New Hampshire Retirement System

ACFR Schedules, GASB Statement Nos. 67 and 74 Plan Reporting and Accounting Schedules June 30, 2023







December 1, 2023

Board of Trustees New Hampshire Retirement System 54 Regional Drive Concord, New Hampshire 03301-8509

Attention: Ms. Jan Goodwin

Dear Board Members:

This report was prepared at the request of the Board and is intended for use by the New Hampshire Retirement System ("NHRS") and those designated or approved by the Board. This report may be provided to parties other than the NHRS only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report. This report should not be relied on for any purpose other than the purposes described below.

The purposes of this report are:

- To provide information in connection with Governmental Accounting Standards Board (GASB) Statement No. 67 "Financial Reporting for Pension Plans" as of June 30, 2023.
- To provide information in connection with Governmental Accounting Standards Board (GASB) Statement No. 74 "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans" as of June 30, 2023.
- To provide supporting schedules for the Annual Comprehensive Financial Report (ACFR) for the System's use in the Actuarial Section, the Statistical Section, Notes to the Financial Statements, and Required Supplementary Information.

The report was based upon information, furnished by New Hampshire Retirement System staff, concerning Retirement System benefits, financial transactions, and active members, terminated members, retirees and beneficiaries as of June 30, 2023. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the data provided by NHRS.

We prepared the following supporting schedules for the Annual Comprehensive Financial Report of the NHRS for use in the Actuarial Section, the Statistical Section, Notes to the Financial Statements and Required Supplementary Information:

- Summary of Actuarial Assumptions and Methods
 - o Percent Retiring Within Next Year
 - o Probabilities of Becoming Disabled Within Next Year
 - Percent Separating Within Next Year
 - Individual Employee Pay Increases
- Retirees and Beneficiaries Age Distribution
- Active Members by Valuation Division

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- Active Members Age and Service Distribution
- Historical Membership Data Active and Retired
- Summary of Membership Data by Category
- Schedule of Average Benefit Payment Amounts
- Schedule of Retired and Vested Members by Type of Benefit
- Solvency Test
- Schedule of Employer Contributions Pension and OPEB
- Schedule of Changes in the Employers' Net Pension Liability, Net OPEB Liability and Related Ratios
- Sensitivity of Net Pension Liability and Net OPEB Liability to the Single Discount Rate Assumption

The schedules include information regarding pension plan funding under the New Hampshire Statute RSA 100-A:16. The basic financial objective of the New Hampshire Retirement System (NHRS) is to establish and receive pension contributions which:

- When expressed in terms of percents of active member payroll will remain approximately level from generation to generation; and
- When combined with present assets and future investment return will be sufficient to meet the financial obligations of NHRS to present and future retirees and beneficiaries.

The financial objective for medical subsidy benefits under RSA 100-A:53, 53-b, 53-c and 53-d is to contribute the lesser of 25 percent of the total employer contribution or the minimum amount necessary to maintain the benefit. RSA 100-A:16 requires biennial actuarial valuations on June 30 of odd years. The Board has adopted an Actuarial Funding Policy which requires annual actuarial valuation. The financial objectives are addressed within the statutory biennial actuarial valuation. The valuation process develops pension contribution rates that are sufficient to fund the plan's current pension cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund pension unfunded actuarial accrued liabilities as a level percent of active member payroll over a closed 30-year period beginning with the fiscal year ending June 30, 2010. Legislation was enacted in 2018 which requires the unfunded liability as of June 30, 2017 to be amortized through 2039. Each subsequent change in liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

The actuarial calculations for funding purposes as of June 30, 2023 in this report are based on the assumptions adopted by the Board pursuant to the June 30, 2019 experience study and the census information as of June 30, 2023. The actuarial accrued liability as of June 30, 2023 differs from the total pension (OPEB) liability as of June 30, 2023 under GASB Statement Nos. 67 and 74 because the total pension (OPEB) liability is based on a roll-forward of the June 30, 2022 actuarial valuation under the System's accounting procedures.



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For funding purposes, assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed five-year period. For GASB Statement Nos. 67 and 74 purposes, assets are reported and used on a market basis.

The actuarial valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The actuarial assumptions are established by the Board after consulting with the actuary under New Hampshire Statute RSA 100-A:14 IX. The assumptions and methods used in this report are reasonable and appropriate for funding purposes and conform to the Actuarial Standards of Practice. However, other assumptions and methods could also be reasonable and could result in materially different results. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial. The actuarial funding method is the Individual Entry Age Actuarial Cost Method, in compliance with NHRS State Statutes. The actuarial assumptions and the methods comply with the requirements of Statement No. 67 and No. 74 of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. Actuarial methods and assumptions were adopted by the Board pursuant to the June 30, 2019 Experience Study.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

We certify that the information contained in this June 30, 2023 accounting report of the NHRS is accurate and fairly presents the actuarial position of the New Hampshire Retirement System as of June 30, 2023 under the current actuarial assumptions. The combined effect of the assumptions, excluding prescribed assumptions or methods set by law, is expected to have no significant bias (i.e., not significantly optimistic or pessimistic). All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes RSA 100-A:16, 100-A:53, 100-A:53-b, 100-A:53-c, and 100-A:53-d.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.



