65 TO 69	90	190	903	2,432	719	556	449	748	907	**6,994**
70 & UP	0	0	0	434	145	0	0	0	872	**1,451**
TOTAL [1]	**21,496**	**238,724**	**177,518**	**263,672**	**58,364**	**13,940**	**4,974**	**2,824**	**2,270**	**783,781**
AVERAGE SALARIES: [2]										
UNDER 20	0	0	0	0	0	0	0	0	0	**0**
20 TO 24	63,448	0	0	0	0	0	0	0	0	**63,448**
25 TO 29	67,990	112,634	59,626	0	0	0	0	0	0	**93,843**
30 TO 34	73,147	119,952	130,318	0	0	0	0	0	0	**115,285**
35 TO 39	75,795	121,138	130,331	135,832	139,457	0	0	0	0	**125,199**
40 TO 44	76,784	122,067	130,783	138,802	144,958	0	0	0	0	**130,749**
45 TO 49	68,314	121,715	131,379	138,160	146,164	156,578	0	0	0	**133,487**
50 TO 54	74,383	122,723	131,722	138,282	144,653	147,996	164,625	0	0	**136,484**
55 TO 59	61,818	126,836	131,804	138,970	142,974	148,116	160,520	159,130	0	**138,956**
60 TO 64	91,728	121,405	128,714	140,676	148,442	148,095	162,251	160,105	163,679	**140,451**
65 TO 69	90,392	95,047	128,938	143,033	143,885	185,230	149,815	149,509	151,198	**142,733**
70 & UP	0	0	0	144,801	144,719	0	0	0	145,271	**145,075**
TOTAL	**72,135**	**120,811**	**130,720**	**138,338**	**145,183**	**149,893**	**160,446**	**156,891**	**151,323**	**128,552**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

	All Other New York City									
AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	10	0	0	0	0	0	0	0	0	**10**
20 TO 24	1,018	1	0	0	0	0	0	0	0	**1,019**
25 TO 29	4,003	670	2	0	0	0	0	0	0	**4,675**
30 TO 34	4,386	3,136	337	0	0	0	0	0	0	**7,859**
35 TO 39	3,656	3,677	2,127	421	2	0	0	0	0	**9,883**
40 TO 44	2,666	3,049	2,741	2,087	364	6	0	0	0	**10,913**
45 TO 49	1,985	2,327	2,081	2,512	1,446	181	3	0	0	**10,535**
50 TO 54	1,629	1,927	1,861	2,229	2,052	1,008	263	15	0	**10,984**
55 TO 59	1,233	1,598	1,562	1,932	1,844	1,503	1,422	461	7	**11,562**
60 TO 64	795	1,211	1,120	1,423	1,319	1,110	1,445	1,083	132	**9,638**
65 TO 69	303	583	536	670	574	372	434	385	200	**4,057**
70 & UP	109	184	236	273	264	158	170	178	202	**1,774**
TOTAL	**21,793**	**18,363**	**12,603**	**11,547**	**7,865**	**4,338**	**3,737**	**2,122**	**541**	**82,909**
SALARIES (IN THOUSANDS):										
UNDER 20	313	0	0	0	0	0	0	0	0	**313**
20 TO 24	49,749	50	0	0	0	0	0	0	0	**49,799**
25 TO 29	241,715	48,148	138	0	0	0	0	0	0	**290,000**
30 TO 34	299,195	251,812	28,854	0	0	0	0	0	0	**579,862**
35 TO 39	265,787	310,858	194,220	39,935	187	0	0	0	0	**810,987**
40 TO 44	195,121	258,985	255,577	207,159	37,773	677	0	0	0	**955,292**
45 TO 49	145,323	198,148	192,240	238,884	149,334	20,544	368	0	0	**944,841**
50 TO 54	118,468	165,765	168,377	205,495	195,714	108,597	28,238	1,713	0	**992,367**
55 TO 59	89,803	135,292	136,063	172,139	164,011	146,927	150,289	50,773	812	**1,046,108**
60 TO 64	56,891	100,570	98,049	125,233	116,919	102,595	144,135	118,889	14,587	**877,869**
65 TO 69	22,339	47,399	44,567	57,980	51,411	32,159	42,323	40,425	22,389	**360,992**
70 & UP	6,955	14,863	19,619	23,951	22,471	14,539	16,858	17,406	20,303	**156,965**
TOTAL [1]	**1,491,659**	**1,531,889**	**1,137,704**	**1,070,776**	**737,819**	**426,039**	**382,211**	**229,205**	**58,091**	**7,065,394**
AVERAGE SALARIES: [2]										
UNDER 20	31,301	0	0	0	0	0	0	0	0	**31,301**
20 TO 24	48,869	49,571	0	0	0	0	0	0	0	**48,870**
25 TO 29	60,383	71,863	68,812	0	0	0	0	0	0	**62,032**
30 TO 34	68,216	80,297	85,621	0	0	0	0	0	0	**73,783**
35 TO 39	72,699	84,541	91,312	94,858	93,351	0	0	0	0	**82,059**
40 TO 44	73,189	84,941	93,242	99,262	103,773	112,762	0	0	0	**87,537**
45 TO 49	73,211	85,152	92,379	95,097	103,274	113,503	122,729	0	0	**89,686**
50 TO 54	72,725	86,022	90,477	92,192	95,377	107,735	107,367	114,195	0	**90,347**
55 TO 59	72,833	84,663	87,108	89,099	88,943	97,756	105,689	110,136	115,945	**90,478**
60 TO 64	71,561	83,047	87,544	88,006	88,642	92,428	99,748	109,777	110,506	**91,084**
65 TO 69	73,724	81,303	83,147	86,538	89,566	86,450	97,519	104,999	111,947	**88,980**
70 & UP	63,807	80,776	83,130	87,733	85,119	92,021	99,163	97,787	100,510	**88,481**
TOTAL	**68,447**	**83,423**	**90,273**	**92,732**	**93,810**	**98,211**	**102,278**	**108,014**	**107,376**	**85,219**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-6
Detailed Active Membership and Salaries as of June 30, 2023 (cont'd)

AGE \ SVC	Total									
	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	30	0	0	0	0	0	0	0	0	**30**
20 TO 24	1,710	71	0	0	0	0	0	0	0	**1,781**
25 TO 29	6,812	1,216	5	0	0	0	0	0	0	**8,033**
30 TO 34	9,598	5,981	678	23	0	0	0	0	0	**16,280**
35 TO 39	8,787	8,154	4,271	1,154	16	0	0	0	0	**22,382**
40 TO 44	6,830	7,182	5,379	4,415	775	9	0	0	0	**24,590**
45 TO 49	5,232	5,681	4,606	5,317	3,011	411	8	0	0	**24,266**
50 TO 54	4,089	4,666	4,164	5,166	4,386	2,161	686	32	0	**25,350**
55 TO 59	2,994	3,936	3,591	4,643	4,397	2,949	2,552	708	8	**25,778**
60 TO 64	1,836	2,779	2,672	3,319	3,267	2,187	2,330	1,563	199	**20,152**
65 TO 69	659	1,267	1,239	1,445	1,350	769	724	606	316	**8,375**
70 & UP	189	375	473	564	557	314	290	264	311	**3,337**
TOTAL	**48,766**	**41,308**	**27,078**	**26,046**	**17,759**	**8,800**	**6,590**	**3,173**	**834**	**180,354**
SALARIES (IN THOUSANDS):										
UNDER 20	1,356	0	0	0	0	0	0	0	0	**1,356**
20 TO 24	90,477	6,430	0	0	0	0	0	0	0	**96,906**
25 TO 29	434,548	97,926	342	0	0	0	0	0	0	**532,815**
30 TO 34	678,701	522,103	61,588	2,527	0	0	0	0	0	**1,264,919**
35 TO 39	650,154	734,115	418,086	126,212	1,857	0	0	0	0	**1,930,424**
40 TO 44	507,135	644,407	522,303	476,694	82,073	1,061	0	0	0	**2,233,673**
45 TO 49	388,745	504,750	439,926	548,990	320,547	45,032	821	0	0	**2,248,811**
50 TO 54	307,706	413,703	388,727	512,966	440,411	232,675	73,029	3,875	0	**2,373,090**
55 TO 59	224,117	337,490	321,633	442,157	421,086	297,325	274,617	78,313	927	**2,397,664**
60 TO 64	136,726	238,404	235,473	305,040	306,749	213,160	239,797	171,810	21,626	**1,868,785**
65 TO 69	51,520	106,681	109,323	128,331	126,099	72,140	72,073	65,040	35,405	**766,612**
70 & UP	14,067	31,564	41,294	49,624	49,764	29,160	29,347	26,218	32,481	**303,519**
TOTAL [1]	**3,485,252**	**3,637,572**	**2,538,694**	**2,592,541**	**1,748,586**	**890,553**	**689,683**	**345,256**	**90,439**	**16,018,576**
AVERAGE SALARIES: [2]										
UNDER 20	45,216	0	0	0	0	0	0	0	0	**45,216**
20 TO 24	52,910	90,560	0	0	0	0	0	0	0	**54,411**
25 TO 29	63,791	80,531	68,316	0	0	0	0	0	0	**66,328**
30 TO 34	70,713	87,294	90,838	109,881	0	0	0	0	0	**77,698**
35 TO 39	73,990	90,031	97,890	109,369	116,068	0	0	0	0	**86,249**
40 TO 44	74,251	89,725	97,100	107,971	105,901	117,912	0	0	0	**90,837**
45 TO 49	74,301	88,849	95,512	103,252	106,459	109,568	102,571	0	0	**92,673**
50 TO 54	75,252	88,663	93,354	99,297	100,413	107,670	106,456	121,089	0	**93,613**
55 TO 59	74,856	85,745	89,566	95,231	95,767	100,822	107,608	110,611	115,840	**93,012**
60 TO 64	74,469	85,788	88,126	91,907	93,893	97,467	102,917	109,923	108,675	**92,734**
65 TO 69	78,179	84,200	88,235	88,811	93,407	93,810	99,548	107,327	112,042	**91,536**
70 & UP	74,431	84,171	87,302	87,986	89,342	92,867	101,197	99,312	104,439	**90,956**
TOTAL	**71,469**	**88,060**	**93,755**	**99,537**	**98,462**	**101,199**	**104,656**	**108,811**	**108,440**	**88,817**