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The actuaries submitting this report are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted, Gabriel, Roeder, Smith & Company

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SECTION A

INTRODUCTION

Executive Summary Pension (\$ Amounts in Millions)

Valuation as of:	Jur	ne 30, 2023	Jur	e 30, 2022
Membership				
Number of				
- Active members		48,589		48,687
- Retirees and Beneficiaries		43,603		42,415
- Inactive, vested		3,266		2,990
- Inactive, nonvested		18,826		16,717
Total		114,284		110,809
Assets				
Market value	\$	11,459.4	\$	10,708.4
Actuarial value	\$	11,495.6	\$	10,849.7
Return on market value		8.0%		-6.0%
Return on actuarial value		6.9%		6.9%
Employer contributions	\$	655.1	\$	579.0
External cash flow %		(0.9%)		(1.1%
Ratio of actuarial to market value		100.3%		101.3%
Actuarial Information				
Actuarial accrued liability (AAL)	\$	17,105.0	\$	16,543.5
Unfunded actuarial accrued liability (UAAL)	\$	5,609.5	\$	5,693.8
Funded Ratio		67.2%		65.6%
Gains/(losses) resulting from				
- Asset experience	\$	17.3	\$	18.8
- Liability experience		(57.6)		(110.7
- Benefit changes		(76.6)		-
 Assumption/method changes 		-		-
	\$	(116.9)	\$	(91.9
GASB Information				
Total pension liability (TPL)	\$	17,057.7	\$	16,444.5
Net pension liability (NPL)	\$	5,598.3	\$	5,736.1
Plan fiduciary net position (PFNP) as		67.2%		65.1%
a percentage of TPL				



Executive Summary Pension

Covered (Group	 Employees	 Teachers	 Police	 Fire	 Total	
I. Numbe	r of Participants as of June 30, 2023						
a.	Actives	24,640	18,141	4,042	1,766	48,589	
b.	Retirees, Disabilities, and Beneficiaries ¹	21,302	15,607	4,764	1,930	43,603	
с.	Vested Terminations	1,668	1,364	185	49	3,266	
d.	Non-Vested Inactive Terminations	13,005	4,626	1,092	103	18,826	
e.	Total	 60,615	39,738	10,083	3,848	114,284	
f.	Total Covered Annual Payroll	\$ 1,412,494,283	\$ 1,260,239,621	\$ 349,469,309	\$ 155,892,931	\$ 3,178,096,144	
g.	Ratio of Actives to Benefit Recipients	116%	116%	85%	92%	111%	
II. GASB N	No. 67 Information						
a.	Total Pension Liability (TPL) ²					\$ 17,057,664,598	
b.	Plan Fiduciary Net Position (PFNP)				-	11,459,384,732	
с.	Net Pension Liability (NPL): a. – b.					5,598,279,866	
d.	PFNP as a Percentage of TPL: b. / a.					67.2%	
III. Statut	ory Funding Information						
a.	Actuarial Present Value of Projected Benefits	\$ 6,625,885,539	\$ 7,626,025,241	\$ 3,849,020,957	\$ 1,806,654,062	\$ 19,907,585,799	
b.	Actuarial Present Value of Future Normal Costs	 914,582,289	1,077,015,112	537,516,088	273,427,875	2,802,541,364	
с.	Actuarial Accrued Liability (AAL): a. – b.	5,711,303,250	6,549,010,129	3,311,504,869	1,533,226,187	17,105,044,435	
d.	Actuarial Value of Assets	 3,850,701,345	4,210,979,415	2,310,556,236	1,123,345,036	11,495,582,032	
e.	Unfunded Actuarial Accrued Liability (UAAL): c. – d.	\$ 1,860,601,905	\$ 2,338,030,714	\$ 1,000,948,633	\$ 409,881,151	\$ 5,609,462,403	
f.	Funded Status: d. / c.	67.4%	64.3%	69.8%	73.3%	67.2%	
IV. Additi	onal Information on Payroll						
Sta	ite	\$ 628,330,727	\$ - 5	\$ 94,372,975	\$ 2,428,519	\$ 725,132,221	
Pol	litical Subdivisions	 784,163,556	1,260,239,621	255,096,334	153,464,412	2,452,963,923	
Tot	tal	\$ 1,412,494,283	\$ 1,260,239,621	\$ 349,469,309	\$ 155,892,931	\$ 3,178,096,144	
Co	ntribution Rates for Fiscal Year 2023 (% of Payroll) ³						
	Member	7.00%	7.00%	11.55%	11.80%		
	Employer (Including Health Subsidy)	14.27%	21.02%	33.88%	32.99%		

¹ Number counts for inactive plan members or beneficiaries currently receiving benefits include 4,014 additional data records which have resulted from additional annuities, survivor benefits, or members having benefits in more than one valuation group.

² GASB Statement No. 67 TPL is based on a roll-forward of the June 30, 2022 valuation. Statutory Funding information is based on data/information provided as of June 30, 2023.

³ Percent-of-payroll contributions applicable to fiscal year 2023 as determined in the June 30, 2019 valuation. Rates shown are pro-rated based on proportions of payroll attributed to State and Political Subdivisions within the various member classifications.



Executive Summary Medical Subsidy (\$ Amounts in Millions)

Valuation as of:	Jur	ne 30, 2023	Jun	e 30, 2022
Mambashia				
Membership Number of				
		1 201		1 405
 Active members Retirees and Beneficiaries 		1,291		1,485
		8,869		9,133
Total		10,160		10,618
Assets				
Market value	\$	50.2	\$	45.0
Actuarial value	\$	50.3	\$	45.6
Return on market value	-	8.0%		-6.0%
Return on actuarial value		6.9%		6.9%
Employer contributions	\$	43.6	\$	42.1
External cash flow %		-0.9%		-1.1%
Ratio of actuarial to market value		100.3%		101.3%
Actuarial Information				
Actuarial accrued liability (AAL)	\$	524.9	\$	567.2
Unfunded actuarial accrued liability (UAAL)	\$	474.5	\$	521.6
Funded Ratio	Ŧ	9.6%	-	8.0%
Gains/(losses) resulting from				
- Asset experience	\$	(0.2)	\$	0.0
- Liability experience		18.5		22.6
- Benefit changes		-		-
 Assumption/method changes 		-		-
	\$	18.3	\$	22.6
GASB Information				
Total OPEB liability (TOL)	ć	391.9	\$	422.9
Net OPEB liability (NOL)	\$ \$	391.9 341.7	\$ \$	422.9 377.9
Plan fiduciary net position (PFNP) as	Ş	341.7 12.8%	Ş	377.9 10.6%
a percentage of TOL		12.070		10.0%



Executive Summary Medical Subsidy

		State		Political Subdivision				Police and		Grand
Covered Group		Employees		Employees		Teachers		Fire		Total
I. Number of Participants Covered by										
Post Retirement Medical Subsidy as of June 30, 2023										
a. Actives		-		-		-		1,291		1,291
b. Retirees, Disabilities, and Beneficiaries		1,224		937		3,745		2,963		8,869
c. Vested Terminations		-		-		-		-		-
d. Total		1,224		937		3,745		4,254		10,160
e. Total NHRS Covered Annual Payroll	\$	628,330,727	\$	784,163,556	\$	1,260,239,621	\$	505,362,240	\$	3,178,096,144
II. GASB No. 74 Information										
a. Total OPEB Liability (TOL)									\$	391,879,049
b. Plan Fiduciary Net Position (PFNP)										50,158,855
c. Net OPEB Liability (NOL): a. – b.										341,720,194
d. PFNP as a Percentage of TOL: b. / a.										12.80%
III. Statutory Funding Information a. Actuarial Present Value of Projected Benefits	Ś	37,568,114	ć	38,246,918	Ś	181,363,522	Ś	272,098,916	ć	529,277,470
b. Actuarial Present Value of Future Normal Costs	Ş	57,506,114	Ş	56,240,916	Ş	101,505,522	Ş		Ş	
		-		-				4,423,004		4,423,004
c. Actuarial Accrued Liability (AAL): a. – b.		37,568,114		38,246,918		181,363,522		267,675,912		524,854,466
d. Valuation Assets		3,787,317		9,076,989		14,703,773		22,749,215		50,317,294
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.		33,780,797		29,169,929		166,659,749		244,926,697		474,537,172
f. Funded Status: d. / c.		10.1%		23.7%		8.1%		8.5%		9.6%

NOTE: GASB Statement No. 74 TOL is based on a roll-forward of the June 30, 2022 valuation and an investment return assumption of 6.75%. Statutory Funding information is based on data/information provided as of June 30, 2023 and an investment return assumption of 2.75%.



Discussion and Comments

Comment 1:

In total, plan experience between June 30, 2022 and June 30, 2023 was unfavorable for pension and favorable for the medical subsidy on the basis of statutory funding. The plan experience was favorable for both pension and the medical subsidy on a market value basis for GASB Statement Nos. 67 and 74.

The primary source of actuarial losses over the year were mortality and payroll losses offset moderately by slightly higher investment return on System assets compared to expectations. On the basis of statutory funding, the rate of return for the year ending June 30, 2023 was 6.91% on the actuarial value of assets, resulting in a recognized asset gain of approximately \$17 million (pension and medical subsidy combined). The dollar-weighted rate of return was 7.99% on the market value of assets. (Note: This dollar-weighted measure may differ from investment manager calculations and should not be used as a measure of investment performance). Please see pages 38 and 40 for additional asset information for statutory funding purposes.

The return on the actuarial value of assets is less than the return on the market value of assets because some of this year's market gain is deferred and losses from prior years are recognized this year. The System's actuarial value of assets (\$11.55 billion) exceeds the market value of assets (\$11.51 billion) by \$36 million as of the valuation date (see page 38). This difference will be gradually recognized over the next four years in the absence of future gains/losses.

Total covered payroll increased by 3.3% versus the assumed increase of 2.75% (2.25% for Teachers). Payroll growth was more than expected for all four-member classifications. We do not have sufficient information to make any adjustment to the data or liability and, therefore, used the data as reported.

	2023 Total Payroll Gr	
Group	Expected	Actual
Employees	2.75%	3.29%
Teachers	2.25%	2.75%
Police	2.75%	3.85%
Fire	2.75%	6.03%

Overall, the System had a loss of \$22 million comprised of an asset gain of \$17 million and a liability loss of \$39 million. See page 44 for additional information on gains and losses.

Between the 2022 and 2023 valuation, the pension funded ratio, based on the actuarial value of assets, increased by 1.6 percentage points from 65.6% to 67.2%. Approximately 2.0% of the increase in the funded ratio is due to scheduled contributions, while the remaining decrease is the result of benefit provision changes and actuarial losses for the System. Please see page 37 for additional detail by member classification.