Note: Age is nearest birthday. Service is nearest year.

[1] Total may not add due to rounding.

[2] Average based on unrounded salary.

Table XIII-7
Detailed Reconciliation of Active Membership

Transit Authority

		TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
TIER	GENDER	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	6	686,098	114,350	79.7	44.3	7	752,722	107,532	79.7	44.6
1	F	2	203,471	101,736	83.5	55.0	2	190,648	95,324	82.5	54.0
		8	889,569	111,196	80.6	47.0	9	943,370	104,819	80.3	46.7
2	M	6	703,030	117,172	74.8	29.5	8	825,221	103,153	73.6	26.8
2	F	1	119,847	119,847	68.0	4.0	2	201,030	100,515	69.5	25.5
		7	822,877	117,554	73.9	25.9	10	1,026,251	102,625	72.8	26.5
4	M	14,892	1,524,786,688	102,390	55.2	19.9	16,217	1,599,660,615	98,641	54.9	19.5
4	F	3,224	299,953,848	93,038	53.1	18.8	3,429	305,021,377	88,953	52.7	18.4
		18,116	1,824,740,536	100,725	54.9	19.7	19,646	1,904,681,992	96,950	54.5	19.3
6	M	16,560	1,411,018,113	85,206	43.2	5.2	14,666	1,215,408,307	82,873	43.1	5.0
6	F	3,925	292,476,806	74,516	41.7	4.3	3,188	232,961,217	73,074	41.4	4.4
		20,485	1,703,494,919	83,158	42.9	5.0	17,854	1,448,369,524	81,123	42.8	4.9
ALL		**38,616**	**3,529,947,901**	**91,412**	**48.5**	**11.9**	**37,519**	**3,355,021,137**	**89,422**	**48.9**	**12.4**

		JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	6	686,098	114,350	79.7	44.3	6	670,870	111,812	78.7	43.3
1	F	2	203,471	101,736	83.5	55.0	2	190,648	95,324	82.5	54.0
		8	889,569	111,196	80.6	47.0	8	861,518	107,690	79.6	46.0
2	M	6	703,030	117,172	74.8	29.5	6	648,745	108,124	73.8	28.5
2	F	1	119,847	119,847	68.0	4.0	1	117,240	117,240	67.0	3.0
		7	822,877	117,554	73.9	25.9	7	765,985	109,426	72.9	24.9
4	M	14,581	1,498,194,698	102,750	55.3	20.0	14,581	1,440,528,966	98,795	54.3	19.0
4	F	3,027	284,814,984	94,092	53.4	19.2	3,027	270,265,647	89,285	52.4	18.2
		17,608	1,783,009,682	101,261	55.0	19.9	17,608	1,710,794,613	97,160	54.0	18.9
6	M	13,791	1,225,364,812	88,852	44.2	5.9	13,791	1,148,522,270	83,281	43.2	5.0
6	F	2,818	226,340,886	80,320	42.6	5.5	2,818	207,532,700	73,645	41.6	4.6
		16,609	1,451,705,698	87,405	43.9	5.9	16,609	1,356,054,970	81,646	42.9	4.9
ALL		**34,232**	**3,236,427,826**	**94,544**	**49.6**	**13.1**	**34,232**	**3,068,477,086**	**89,638**	**48.6**	**12.1**

		ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	1	81,852	81,852	86.0	52.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	1	81,852	81,852	86.0	52.0
2	M	0	0	0	0.0	0.0	2	176,476	88,238	73.0	21.5
2	F	0	0	0	0.0	0.0	1	83,790	83,790	72.0	48.0
		0	0	0	0.0	0.0	3	260,266	86,755	72.7	30.3
4	M	311	26,591,990	85,505	51.2	14.9	1,636	159,131,649	97,269	59.6	23.3
4	F	197	15,138,864	76,847	49.4	13.7	402	34,755,730	86,457	55.3	20.3
		508	41,730,854	82,147	50.5	14.4	2,038	193,887,379	95,136	58.7	22.7
6	M	2,769	185,653,301	67,047	38.3	1.4	875	66,886,037	76,441	41.3	4.1
6	F	1,107	66,135,920	59,743	39.3	1.5	370	25,428,517	68,726	39.5	3.5
		3,876	251,789,221	64,961	38.6	1.5	1,245	92,314,554	74,148	40.7	3.9
ALL		**4,384**	**293,520,075**	**66,953**	**40.0**	**3.0**	**3,287**	**286,544,051**	**87,175**	**51.9**	**15.6**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

Housing Authority

TIER	GENDER	TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
		NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	1	87,771	87,771	76.0	41.0	1	85,215	85,215	75.0	40.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		1	87,771	87,771	76.0	41.0	1	85,215	85,215	75.0	40.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	1	88,271	88,271	73.0	49.0	2	141,026	70,513	70.5	47.5
		1	88,271	88,271	73.0	49.0	2	141,026	70,513	70.5	47.5
4	M	2,638	245,344,019	93,004	53.3	22.2	2,938	259,823,744	88,436	52.9	21.6
4	F	1,833	149,584,306	81,606	53.5	21.5	1,998	152,435,429	76,294	53.3	20.9
		4,471	394,928,325	88,331	53.4	21.9	4,936	412,259,173	83,521	53.1	21.3
6	M	2,789	213,021,339	76,379	43.4	4.5	2,372	172,049,233	72,533	43.0	4.4
6	F	1,669	105,363,250	63,130	41.7	4.3	1,419	84,937,507	59,857	41.1	4.2
		4,458	318,384,589	71,419	42.8	4.4	3,791	256,986,740	67,789	42.3	4.4
ALL		**8,931**	**713,488,956**	**79,889**	**48.1**	**13.2**	**8,730**	**669,472,154**	**76,686**	**48.4**	**14.0**