The impact of market-value-based investment gains on GASB Statement No. 67 was an increase in the ratio of plan fiduciary net position to total pension liability from 65.1% to 67.2%. See pages 9 and 10 for additional plan fiduciary net position information and page 11 for the impact on the net pension liability.



Discussion and Comments (Concluded)

Comment 2:

Benefit Changes

House Bill (HB) 1587 modifies the definition of Average Final Compensation (AFC) for Group II members who commenced service on or after July 1, 2011 or who have not attained vested status prior to January 1, 2012. The impact of this change was an increase in actuarial accrued liabilities of approximately \$22.2 million for Police and \$10.5 million for Fire. An appropriation of \$42.9 million was made by the State for this benefit. This provision was terminally funded by the State, therefore, there is no expected financial impact on the NHRS for this bill based on the current valuation assumptions.

House Bill (HB) 2 modifies the effective date of the statutory pension recalculation for Group I (Employee and Teacher) members who retire on or after July 1, 2023. The change defers the recalculation of a Group I retiree's NHRS benefit from age 65 to his or her full retirement age under the federal Social Security system. The impact of this change was an increase in actuarial accrued liabilities of approximately \$18.7 million for Employees and \$25.2 million for Teachers and a decrease in the funded status of 0.2% for both Employees and Teachers.

HB 2 also grants a one-time payment of \$500 to members who retired on or before July 1, 2018 with at least 20 years of creditable service, or any beneficiaries of such member who is receiving a survivorship pension benefit who has an annual retirement allowance of no more than \$40,000 on June 30, 2023. The one-time payment will be made during state fiscal year 2024. An appropriation of \$7.1 million is expected to be made by the State for this benefit. This portion of HB 2 is reflected in the GASB Statement No. 67 Accounting Statements. This portion of the bill was terminally funded by the State, therefore, there is no financial impact on the NHRS for this portion the bill.



Results of the Valuations

This report provides information in connection with Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 74, and it provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

Calculations required for compliance with the GASB Statement Nos. 68 and 75 will be issued in separate reports.

Valuations for certifying contribution rates are prepared biennially, as of June 30 on the odd numbered years (2023, 2025, etc.). The June 30, 2021 actuarial valuation was the basis for the Fiscal Year 2024 and Fiscal Year 2025 employer contribution rates. The June 30, 2023 funding actuarial valuation will be issued in the summer of 2024 and will establish the Fiscal Year 2026 and Fiscal Year 2027 employer contribution rates.



SECTION B

FINANCIAL SECTION

Measurement of the Net Pension Liability

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2022 rolled forward to the measurement date of June 30, 2023. The roll forward procedure increases the June 30, 2022 total pension liability with service cost and interest and decreases it with actual benefit payments.

A single discount rate of 6.75% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 6.75%. The projection of cash flows, shown on pages 17-22, used to determine this single discount rate assumed that employer contributions will be made under the current statute RSA 100-A:16 and that plan member contributions will be made under RSA 100-A:16. Based on these assumptions, the pension plan's fiduciary net position was projected to be sufficient to make all projected future benefit payments due to current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Below is a table providing the sensitivity of the net pension liability to changes in the discount rate. In particular, the table presents the plan's net pension liability calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current single discount rate:

_		Net Pension Liability		
Measurement				
Date		Current Single		Single Discount
June 30	1% Decrease	Discount Rate	1% Increase	Rate Assumption
2014	\$4,944,083,125	\$3,753,585,752	\$2,749,222,899	7.75%
2015	5,214,835,524	3,961,527,090	2,893,074,359	7.75%
2016	6,832,747,755	5,317,595,337	4,061,016,509	7.25%
2017	6,479,208,704	4,917,992,831	3,638,638,217	7.25%
2018	6,406,666,255	4,815,202,417	3,481,507,071	7.25%
2019	6,443,003,824	4,811,654,670	3,463,357,380	7.25%
2020	8,280,412,543	6,396,151,084	4,856,459,957	6.75%
2021	6,338,151,561	4,431,919,221	2,841,810,253	6.75%
2022	7,696,442,274	5,736,131,484	4,106,314,531	6.75%
2023	7,596,188,009	5,598,279,866	3,891,189,564	6.75%

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption



Statement of Fiduciary Net Position as of June 30, 2023 Pension

	 2023*
Assets	
Cash and Deposits	\$ 253,788,926
Receivables	
Accounts Receivable - Sale of Investments	\$ 13,548,176
Interest and Dividend Receivables	16,758,861
Contributions	96,036,814
Accounts Receivable - Other	 10,411,924
Total Receivables	\$ 136,755,775
Investments	
Fixed Income	\$ 2,201,422,794
Domestic Equities	4,590,474,049
International Equities	814,715,759
Real Estate	1,276,517,803
Other	 2,230,561,650
Total Investments	\$ 11,113,692,055
Total Assets	\$ 11,504,236,756
Liabilities	
Payables	
Accounts Payable - Purchase of Investments	\$ 29,456,237
Accrued Expenses	 15,395,787
Total Liabilities	\$ 44,852,024
Net Position Restricted for Pensions	\$ 11,459,384,732

* Reported amounts provided by the System as of June 30, 2023 do not include the 401(h) medical subsidy account. Total is the actual amount on the balance sheet.



Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2023 Pension

	Total*
Additions	
Contributions	
Employer	\$ 655,093,369
Member	 254,678,553
Total Contributions	\$ 909,771,922
Investment Income	
Net Appreciation/(Depreciation) in Fair Value of	
Investments	\$ 693,594,778
Interest and Dividends	214,530,839
Less Investment Expense	(57,652,209)
Net Investment Income/(Loss)	\$ 850,473,408
Total Additions	\$ 1,760,245,330
Deductions	
Benefit Payments and Refunds	\$ 998,507,633
Pension Plan Administrative Expense	9,637,702
Other custodial, professional and non-investment expenses	 1,072,273
Total Deductions	\$ 1,009,217,608
Net Increase/(Decrease) in Net Position	\$ 751,027,722
Net Position Restricted for Pensions	
Beginning of Year	\$ 10,708,357,010
End of Year	\$ 11,459,384,732

* Reported amounts provided by the System as of June 30, 2023 do not include the 401(h) medical subsidy account.



Schedules of Required Supplementary Information Schedule of Changes in the Employers' Net Pension Liability and Related Ratios Last 10 Fiscal Years

Fiscal Year Ending	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Total Pension Liability										
Service Cost	\$ 332,275,622	\$ 321,589,002	\$ 319,295,943	\$ 310,678,283	\$ 275,380,260	\$ 269,751,007	\$ 262,626,490	\$ 266,379,101	\$ 243,964,955	\$ 245,827,165
Interest on the Total Pension Liability	1,087,517,643	1,056,221,936	1,026,952,855	994,537,325	970,599,109	936,988,169	906,200,904	875,246,755	847,646,050	815,213,536
Benefit Changes	86,209,933	10,793,500	-	69,354,791	-	-	-	-	-	-
Difference between expected and actual experience of the Total Pension Liability	105,680,539	37,806,852	(5,871,508)	198,104,071	(111,250,355)	39,112,535	(19,046,986)	18,403,928	(106,715,500)	-
Assumption Changes	-	-	-	778,434,124	-	-	-	815,022,527	-	-
Benefit Payments	(971,121,035)	(913,994,579)	(858,210,462)	(816,708,118)	(780,906,714)	(741,752,669)	(706,303,846)	(670,359,868)	(631,310,997)	(599,475,606)
Refunds	(27,386,598)	(23,726,778)	(19,883,792)	(23,312,151)	(23,464,493)	(24,010,459	(23,408,460)	(24,233,277)	(26,344,739)	(26,119,759)
Net Change in Total Pension Liability	\$ 613,176,104	\$ 488,689,933	\$ 462,283,036	\$ 1,511,088,325	\$ 330,357,807	\$ 480,088,583	\$ 420,068,102	\$ 1,280,459,166	\$ 327,239,769	\$ 435,445,336
Total Pension Liability - Beginning	\$ 16,444,488,494	\$ 15,955,798,561	\$ 15,493,515,525	\$ 13,982,427,200	\$ 13,652,069,393	\$ 13,171,980,810	\$ 12,751,912,708	\$ 11,471,453,542	\$ 11,144,213,773	\$ 10,708,768,437
Total Pension Liability - Ending (a)	\$ 17,057,664,598	\$ 16,444,488,494	\$ 15,955,798,561	\$ 15,493,515,525	\$ 13,982,427,200	\$ 13,652,069,393	\$ 13,171,980,810	\$ 12,751,912,708	\$ 11,471,453,542	\$ 11,144,213,773
Plan Fiduciary Net Position										
Contributions - Employer	\$ 655,093,369	\$ 579,028,230	\$ 459,277,447	\$ 445,021,693	\$ 434,407,178	\$ 422,659,079	\$ 366,653,014	\$ 357,481,725	\$ 332,294,226	\$ 328,444,256
Contributions - Member	254,678,553	243,981,535	236,878,931	229,725,742	223,995,134	217,571,830	213,060,827	207,949,398	204,063,168	199,032,996
Pension Plan Net Investment Income	850,473,408	(690,177,440)	2,617,660,628	101,039,189	488,269,838	717,090,294	978,594,418	61,877,808	249,804,954	1,092,585,321
Benefit Payments	(971,121,035)	(913,994,579)	(858,210,462)	(816,708,118)	(780,906,714)	(741,752,669)	(706,303,846)	(670,359,868)	(631,310,997)	(599,475,606)
Refunds	(27,386,598)	(23,726,778)	(19,883,792)	(23,312,151)	(23,464,493)	(24,010,459)	(23,408,460)	(24,233,277)	(26,344,739)	(26,119,759)
Pension Plan Administrative Expense	(9,637,702)	(9,523,523)	(8,417,145)	(8,281,785)	(7,436,447)	(7,767,254	(7,670,827)	(7,061,317)	(7,581,315)	(7,376,270)
Other custodial, professional and non-investment expenses, and contributions other than for contribution effort	(1,072,273)	(1,109,775)	(790,708)	(892,659)	(958,942)	(911,824	(1,254,518)	(1,263,550)	(1,626,866)	(1,446,882)
Net Change in Plan Fiduciary Net Position	\$ 751,027,722	\$ (815,522,330)	\$2,426,514,899	\$ (73,408,089)	\$ 333,905,554	\$ 582,878,997	\$ 819,670,608	\$ (75,609,081)	\$ 119,298,431	\$ 985,644,056
Plan Fiduciary Net Position - Beginning	\$ 10,708,357,010	\$ 11,523,879,340	\$9,097,364,441	\$ 9,170,772,530	\$ 8,836,866,976	\$ 8,253,987,979	\$ 7,434,317,371	\$ 7,509,926,452	\$ 7,390,628,021	\$ 6,404,983,965
Plan Fiduciary Net Position - Ending (b)	\$ 11,459,384,732	\$ 10,708,357,010	\$ 11,523,879,340	\$ 9,097,364,441	\$ 9,170,772,530	\$ 8,836,866,976	\$ 8,253,987,979	\$ 7,434,317,371	\$ 7,509,926,452	\$ 7,390,628,021
Net Pension Liability - Ending (a) - (b)	\$ 5,598,279,866	\$ 5,736,131,484	\$4,431,919,221	\$ 6,396,151,084	\$ 4,811,654,670	\$ 4,815,202,417	\$ 4,917,992,831	\$ 5,317,595,337	\$ 3,961,527,090	\$ 3,753,585,752
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	67.18 %	65.12 %	72.22 %	58.72 %	65.59 %	64.73 %	62.66 %	58.30 %	65.47 %	66.32 %
Covered Employee Payroll*	\$3,178,096,144	\$3,077,583,995	\$2,972,968,504	\$ 2,894,708,279	\$ 2,825,006,022	\$ 2,752,235,069	\$2,667,611,532	\$2,601,403,606	\$2,575,031,210	\$ 2,507,898,809
Net Pension Liability as a Percentage										
of Covered Employee Payroll	176.15 %	186.38 %	149.07 %	220.96 %	170.32 %	174.96 %	184.36 %	204.41 %	153.84 %	149.67 %