TIER	GENDER	JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	1	87,771	87,771	76.0	41.0	1	85,215	85,215	75.0	40.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		1	87,771	87,771	76.0	41.0	1	85,215	85,215	75.0	40.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	1	88,271	88,271	73.0	49.0	1	85,795	85,795	72.0	48.0
		1	88,271	88,271	73.0	49.0	1	85,795	85,795	72.0	48.0
4	M	2,587	240,957,893	93,142	53.4	22.4	2,587	229,289,928	88,632	52.4	21.3
4	F	1,777	145,194,577	81,708	53.7	21.7	1,777	136,512,712	76,822	52.7	20.7
		4,364	386,152,470	88,486	53.5	22.1	4,364	365,802,640	83,823	52.5	21.1
6	M	2,128	171,171,464	80,438	44.1	5.5	2,128	156,250,629	73,426	43.2	4.5
6	F	1,208	79,710,542	65,986	42.4	5.3	1,208	72,506,885	60,022	41.4	4.3
		3,336	250,882,006	75,204	43.5	5.4	3,336	228,757,514	68,572	42.5	4.5
ALL		**7,702**	**637,210,518**	**82,733**	**49.2**	**14.9**	**7,702**	**594,731,164**	**77,218**	**48.2**	**13.9**

TIER	GENDER	ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	1	55,231	55,231	69.0	47.0
		0	0	0	0.0	0.0	1	55,231	55,231	69.0	47.0
4	M	51	4,386,126	86,002	48.3	16.1	351	30,533,816	86,991	56.9	23.7
4	F	56	4,389,729	78,388	47.7	15.9	221	15,922,717	72,048	57.5	22.9
		107	8,775,855	82,017	48.0	16.0	572	46,456,533	81,218	57.1	23.4
6	M	661	41,849,875	63,313	41.1	1.5	244	15,798,604	64,748	41.4	3.8
6	F	461	25,652,708	55,646	39.8	1.8	211	12,430,622	58,913	39.7	3.5
		1,122	67,502,583	60,163	40.6	1.6	455	28,229,226	62,042	40.6	3.6
ALL		**1,229**	**76,278,438**	**62,065**	**41.2**	**2.8**	**1,028**	**74,740,990**	**72,705**	**49.8**	**14.7**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

Health and Hospitals

		TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
TIER	GENDER	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	4	407,682	101,921	73.3	51.0	4	389,868	97,467	72.3	50.0
1	F	10	1,377,104	137,710	79.0	42.7	11	1,379,713	125,428	78.4	42.7
		14	1,784,786	127,485	77.4	45.1	15	1,769,581	117,972	76.7	44.7
2	M	2	294,658	147,329	74.5	37.5	3	345,132	115,044	73.0	31.7
2	F	2	189,447	94,724	72.0	29.5	5	667,620	133,524	71.6	40.8
		4	484,105	121,026	73.3	33.5	8	1,012,752	126,594	72.1	37.4
4	M	4,301	396,428,906	92,171	55.3	16.8	4,714	419,063,385	88,898	54.7	16.1
4	F	10,142	916,173,234	90,335	55.1	16.8	11,047	969,768,683	87,786	54.5	16.0
		14,443	1,312,602,140	90,882	55.1	16.8	15,761	1,388,832,068	88,118	54.6	16.0
6	M	4,771	423,625,659	88,792	43.6	3.4	4,211	367,176,711	87,195	43.0	3.2
6	F	11,682	951,443,088	81,445	43.5	3.2	10,536	842,602,241	79,974	42.9	2.9
		16,453	1,375,068,747	83,576	43.5	3.3	14,747	1,209,778,952	82,036	42.9	3.0
ALL		**30,914**	**2,689,939,778**	**87,014**	**49.0**	**9.6**	**30,531**	**2,601,393,353**	**85,205**	**48.9**	**9.8**

		JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	4	407,682	101,921	73.3	51.0	4	389,868	97,467	72.3	50.0
1	F	10	1,377,104	137,710	79.0	42.7	10	1,314,481	131,448	78.0	41.7
		14	1,784,786	127,485	77.4	45.1	14	1,704,349	121,739	76.4	44.1
2	M	2	294,658	147,329	74.5	37.5	2	299,251	149,626	73.5	37.0
2	F	2	189,447	94,724	72.0	29.5	2	181,016	90,508	71.0	28.5
		4	484,105	121,026	73.3	33.5	4	480,267	120,067	72.3	32.8
4	M	4,227	389,514,173	92,149	55.4	16.9	4,227	375,979,792	88,947	54.4	15.9
4	F	9,898	895,718,216	90,495	55.2	16.9	9,898	867,727,686	87,667	54.2	15.8
		14,125	1,285,232,389	90,990	55.2	16.9	14,125	1,243,707,478	88,050	54.2	15.8
6	M	3,646	335,537,510	92,029	44.5	4.1	3,646	318,665,602	87,401	43.5	3.3
6	F	8,900	745,591,031	83,774	44.6	3.9	8,900	714,212,793	80,249	43.6	3.0
		12,546	1,081,128,541	86,173	44.6	4.0	12,546	1,032,878,395	82,327	43.6	3.1
ALL		**26,689**	**2,368,629,821**	**88,749**	**50.2**	**10.8**	**26,689**	**2,278,770,489**	**85,382**	**49.2**	**9.9**

		ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	1	65,232	65,232	82.0	53.0
		0	0	0	0.0	0.0	1	65,232	65,232	82.0	53.0
2	M	0	0	0	0.0	0.0	1	45,881	45,881	72.0	21.0
2	F	0	0	0	0.0	0.0	3	486,604	162,201	72.0	49.0
		0	0	0	0.0	0.0	4	532,485	133,121	72.0	42.0
4	M	74	6,914,733	93,442	50.1	12.1	487	43,083,593	88,467	57.0	17.8
4	F	244	20,455,018	83,832	51.5	10.3	1,149	102,040,997	88,809	57.7	17.9
		318	27,369,751	86,068	51.2	10.7	1,636	145,124,590	88,707	57.5	17.9
6	M	1,125	88,088,149	78,301	40.6	1.1	565	48,511,109	85,860	39.6	2.6
6	F	2,782	205,852,057	73,994	40.0	1.1	1,636	128,389,448	78,478	38.8	2.2
		3,907	293,940,206	75,234	40.1	1.1	2,201	176,900,557	80,373	39.0	2.3
ALL		**4,225**	**321,309,957**	**76,050**	**41.0**	**1.8**	**3,842**	**322,622,864**	**83,973**	**46.9**	**9.0**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

Triborough Bridge and Tunnel Authority

		TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
TIER	GENDER	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	2	315,394	157,697	70.0	47.5	2	300,461	150,231	69.0	46.5
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	315,394	157,697	70.0	47.5	2	300,461	150,231	69.0	46.5
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
4	M	560	70,536,718	125,958	51.1	17.3	628	75,095,208	119,578	50.7	16.6
4	F	149	16,994,890	114,060	53.3	19.5	162	17,476,549	107,880	52.5	18.2
		709	87,531,608	123,458	51.6	17.8	790	92,571,757	117,179	51.0	16.9
6	M	187	20,950,947	112,037	43.2	5.4	174	18,323,108	105,305	42.8	5.1
6	F	44	4,743,285	107,802	44.4	5.3	43	4,122,749	95,878	43.1	4.8
		231	25,694,232	111,230	43.4	5.4	217	22,445,857	103,437	42.9	5.0
ALL		**942**	**113,541,234**	**120,532**	**49.6**	**14.8**	**1,009**	**115,318,075**	**114,289**	**49.3**	**14.4**

		JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	2	315,394	157,697	70.0	47.5	2	300,461	150,231	69.0	46.5
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	315,394	157,697	70.0	47.5	2	300,461	150,231	69.0	46.5
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
4	M	553	69,656,874	125,962	51.0	17.3	553	66,188,269	119,689	50.0	16.1
4	F	146	16,678,567	114,237	53.4	19.6	146	15,743,085	107,829	52.4	17.9
		699	86,335,441	123,513	51.5	17.8	699	81,931,354	117,212	50.5	16.5
6	M	165	19,041,872	115,405	43.9	5.9	165	17,459,983	105,818	42.9	5.1
6	F	39	4,218,949	108,178	44.9	5.8	39	3,744,044	96,001	43.9	4.8
		204	23,260,821	114,024	44.1	5.8	204	21,204,027	103,941	43.1	5.1
ALL		**905**	**109,911,656**	**121,449**	**49.9**	**15.2**	**905**	**103,435,842**	**114,294**	**48.9**	**14.0**

		ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
4	M	7	879,844	125,692	55.4	20.4	75	8,906,939	118,759	55.3	20.4
4	F	3	316,323	105,441	47.3	11.3	16	1,733,464	108,342	53.4	20.8
		10	1,196,167	119,617	53.0	17.7	91	10,640,403	116,928	55.0	20.5
6	M	22	1,909,075	86,776	38.0	1.7	9	863,125	95,903	40.8	3.9
6	F	5	524,336	104,867	40.2	1.8	4	378,705	94,676	35.8	4.5
		27	2,433,411	90,126	38.4	1.7	13	1,241,830	95,525	39.2	4.1
ALL		**37**	**3,629,578**	**98,097**	**42.4**	**6.1**	**104**	**11,882,233**	**114,252**	**53.0**	**18.4**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

CUNY Senior College

TIER	GENDER	TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	1	80,660	80,660	77.0	53.0	2	124,623	62,312	77.0	35.0
1	F	2	117,439	58,720	75.0	50.0	3	165,578	55,193	74.3	43.0
		3	198,099	66,033	75.7	51.0	5	290,201	58,040	75.4	39.8
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	1	63,327	63,327	78.0	47.0	1	61,484	61,484	77.0	46.0
		1	63,327	63,327	78.0	47.0	1	61,484	61,484	77.0	46.0
4	M	1,159	93,754,051	80,892	54.0	17.4	1,263	99,537,310	78,810	53.5	16.5
4	F	1,083	71,035,902	65,592	56.3	16.4	1,209	75,142,002	62,152	55.9	15.9
		2,242	164,789,953	73,501	55.1	16.9	2,472	174,679,312	70,663	54.7	16.2
6	M	864	58,531,397	67,745	45.5	4.5	807	52,492,028	65,046	45.1	4.3
6	F	678	34,935,787	51,528	44.9	4.2	647	32,013,651	49,480	44.4	3.9
		1,542	93,467,184	60,614	45.3	4.4	1,454	84,505,679	58,119	44.8	4.1
ALL		**3,788**	**258,518,563**	**68,247**	**51.1**	**11.8**	**3,932**	**259,536,676**	**66,006**	**51.1**	**11.8**

TIER	GENDER	JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	1	80,660	80,660	77.0	53.0	1	78,313	78,313	76.0	52.0
1	F	2	117,439	58,720	75.0	50.0	2	114,021	57,011	74.0	49.0
		3	198,099	66,033	75.7	51.0	3	192,334	64,111	74.7	50.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	1	63,327	63,327	78.0	47.0	1	61,484	61,484	77.0	46.0
		1	63,327	63,327	78.0	47.0	1	61,484	61,484	77.0	46.0
4	M	1,140	92,171,043	80,852	54.1	17.4	1,140	90,004,442	78,951	53.1	16.4
4	F	1,063	69,365,284	65,254	56.4	16.5	1,063	66,467,026	62,528	55.4	15.6
		2,203	161,536,327	73,326	55.2	17.0	2,203	156,471,468	71,027	54.2	16.1
6	M	696	47,729,084	68,576	46.6	5.2	696	46,048,301	66,161	45.6	4.4
6	F	545	28,446,545	52,195	46.1	4.8	545	26,923,761	49,401	45.1	4.0
		1,241	76,175,629	61,382	46.4	5.0	1,241	72,972,062	58,801	45.4	4.2
ALL		**3,448**	**237,973,382**	**69,018**	**52.1**	**12.7**	**3,448**	**229,697,348**	**66,618**	**51.1**	**11.8**

TIER	GENDER	ADDITIONS DURING THE YEAR [1] NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1] NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	0	0	0	0.0	0.0	1	46,310	46310.0	78.0	18.0
1	F	0	0	0	0.0	0.0	1	51,557	51,557	75.0	31.0
		0	0	0	0.0	0.0	2	97,867	48,934	76.5	24.5
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
4	M	19	1,583,008	83,316	50.6	14.5	123	9,532,868	77,503	57.9	17.1
4	F	20	1,670,618	83,531	47.7	13.3	146	8,674,976	59,418	59.4	17.9
		39	3,253,626	83,426	49.1	13.9	269	18,207,844	67,687	58.7	17.5
6	M	168	10,802,313	64,299	41.2	1.7	111	6,443,727	58,052	42.1	3.8
6	F	133	6,489,242	48,791	40.3	1.7	102	5,089,890	49,901	40.8	3.5
		301	17,291,555	57,447	40.8	1.7	213	11,533,617	54,148	41.5	3.7
ALL		**340**	**20,545,181**	**60,427**	**41.7**	**3.1**	**484**	**29,839,328**	**61,652**	**51.2**	**11.5**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

All Other Non-NYC Contributing Entities

		TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
TIER	GENDER	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	M	1	149,429	149,429	77.0	25.0	1	149,429	149,429	76.0	22.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		1	149,429	149,429	77.0	25.0	1	149,429	149,429	76.0	22.0
4	M	53	8,451,717	159,466	56.1	21.8	55	8,119,946	147,635	56.4	20.7
4	F	70	9,181,673	131,167	55.7	17.7	73	8,894,314	121,840	54.8	17.1
		123	17,633,390	143,361	55.9	19.4	128	17,014,260	132,924	55.5	18.7
6	M	26	3,362,914	129,343	43.3	3.8	12	1,445,991	120,499	38.8	3.9
6	F	39	4,734,546	121,399	42.7	3.4	18	2,216,344	123,130	42.4	4.2
		65	8,097,460	124,576	42.9	3.5	30	3,662,335	122,078	41.0	4.1
ALL		**189**	**25,880,279**	**136,933**	**51.5**	**14.0**	**159**	**20,826,024**	**130,981**	**52.9**	**15.9**

		JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	M	1	149,429	149,429	77.0	25.0	1	149,429	149,429	76.0	22.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		1	149,429	149,429	77.0	25.0	1	149,429	149,429	76.0	22.0
4	M	50	7,901,049	158,021	56.7	22.4	50	7,461,826	149,237	55.7	20.9
4	F	65	8,353,449	128,515	55.8	17.6	65	7,837,128	120,571	54.8	16.5
		115	16,254,498	141,343	56.2	19.7	115	15,298,954	133,034	55.2	18.4
6	M	9	1,201,234	133,470	39.7	4.9	9	1,166,030	129,559	38.7	4.3
6	F	16	2,162,979	135,186	44.6	4.8	16	1,985,344	124,084	43.6	3.9
		25	3,364,213	134,569	42.8	4.8	25	3,151,374	126,055	41.8	4.1
ALL		**141**	**19,768,140**	**140,200**	**54.0**	**17.1**	**141**	**18,599,757**	**131,913**	**53.0**	**15.9**

		ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
4	M	3	550,668	183,556	46.0	11.3	5	658,120	131,624	62.6	19.0
4	F	5	828,224	165,645	55.0	18.6	8	1,057,186	132,148	55.3	22.6
		8	1,378,892	172,362	51.6	15.9	13	1,715,306	131,947	58.1	21.2
6	M	17	2,161,680	127,158	45.3	3.2	3	279,961	93,320	39.0	2.7
6	F	23	2,571,567	111,807	41.3	2.4	2	231,000	115,500	33.5	6.5
		40	4,733,247	118,331	43.0	2.7	5	510,961	102,192	36.8	4.2
ALL		**48**	**6,112,139**	**127,336**	**44.5**	**4.9**	**18**	**2,226,267**	**123,682**	**52.2**	**16.5**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.
[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

New York City: Sanitation

		TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
TIER	GENDER	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	2	204,588	102,294	76.0	51.0	3	301,398	100,466	75.3	50.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	204,588	102,294	76.0	51.0	3	301,398	100,466	75.3	50.0
2	M	2	231,331	115,666	69.0	41.0	2	246,371	123,186	68.0	40.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	231,331	115,666	69.0	41.0	2	246,371	123,186	68.0	40.0
4	M	3,259	412,101,385	126,450	48.4	18.7	3,543	430,159,935	121,411	47.9	18.1
4	F	77	9,933,512	129,007	50.5	18.8	85	10,537,700	123,973	50.3	18.6
		3,336	422,034,897	126,509	48.5	18.7	3,628	440,697,635	121,471	47.9	18.1
3R	M	4,397	396,148,148	90,095	39.1	6.0	3,749	334,715,038	89,281	38.6	5.8
3R	F	231	19,465,645	84,267	39.9	6.7	190	15,774,945	83,026	39.5	6.4
		4,628	415,613,793	89,804	39.2	6.0	3,939	350,489,983	88,979	38.6	5.8
ALL		**7,968**	**838,084,609**	**105,181**	**43.1**	**11.3**	**7,572**	**791,735,387**	**104,561**	**43.1**	**11.7**

		JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	2	204,588	102,294	76.0	51.0	2	198,148	99,074	75.0	50.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	204,588	102,294	76.0	51.0	2	198,148	99,074	75.0	50.0
2	M	2	231,331	115,666	69.0	41.0	2	246,371	123,186	68.0	40.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	231,331	115,666	69.0	41.0	2	246,371	123,186	68.0	40.0
4	M	3,240	409,961,047	126,531	48.5	18.7	3,240	393,736,614	121,524	47.5	17.7
4	F	77	9,933,512	129,007	50.5	18.8	77	9,557,271	124,120	49.5	17.8
		3,317	419,894,559	126,589	48.5	18.7	3,317	403,293,885	121,584	47.5	17.7
3R	M	3,648	354,259,022	97,110	39.6	6.8	3,648	327,134,460	89,675	38.6	5.8
3R	F	187	17,107,894	91,486	40.5	7.4	187	15,510,771	82,945	39.5	6.4
		3,835	371,366,916	96,836	39.7	6.8	3,835	342,645,231	89,347	38.7	5.8
ALL		**7,156**	**791,697,394**	**110,634**	**43.8**	**12.4**	**7,156**	**746,383,635**	**104,302**	**42.8**	**11.3**

		ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	1	103,250	103,250	76.0	50.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	1	103,250	103,250	76.0	50.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
4	M	19	2,140,338	112,649	47.1	15.4	303	36,423,321	120,209	52.4	22.8
4	F	0	0	0	0.0	0.0	8	980,429	122,554	57.0	26.5
		19	2,140,338	112,649	47.1	15.4	311	37,403,750	120,269	52.5	22.8
3R	M	749	41,889,126	55,927	36.6	1.8	101	7,580,578	75,055	37.0	4.4
3R	F	44	2,357,751	53,585	37.3	3.8	3	264,174	88,058	35.0	7.3
		793	44,246,877	55,797	36.6	1.9	104	7,844,752	75,430	36.9	4.5
ALL		**812**	**46,387,215**	**57,127**	**36.9**	**2.2**	**416**	**45,351,752**	**109,019**	**48.7**	**18.3**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

New York City: Correction

		TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
TIER	GENDER	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	2	285,810	142,905	71.5	50.5	2	276,950	138,475	70.5	49.5
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	285,810	142,905	71.5	50.5	2	276,950	138,475	70.5	49.5
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
3	M	1,739	237,914,975	136,811	46.6	16.1	1,935	254,069,895	131,302	45.7	15.2
3	F	1,568	217,921,452	138,981	45.9	16.4	1,729	230,190,760	133,135	45.1	15.5
		3,307	455,836,427	137,840	46.3	16.2	3,664	484,260,655	132,167	45.4	15.4
3R	M	1,582	187,390,384	118,452	39.5	7.6	1,752	189,744,047	108,301	38.6	6.8
3R	F	1,206	140,268,384	116,309	38.9	7.9	1,320	139,958,068	106,029	37.8	7.1
		2,788	327,658,768	117,525	39.2	7.7	3,072	329,702,115	107,325	38.3	7.0
ALL		**6,097**	**783,781,005**	**128,552**	**43.0**	**12.3**	**6,738**	**814,239,720**	**120,843**	**42.2**	**11.5**

		JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	2	285,810	142,905	71.5	50.5	2	276,950	138,475	70.5	49.5
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		2	285,810	142,905	71.5	50.5	2	276,950	138,475	70.5	49.5
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
3	M	1,720	235,652,242	137,007	46.6	16.1	1,720	225,699,600	131,221	45.6	15.1
3	F	1,551	215,781,292	139,124	46.0	16.4	1,551	206,039,019	132,843	45.0	15.4
		3,271	451,433,534	138,011	46.3	16.2	3,271	431,738,619	131,990	45.3	15.3
3R	M	1,461	178,280,964	122,027	39.8	8.0	1,461	161,156,567	110,306	38.8	7.0
3R	F	1,116	132,861,187	119,051	39.1	8.3	1,116	119,544,383	107,119	38.1	7.3
		2,577	311,142,151	120,738	39.5	8.1	2,577	280,700,950	108,925	38.5	7.1
ALL		**5,850**	**762,861,495**	**130,404**	**43.3**	**12.7**	**5,850**	**712,716,519**	**121,832**	**42.3**	**11.7**

		ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
1	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	M	0	0	0	0.0	0.0	0	0	0	0.0	0.0
2	F	0	0	0	0.0	0.0	0	0	0	0.0	0.0
		0	0	0	0.0	0.0	0	0	0	0.0	0.0
3	M	19	2,262,733	119,091	42.4	11.9	215	28,370,295	131,955	46.8	16.3
3	F	17	2,140,160	125,892	41.0	13.4	178	24,151,741	135,684	46.2	16.3
		36	4,402,893	122,303	41.7	12.6	393	52,522,036	133,644	46.5	16.3
3R	M	121	9,109,420	75,284	35.1	2.8	291	28,587,480	98,239	37.7	6.1
3R	F	90	7,407,197	82,302	35.9	3.7	204	20,413,685	100,067	36.4	6.3
		211	16,516,617	78,278	35.5	3.2	495	49,001,165	98,992	37.1	6.2
ALL		**247**	**20,919,510**	**84,694**	**36.4**	**4.6**	**888**	**101,523,201**	**114,328**	**41.3**	**10.6**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

All Other New York City

TIER	GENDER	TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023					TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022				
		NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	30	2,946,131	98,204	77.8	50.1	38	3,645,813	95,942	76.6	47.4
1	F	29	2,536,632	87,470	77.3	53.0	40	3,337,449	83,436	75.8	50.3
		59	5,482,763	92,928	77.6	51.5	78	6,983,262	89,529	76.2	48.9
2	M	55	6,077,708	110,504	57.5	28.6	67	7,118,330	106,244	58.3	29.2
2	F	44	4,244,566	96,467	59.3	26.4	49	4,429,605	90,400	58.5	25.2
		99	10,322,274	104,265	58.3	27.6	116	11,547,935	99,551	58.4	27.5
4	M	18,310	1,885,569,773	102,980	54.1	20.2	19,874	1,955,898,230	98,415	53.7	19.6
4	F	22,354	1,951,195,182	87,286	53.9	20.3	24,230	2,009,921,148	82,952	53.3	19.7
		40,664	3,836,764,955	94,353	54.0	20.3	44,104	3,965,819,378	89,920	53.5	19.6
3R/6	M	21,389	1,714,650,828	80,165	41.4	4.7	20,042	1,533,882,125	76,533	40.9	4.4
3R/6	F	20,698	1,498,173,138	72,383	41.5	4.5	19,066	1,321,998,444	69,338	41.1	4.3
		42,087	3,212,823,966	76,338	41.5	4.6	39,108	2,855,880,569	73,025	41.0	4.4
ALL		**82,909**	**7,065,393,958**	**85,219**	**47.6**	**12.3**	**83,406**	**6,840,231,144**	**82,011**	**47.7**	**12.5**

TIER	GENDER	JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022					JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023				
1	M	29	2,845,990	98,138	77.8	50.0	29	2,762,434	95,256	76.8	49.1
1	F	29	2,536,632	87,470	77.3	53.0	29	2,467,203	85,076	76.3	52.0
		58	5,382,622	92,804	77.5	51.5	58	5,229,637	90,166	76.5	50.6
2	M	54	5,978,512	110,713	57.4	29.1	54	5,776,634	106,975	56.4	28.1
2	F	43	4,171,667	97,016	59.2	26.5	43	3,974,365	92,427	58.2	25.2
		97	10,150,179	104,641	58.2	27.9	97	9,750,999	100,526	57.2	26.8
4	M	18,014	1,861,338,864	103,327	54.2	20.3	18,014	1,778,145,453	98,709	53.2	19.3
4	F	21,852	1,914,562,830	87,615	54.0	20.5	21,852	1,817,376,266	83,168	53.0	19.5
		39,866	3,775,901,694	94,715	54.0	20.4	39,866	3,595,521,719	90,190	53.1	19.4
3R/6	M	17,791	1,484,908,283	83,464	42.3	5.4	17,791	1,379,206,804	77,523	41.3	4.5
3R/6	F	16,451	1,235,569,473	75,106	42.6	5.3	16,451	1,146,478,467	69,691	41.6	4.4
		34,242	2,720,477,756	79,449	42.4	5.4	34,242	2,525,685,271	73,760	41.4	4.5
ALL		**74,263**	**6,511,912,251**	**87,687**	**48.7**	**13.5**	**74,263**	**6,136,187,626**	**82,628**	**47.7**	**12.5**