Notes to Schedule:

* Based on the June 30 census data for the applicable fiscal year. Covered employee payroll for employer's disclosure may differ.



Schedules of Required Supplementary Information Schedule of the Employers' Net Pension Liability Last 10 Fiscal Years

FY Ending June 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll*	Net Pension Liability as a % of Covered Payroll
2014	\$ 11,144,213,773	\$ 7,390,628,021	\$ 3,753,585,752	66.32%	\$ 2,507,898,809	149.67%
2015	11,471,453,542	7,509,926,452	3,961,527,090	65.47%	2,575,031,210	153.84%
2016	12,751,912,708	7,434,317,371	5,317,595,337	58.30%	2,601,403,606	204.41%
2017	13,171,980,810	8,253,987,979	4,917,992,831	62.66%	2,667,611,532	184.36%
2018	13,652,069,393	8,836,866,976	4,815,202,417	64.73%	2,752,235,069	174.96%
2019	13,982,427,200	9,170,772,530	4,811,654,670	65.59%	2,825,006,022	170.32%
2020	15,493,515,525	9,097,364,441	6,396,151,084	58.72%	2,894,708,279	220.96%
2021	15,955,798,561	11,523,879,340	4,431,919,221	72.22%	2,972,968,504	149.07%
2022	16,444,488,494	10,708,357,010	5,736,131,484	65.12%	3,077,583,995	186.38%
2023	17,057,664,598	11,459,384,732	5,598,279,866	67.18%	3,178,096,144	176.15%

* Based on the June 30 census data. Covered-employee payroll for employer's disclosure may differ.



Schedules of Required Supplementary Information Schedule of Employer Pension Contributions Last 10 Fiscal Years

FY Ending June 30,	Actuarially Determined Contribution*	Actual Contribution*	Contribution Deficiency (Excess)	Covered Payroll**	Actual Contribution as a % of Covered Payroll
2014	\$ 328,444,256	\$ 328,444,256	\$-	\$ 2,507,898,809	13.10%
2015	332,294,226	332,294,226	-	2,575,031,210	12.90%
2016	357,481,725	357,481,725	-	2,601,403,606	13.74%
2017	366,653,014	366,653,014	-	2,667,611,532	13.74%
2018	422,659,079	422,659,079	-	2,752,235,069	15.36%
2019	434,407,178	434,407,178	-	2,825,006,022	15.38%
2020	445,021,693	445,021,693	-	2,894,708,279	15.37%
2021	459,277,447	459,277,447	-	2,972,968,504	15.45%
2022	579,028,230	579,028,230	-	3,077,583,995	18.81%
2023	655,093,369	655,093,369	-	3,178,096,144	20.61%

* We do not compute a dollar amount for the Actuarially Determined Contribution. It is our understanding that employers contribute the Actuarially Determined Contribution. The amount shown in this column, therefore, matches the actual contributions. Contributions other than the Actuarial Determined Contributions are accounted for separately.

** Based on the June 30 census data. Covered employee payroll for employer's disclosure may differ.



Notes to Schedule of Pension Contributions

Valuation Date	Actuarially determined contribution rates for the 2022-2023 biennium were determined based on the June 30, 2019 actuarial valuation. Actuarially determined contribution rates for the 2024-2025 biennium were determined based on the June 30, 2021 actuarial valuation. Future employer contribution rates for the purposes of the projection in this report are based on the closed statutory amortization period.
Notes	The roll-forward of total pension liability from June 30, 2022 to June 30, 2023 reflects expected service cost and interest reduced by actual benefit payments.