TIER	GENDER	ADDITIONS DURING THE YEAR [1]					SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1]				
1	M	1	100,141	100,141	80.0	52.0	9	883,379	98,153	75.9	41.9
1	F	0	0	0	0.0	0.0	11	870,246	79,113	74.5	45.8
		1	100,141	100,141	80.0	52.0	20	1,753,625	87,681	75.1	44.0
2	M	1	99,196	99,196	63.0	1.0	13	1,341,696	103,207	66.2	33.5
2	F	1	72,899	72,899	63.0	22.0	6	455,240	75,873	60.2	25.5
		2	172,095	86,048	63.0	11.5	19	1,796,936	94,576	64.3	31.0
4	M	296	24,230,909	81,861	50.7	12.4	1,860	177,752,777	95,566	58.5	22.8
4	F	502	36,632,352	72,973	49.6	13.0	2,378	192,544,882	80,969	56.8	21.6
		798	60,863,261	76,270	50.0	12.8	4,238	370,297,659	87,376	57.5	22.1
3R/6	M	3,598	229,742,545	63,853	37.0	1.1	2,251	154,675,321	68,714	37.9	3.7
3R/6	F	4,247	262,603,665	61,833	37.2	1.2	2,615	175,519,977	67,120	38.1	3.8
		7,845	492,346,210	62,759	37.1	1.2	4,866	330,195,298	67,858	38.0	3.8
ALL		**8,646**	**553,481,707**	**64,016**	**38.3**	**2.3**	**9,143**	**704,043,518**	**77,004**	**47.2**	**12.4**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-7
Detailed Reconciliation of Active Membership (cont'd)

Total

TIER	GENDER	TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2023 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2022 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	48	5,014,134	104,461	77.0	49.3	59	5,877,050	99,611	76.1	46.8
1	F	43	4,234,646	98,480	77.9	50.6	56	5,073,388	90,596	76.5	48.6
		91	9,248,780	101,635	77.4	49.9	115	10,950,438	95,221	76.3	47.7
2	M	66	7,456,156	112,972	60.2	29.3	81	8,684,483	107,216	60.8	29.2
2	F	49	4,705,458	96,030	60.7	26.9	59	5,500,765	93,233	60.7	27.6
		115	12,161,614	105,753	60.4	28.3	140	14,185,248	101,323	60.7	28.5
3/4	M	46,911	4,874,888,232	103,918	53.8	19.5	51,167	5,101,428,268	99,702	53.4	19.0
3/4	F	40,500	3,641,973,999	89,925	53.8	19.1	43,962	3,779,387,962	85,969	53.3	18.4
		87,411	8,516,862,231	97,435	53.8	19.3	95,129	8,880,816,230	93,356	53.3	18.7
3R/6	M	52,565	4,428,699,729	84,252	42.1	4.9	47,785	3,885,236,588	81,307	41.7	4.7
3R/6	F	40,172	3,051,603,929	75,963	42.1	4.2	36,427	2,676,585,166	73,478	41.6	4.0
		92,737	7,480,303,658	80,661	42.1	4.6	84,212	6,561,821,754	77,920	41.6	4.4
ALL		**180,354**	**16,018,576,283**	**88,817**	**47.8**	**11.8**	**179,596**	**15,467,773,670**	**86,125**	**47.9**	**12.0**

TIER	GENDER	JUNE 30, 2023 MEMBERS ALSO PRESENT AS OF JUNE 30, 2022 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	JUNE 30, 2022 MEMBERS ALSO PRESENT AS OF JUNE 30, 2023 NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	47	4,913,993	104,553	76.9	49.2	47	4,762,259	101,325	75.9	48.2
1	F	43	4,234,646	98,480	77.9	50.6	43	4,086,353	95,031	76.9	49.6
		90	9,148,639	101,652	77.4	49.9	90	8,848,612	98,318	76.4	48.9
2	M	65	7,356,960	113,184	60.2	29.7	65	7,120,430	109,545	59.2	28.7
2	F	48	4,632,559	96,512	60.6	27.0	48	4,419,900	92,081	59.6	25.8
		113	11,989,519	106,102	60.4	28.6	113	11,540,330	102,127	59.4	27.4
3/4	M	46,112	4,805,347,883	104,210	53.9	19.6	46,112	4,607,034,890	99,910	52.9	18.6
3/4	F	39,456	3,560,402,711	90,237	53.9	19.3	39,456	3,397,525,840	86,109	53.0	18.2
		85,568	8,365,750,594	97,767	53.9	19.5	85,568	8,004,560,730	93,546	52.9	18.4
3R/6	M	43,335	3,817,494,245	88,093	42.9	5.7	43,335	3,555,610,646	82,049	42.0	4.8
3R/6	F	31,280	2,472,009,486	79,028	43.1	5.0	31,280	2,308,439,148	73,799	42.1	4.1
		74,615	6,289,503,731	84,293	43.0	5.4	74,615	5,864,049,794	78,591	42.0	4.5
ALL		**160,386**	**14,676,392,483**	**91,507**	**48.9**	**13.0**	**160,386**	**13,888,999,466**	**86,597**	**47.9**	**12.0**

TIER	GENDER	ADDITIONS DURING THE YEAR [1] NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC	SEPARATIONS FROM MEMBERSHIP DURING THE YEAR [1] NUMBER	SALARY	AVG SAL	AVG AGE	AVG SVC
1	M	1	100,141	100,141	80.0	52.0	12	1,114,791	92,899	76.9	41.4
1	F	0	0	0	0.0	0.0	13	987,035	75,926	75.2	45.2
		1	100,141	100,141	80.0	52.0	25	2,101,826	84,073	76.0	43.4
2	M	1	99,196	99,196	63.0	1.0	16	1,564,053	97,753	67.4	31.3
2	F	1	72,899	72,899	63.0	22.0	11	1,080,865	98,260	65.3	35.9
		2	172,095	86,048	63.0	11.5	27	2,644,918	97,960	66.5	33.1
3/4	M	799	69,540,349	87,034	50.4	13.8	5,055	494,393,378	97,803	57.7	22.1
3/4	F	1,044	81,571,288	78,133	49.7	12.7	4,506	381,862,122	84,745	56.6	20.3
		1,843	151,111,637	81,992	50.0	13.2	9,561	876,255,500	91,649	57.2	21.2
3R/6	M	9,230	611,205,484	66,219	38.2	1.3	4,450	329,625,942	74,073	39.0	3.8
3R/6	F	8,892	579,594,443	65,182	38.5	1.3	5,147	368,146,018	71,526	38.5	3.4
		18,122	1,190,799,927	65,710	38.3	1.3	9,597	697,771,960	72,707	38.7	3.6
ALL		**19,968**	**1,342,183,800**	**67,217**	**39.4**	**2.4**	**19,210**	**1,578,774,204**	**82,185**	**48.0**	**12.5**

Note: Age is nearest birthday. Service is nearest year. The member is considered also present if active with the same tier and gender as of both valuation dates.

[1] Separations and additions do not include members who joined after June 30, 2022 and are no longer members on June 30, 2023. Members are included as separations and additions if the tier or gender has changed.