Methods and Assumptions:

Actuarial Cost Method	Entry-Age Normal
Amortization Method	Level Percentage-of-Payroll, Closed
Remaining Amortization Period	Multiple periods of 17-20 years
Asset Valuation Method	5-year smoothed fair value for funding purposes; 20% corridor
Price Inflation	2.0% per year
Wage Inflation	2.75% per year (2.25% for Teachers) in the 2019 valuation
Salary Increases	5.4% average, including inflation
Investment Rate of Return	6.75% per year, net of investment expenses, including inflation
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Based on the 2015-2019 Experience Study.
Mortality	Pub-2010 Healthy Retiree Mortality Tables with credibility adjustments for each member classification (Police and Fire combined) and projected fully generational mortality improvements using Scale MP-2019.
Other Information:	
Notes	The Board has adopted new assumptions based on the 2015-2019 experience study effective for employer contributions in the 2022-2023 and the 2024-2025 bienniums.

NOTE: A full list of actuarial assumptions and the summary of benefit provisions can be found starting on page 61. Actuarial assumptions for contributions made in the year ending June 30, 2023 can be found in the June 30, 2019 actuarial valuation report.



Summary of Pension Population Statistics as of June 30, 2022

For purposes of GASB Statement No. 67 disclosures, the System has adopted a roll-forward methodology for accounting purposes. This means that the June 30, 2023 Total Pension Liability is based on a roll-forward of the June 30, 2022 valuation. A brief summary of the June 30, 2022 census data is shown below.

Inactive Plan Members or Beneficiaries Currently Receiving Benefits*	42,415
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2,990
Active Plan Members	48,687
Non-Vested Inactive Members	16,717
Total Plan Members	110,809

^{*} Number counts for inactive plan members or beneficiaries receiving benefits as of June 30, 2022 include 3,698 additional data records which have resulted from additional annuities, survivor benefits, or members having benefits in more than one valuation group.

Additional information regarding the covered population as of June 30, 2022 may be found in the ACFR Schedules, GASB Statement Nos. 67 and 74 Plan Reporting and Accounting Schedules report issued November 7, 2022.



Calculation of the Single Discount Rate for Pension

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects: (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits); and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the plan fiduciary net position is not projected to be sufficient to pay benefits.

The determination of the discount rate is done at the plan level. Our understanding is that all pension assets are available to pay the pension benefits of the four-member classifications so there is one plan for the discount rate calculation. For the purpose of this valuation, the expected rate of return on pension plan investments is 6.75%; the municipal bond rate is 3.86% (based on the 20-Year Municipal GO AA Index for June 2023); and the resulting single discount rate is 6.75%.

The tables in this section provide background for the development of the single discount rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Service Cost contributions for future hires after June 30, 2023 are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years after June 30, 2023.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate. It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.



Single Discount Rate Development Projection of Pension Contributions Beginning July 1, 2023 (Years 1-50 only)

Year	Payroll for Current Employees	Contributions from Current Employees	Employer Service Cost and Expense Contributions	UAL Contributions	Total Contributions
0	\$ 3,178,096,144				
1	3,153,310,212	\$ 223,361,785	\$ 98,033,146	\$ 468,955,133	\$ 790,350,065
2	3,008,715,726	213,458,254	91,637,532	480,839,449	785,935,235
3	2,879,554,546	204,590,855	85,832,243	501,689,262	792,112,359
4	2,759,113,336	196,283,464	80,398,483	514,409,128	791,091,075
5	2,644,225,256	188,313,836	75,273,473	527,454,569	791,041,878
6	2,531,584,013	180,496,830	70,383,286	540,833,990	791,714,106
7	2,418,104,622	172,610,635	65,565,114	554,556,021	792,731,769
8	2,303,851,794	164,639,188	60,809,995	568,629,512	794,078,695
9	2,192,834,210	156,876,821	56,317,770	583,063,546	796,258,136
10	2,084,478,508	149,306,227	52,070,477	597,867,441	799,244,145
10	1,977,153,228	143,300,227	47,997,909	613,050,762	802,865,980
12	1,871,981,757	134,469,528	44,109,288	628,623,318	807,202,133
12	1,768,600,866	127,263,429	40,414,183	644,595,177	812,272,790
13	1,668,307,563	120,284,050	36,983,509	660,976,668	812,272,790
	1,571,026,551	120,284,050	33,782,049	677,778,389	
15	1,476,703,803				825,031,578
16		106,816,509	30,798,450	695,011,219	832,626,178 211,714,927
17	1,382,997,652	100,162,514	27,936,619	83,615,795 85,763,570	
18	1,291,470,357	93,597,091	25,238,259	85,763,570	204,598,920
19	1,200,908,369	87,012,255	22,640,096	-	109,652,352
20	1,110,609,850	80,369,807	20,119,021		100,488,828
21	1,021,866,007	73,774,994	17,731,994	-	91,506,988
22	933,564,422	67,142,380	15,421,019		82,563,400
23	845,962,637	60,486,062	13,194,264	-	73,680,327
24	759,158,858	53,827,049	11,066,929	-	64,893,979
25	675,189,474	47,398,265	9,120,899	-	56,519,164
26	596,724,736	41,478,055	7,449,335	-	48,927,389
27	522,680,147	35,999,006	6,018,000	-	42,017,006
28	453,464,932	30,975,342	4,805,588	-	35,780,930
29	388,394,129	26,345,919	3,771,173	-	30,117,092
30	329,538,618	22,230,496	2,929,611	-	25,160,106
31	277,277,169	18,626,829	2,253,805	-	20,880,634
32	230,576,112	15,434,752	1,715,223	-	17,149,975
33	188,718,341	12,600,330	1,281,142	-	13,881,471
34	151,898,112	10,117,244	940,888	-	11,058,132
35	119,993,699	7,971,299	678,713	-	8,650,012
36	92,295,023	6,114,651	481,455	-	6,596,107
37	69,354,858	4,577,149	341,609	-	4,918,759
38	50,532,214	3,317,508	240,811	-	3,558,319
39	35,644,396	2,324,178	170,522	-	2,494,700
40	24,214,827	1,563,571	123,329	-	1,686,900
41	15,435,795	979,274	94,247	-	1,073,521
42	9,691,261	593,443	79,626	-	673,069
43	6,126,279	354,546	69,301	-	423,847
44	3,791,693	218,305	42,817	-	261,123
45	2,173,416	124,441	24,216	-	148,657
46	1,067,504	60,274	12,596	-	72,870
47	520,950	29,358	5,572	-	34,930
48	271,169	15,694	1,796	-	17,490
49	131,692	7,789	492	-	8,281
50	44,416	2,705	13	-	2,718