Table XIII-8
Distribution of Pension Benefits as of June 30, 2023

	MALE			FEMALE			TOTAL		
AGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
SERVICE RETIREMENT:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	60	3,707,472	61,791	11	573,085	52,099	71	4,280,557	60,290
45 TO 49	404	24,111,794	59,683	174	10,541,151	60,581	578	34,652,945	59,953
50 TO 54	1,094	65,380,278	59,763	495	28,756,364	58,094	1,589	94,136,642	59,243
55 TO 59	4,927	270,517,892	54,905	2,597	109,838,049	42,294	7,524	380,355,941	50,552
60 TO 64	11,327	557,252,078	49,197	7,451	267,122,205	35,851	18,778	824,374,283	43,901
65 TO 69	16,571	714,419,843	43,113	12,289	415,956,249	33,848	28,860	1,130,376,092	39,168
70 TO 74	16,755	670,630,832	40,026	11,788	369,650,606	31,358	28,543	1,040,281,438	36,446
75 TO 79	13,743	517,238,746	37,637	9,718	280,384,158	28,852	23,461	797,622,904	33,998
80 TO 84	9,629	329,890,875	34,260	6,451	168,799,863	26,166	16,080	498,690,738	31,013
85 TO 89	5,253	163,651,323	31,154	3,651	82,544,576	22,609	8,904	246,195,899	27,650
90 & UP	2,867	81,336,499	28,370	2,784	53,338,250	19,159	5,651	134,674,749	23,832
TOTAL	**82,630**	**3,398,137,632**	**41,125**	**57,409**	**1,787,504,556**	**31,136**	**140,039**	**5,185,642,188**	**37,030**
ORDINARY DISABILITY:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	12	366,893	30,574	6	186,756	31,126	18	553,649	30,758
40 TO 44	26	614,305	23,627	19	459,693	24,194	45	1,073,998	23,867
45 TO 49	72	1,860,296	25,837	70	1,690,893	24,156	142	3,551,189	25,008
50 TO 54	229	5,711,727	24,942	184	3,765,750	20,466	413	9,477,477	22,948
55 TO 59	582	14,264,884	24,510	507	10,789,296	21,281	1,089	25,054,180	23,007
60 TO 64	1,004	25,063,811	24,964	838	17,238,048	20,570	1,842	42,301,859	22,965
65 TO 69	1,065	24,191,178	22,715	748	14,257,024	19,060	1,813	38,448,202	21,207
70 TO 74	909	19,337,878	21,274	571	10,688,336	18,719	1,480	30,026,214	20,288
75 TO 79	769	16,046,010	20,866	337	5,776,365	17,141	1,106	21,822,375	19,731
80 TO 84	494	10,411,335	21,076	203	3,079,536	15,170	697	13,490,871	19,356
85 TO 89	170	3,496,393	20,567	78	1,055,838	13,536	248	4,552,231	18,356
90 & UP	54	990,373	18,340	29	344,389	11,875	83	1,334,762	16,081
TOTAL	**5,386**	**122,355,083**	**22,717**	**3,590**	**69,331,924**	**19,313**	**8,976**	**191,687,007**	**21,356**
ACCIDENTAL DISABILITY:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	2	52,713	26,357	0	0	0	2	52,713	26,357
35 TO 39	36	1,637,599	45,489	20	848,500	42,425	56	2,486,099	44,395
40 TO 44	112	6,127,483	54,710	27	1,586,423	58,756	139	7,713,906	55,496
45 TO 49	191	11,894,079	62,273	66	3,288,981	49,833	257	15,183,060	59,078
50 TO 54	312	17,548,574	56,245	116	6,139,659	52,928	428	23,688,233	55,346
55 TO 59	541	28,522,294	52,721	157	7,082,272	45,110	698	35,604,566	51,009
60 TO 64	608	28,659,887	47,138	161	5,963,814	37,042	769	34,623,701	45,024
65 TO 69	522	22,447,328	43,003	119	4,169,673	35,039	641	26,617,001	41,524
70 TO 74	482	18,549,998	38,485	57	1,590,200	27,898	539	20,140,198	37,366
75 TO 79	548	18,962,172	34,603	39	916,953	23,512	587	19,879,125	33,866
80 TO 84	331	10,245,797	30,954	37	718,681	19,424	368	10,964,478	29,795
85 TO 89	128	3,982,191	31,111	19	307,781	16,199	147	4,289,972	29,183
90 & UP	69	2,165,028	31,377	8	121,505	15,188	77	2,286,533	29,695
TOTAL	**3,882**	**170,795,143**	**43,997**	**826**	**32,734,442**	**39,630**	**4,708**	**203,529,585**	**43,231**

Table XIII-8
Distribution of Pension Benefits as of June 30, 2023 (cont'd)

	MALE			FEMALE			TOTAL		
AGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
ACCIDENTAL DEATH:									
UNDER 30	10	328,350	32,835	15	460,700	30,713	25	789,050	31,562
30 TO 34	0	0	0	2	54,359	27,180	2	54,359	27,180
35 TO 39	2	98,638	49,319	13	546,740	42,057	15	645,378	43,025
40 TO 44	1	44,742	44,742	19	694,589	36,557	20	739,331	36,967
45 TO 49	5	158,039	31,608	21	1,078,235	51,345	26	1,236,274	47,549
50 TO 54	5	164,010	32,802	35	2,051,781	58,622	40	2,215,791	55,395
55 TO 59	2	101,675	50,838	52	3,051,534	58,683	54	3,153,209	58,393
60 TO 64	9	405,577	45,064	72	3,852,470	53,507	81	4,258,047	52,568
65 TO 69	4	99,432	24,858	75	4,294,382	57,258	79	4,393,814	55,618
70 TO 74	3	109,505	36,502	47	2,390,224	50,856	50	2,499,729	49,995
75 TO 79	2	79,152	39,576	35	2,062,315	58,923	37	2,141,467	57,877
80 TO 84	2	74,921	37,461	28	1,202,915	42,961	30	1,277,836	42,595
85 TO 89	0	0	0	6	221,274	36,879	6	221,274	36,879
90 & UP	0	0	0	5	113,030	22,606	5	113,030	22,606
TOTAL	**45**	**1,664,041**	**36,979**	**425**	**22,074,548**	**51,940**	**470**	**23,738,589**	**50,508**
OTHER BENEFICIARIES:									
UNDER 30	91	1,382,471	15,192	113	1,807,208	15,993	204	3,189,679	15,636
30 TO 34	99	1,450,014	14,647	135	1,857,580	13,760	234	3,307,594	14,135
35 TO 39	133	1,783,072	13,407	172	2,310,742	13,435	305	4,093,814	13,422
40 TO 44	163	2,310,597	14,175	234	3,243,730	13,862	397	5,554,327	13,991
45 TO 49	193	2,861,552	14,827	305	4,127,892	13,534	498	6,989,444	14,035
50 TO 54	203	2,364,467	11,648	387	5,629,108	14,545	590	7,993,575	13,548
55 TO 59	213	2,257,101	10,597	582	9,901,984	17,014	795	12,159,085	15,294
60 TO 64	196	2,283,831	11,652	933	18,138,303	19,441	1,129	20,422,134	18,089
65 TO 69	227	3,479,511	15,328	1,363	28,969,696	21,254	1,590	32,449,207	20,408
70 TO 74	209	3,063,807	14,659	1,866	41,724,294	22,360	2,075	44,788,101	21,585
75 TO 79	194	2,673,806	13,783	2,130	47,050,637	22,090	2,324	49,724,443	21,396
80 TO 84	143	2,063,264	14,428	2,206	44,765,290	20,293	2,349	46,828,554	19,936
85 TO 89	97	1,427,365	14,715	1,644	30,201,526	18,371	1,741	31,628,891	18,167
90 & UP	70	767,722	10,967	1,902	31,160,643	16,383	1,972	31,928,365	16,191
TOTAL	**2,231**	**30,168,580**	**13,522**	**13,972**	**270,888,633**	**19,388**	**16,203**	**301,057,213**	**18,580**
ALL PENSIONERS AND BENEFICIARIES:									
UNDER 30	101	1,710,821	16,939	128	2,267,908	17,718	229	3,978,729	17,374
30 TO 34	101	1,502,727	14,878	137	1,911,939	13,956	238	3,414,666	14,347
35 TO 39	183	3,886,202	21,236	211	3,892,738	18,449	394	7,778,940	19,744
40 TO 44	362	12,804,599	35,372	310	6,557,520	21,153	672	19,362,119	28,813
45 TO 49	865	40,885,760	47,267	636	20,727,152	32,590	1,501	61,612,912	41,048
50 TO 54	1,843	91,169,056	49,468	1,217	46,342,662	38,079	3,060	137,511,718	44,938
55 TO 59	6,265	315,663,846	50,385	3,895	140,663,135	36,114	10,160	456,326,981	44,914
60 TO 64	13,144	613,665,184	46,688	9,455	312,314,840	33,032	22,599	925,980,024	40,974
65 TO 69	18,389	764,637,292	41,581	14,594	467,647,024	32,044	32,983	1,232,284,316	37,361
70 TO 74	18,358	711,692,020	38,767	14,329	426,043,660	29,733	32,687	1,137,735,680	34,807
75 TO 79	15,256	554,999,886	36,379	12,259	336,190,428	27,424	27,515	891,190,314	32,389
80 TO 84	10,599	352,686,192	33,275	8,925	218,566,285	24,489	19,524	571,252,477	29,259
85 TO 89	5,648	172,557,272	30,552	5,398	114,330,995	21,180	11,046	286,888,267	25,972
90 & UP	3,060	85,259,622	27,863	4,728	85,077,817	17,994	7,788	170,337,439	21,872
TOTAL	**94,174**	**3,723,120,479**	**39,534**	**76,222**	**2,182,534,103**	**28,634**	**170,396**	**5,905,654,582**	**34,658**

Graph XIII-9
Pensioner Average Benefits

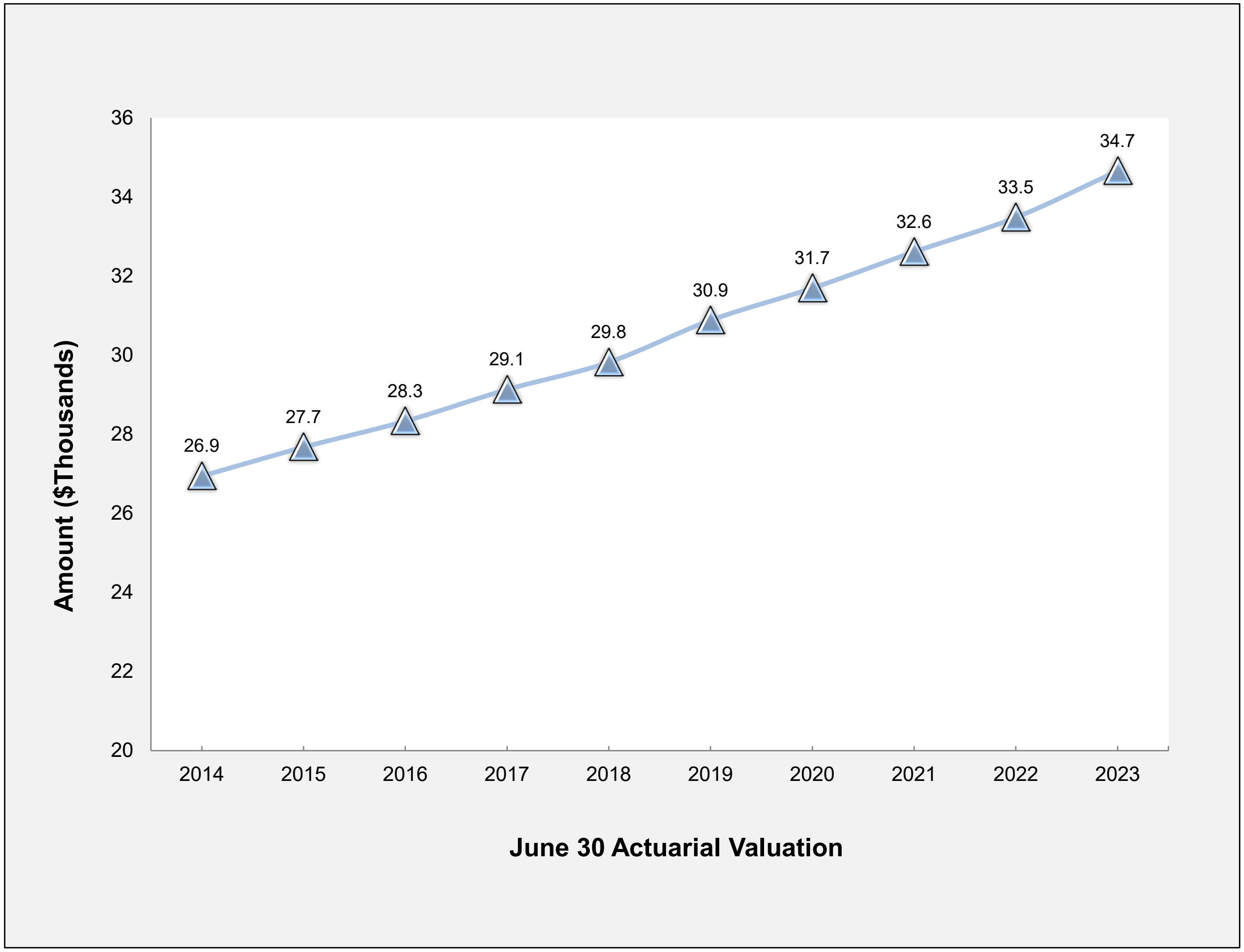


Table XIII-10
Reconciliation of Pensioner and Beneficiary Data

SCHEDULE OF PENSIONERS AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS

June 30 Actuarial Valuation	Added to Rolls		Removed from Rolls		End of Year Rolls		% Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances[1]	Number	Annual Allowances	Number	Annual Allowances[2]		
2014	8,132	$276,606,560	5,436	$107,547,552	142,095	$3,828,587,191	4.6%	$26,944
2015	8,219	289,143,851	5,788	117,910,540	144,526	3,999,820,502	4.5%	27,675
2016	8,407	295,570,322	5,419	115,894,203	147,514	4,179,496,621	4.5%	28,333
2017	8,756	329,831,284	5,851	127,341,967	150,419	4,381,985,938	4.8%	29,132
2018	9,606	345,164,441	5,909	131,216,661	154,116	4,595,933,718	4.9%	29,821
2019	9,431	404,793,279	6,394	147,333,875	157,153	4,853,393,122	5.6%	30,883
2020	9,750	385,195,770	6,997	170,363,372	159,906	5,068,225,520	4.4%	31,695
2021	9,273	395,051,205	7,030	175,127,083	162,149	5,288,149,642	4.3%	32,613
2022	11,050	460,225,948	6,568	169,124,847	166,631	5,579,250,743	5.5%	33,483
2023	9,654	481,668,593	5,889	155,264,754	170,396	5,905,654,582	5.9%	34,658

[1] Amounts shown include changes due to benefit finalization, changes in benefit type (e.g. Service to Accidental Disability), COLA increases and other changes.

[2] Allowances shown are those used in the actuarial valuation as of the Year End date and are not adjusted for anticipated changes due to the finalization of benefit calculations or contract settlements. Beginning 2016, SADB payments to beneficiaries are included.

APPENDIX: ACRONYMS AND ABBREVIATIONS

Revised 2021 A&M	Actuarial Assumptions and Methods proposed by the Actuary and adopted by the Board of Trustees during Fiscal Year 2021
2019 A&M	Actuarial Assumptions and Methods proposed by the Actuary and adopted by the Board of Trustees during Fiscal Year 2019
AAVM	Actuarial Asset Valuation Method
ACCNY	Administrative Code of the City of New York
AIR	Actuarial Interest Rate
AL	Accrued Liability
AMC	Additional Member Contributions
AMC-PT	Additional Member Contributions for Physically-Taxing Employment
AVA	Actuarial Value of Assets
BERS	Board of Education Retirement System
BMC	Basic Member Contributions
COLA	Cost-of-Living Adjustment
EAN	Entry Age Normal cost method
FAS	Final Average Salary
FIRE	Fire Pension Fund
GASB	Governmental Accounting Standards Board
IRC	Internal Revenue Code
ITHP	Increased-Take-Home-Pay
MVA	Market Value of Assets
NYCERS	New York City Employees' Retirement System
NYCRS	New York City Retirement Systems
OWBPA	Older Workers Benefit Protection Act
OYLM	One-Year Lag Methodology
POLICE	Police Pension Fund
PT	Physically-Taxing Employment
PV	Present Value
PVFB	Present Value of Future Benefits
PVFNC	Present Value of Future Normal Costs
PVFS	Present Value of Future Salary
TRS	Teachers' Retirement System
UAL	Unfunded Accrued Liability
VSF	Variable Supplements Fund
WTC	World Trade Center