Employer contributions as shown may differ substantially from those determined by a funding valuation.



Single Discount Rate Development Projection of Pension Plan Fiduciary Net Position Beginning July 1, 2023

(Years 1-50)

					Projected	
	Desired D 1	Duralization (The second	Ductoria (D. 61	Projected	Investment	Designational To 11 Mar
Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Administrative Expenses	Earnings at 6.75%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 11,459,384,732		\$ 1,052,148,434	\$ 11,036,586	\$ 764,450,645	\$ 11,951,000,421
2	11,951,000,421	785,935,235	1,088,291,021	10,530,505	796,305,043	12,434,419,172
3	12,434,419,172	792,112,359	1,123,953,000	10,078,441	827,971,951	12,920,472,041
4	12,920,472,041	791,091,075	1,159,015,075	9,656,897	859,596,586	13,402,487,731
5	13,402,487,731	791,041,878	1,194,354,340	9,254,788	890,971,136	13,880,891,618
6	13,880,891,618	791,714,106	1,228,335,609	8,860,544	922,170,663	14,357,580,234
7	14,357,580,234	792,731,769	1,261,420,443	8,463,366	953,295,735	14,833,723,929
8	14,833,723,929	794,078,695	1,294,259,562	8,063,481	984,403,204	15,309,882,784
9	15,309,882,784	796,258,136	1,325,251,777	7,674,920	1,015,600,273	15,788,814,496
10	15,788,814,496	799,244,145	1,356,678,012	7,295,675	1,046,996,570	16,271,081,523
11	16,271,081,523	802,865,980	1,385,765,056	6,920,036	1,078,716,648	16,759,979,058
12	16,759,979,058	807,202,133	1,413,298,216	6,551,936	1,110,959,336	17,258,290,376
12	17,258,290,376	812,272,790	1,438,292,412	6,190,103	1,143,945,923	17,770,026,573
14	17,770,026,573	818,244,227	1,460,493,501	5,839,076	1,177,960,963	18,299,899,187
14	18,299,899,187	818,244,227 825,031,578	1,480,798,353	5,498,593	1,213,289,902	18,851,923,720
15						
	18,851,923,720	832,626,178	1,498,587,339 1,514,778,735	5,168,463	1,250,224,075	19,431,018,172 19,391,286,594
17	19,431,018,172	211,714,927 204,598,920		4,840,492	1,268,172,722	
18	19,391,286,594		1,528,709,152	4,520,146	1,264,802,757	19,327,458,973
19	19,327,458,973	109,652,352	1,540,871,270	4,203,179	1,256,949,023	19,148,985,898
20	19,148,985,898	100,488,828	1,551,415,249	3,887,134	1,244,258,315	18,938,430,658
21	18,938,430,658	91,506,988	1,559,518,460	3,576,531	1,229,488,943	18,696,331,598
22	18,696,331,598	82,563,400	1,565,737,776	3,267,475	1,212,654,125	18,422,543,871
23	18,422,543,871	73,680,327	1,569,645,758	2,960,869	1,193,758,983	18,117,376,554
24	18,117,376,554	64,893,979	1,571,137,161	2,657,056	1,172,829,065	17,781,305,381
25	17,781,305,381	56,519,164	1,568,735,805	2,363,163	1,149,955,706	17,416,681,283
26	17,416,681,283	48,927,389	1,561,542,439	2,088,537	1,125,339,469	17,027,317,166
27	17,027,317,166	42,017,006	1,551,974,677	1,829,381	1,099,154,217	16,614,684,332
28	16,614,684,332	35,780,930	1,539,854,600	1,587,127	1,071,504,886	16,180,528,421
29	16,180,528,421	30,117,092	1,526,005,733	1,359,379	1,042,478,657	15,725,759,059
30	15,725,759,059	25,160,106	1,509,791,116	1,153,385	1,012,162,305	15,252,136,969
31	15,252,136,969	20,880,634	1,491,507,355	970,470	980,663,814	14,761,203,593
32	14,761,203,593	17,149,975	1,472,049,392	807,016	948,053,367	14,253,550,527
33	14,253,550,527	13,881,471	1,450,750,628	660,514	914,390,234	13,730,411,090
34	13,730,411,090	11,058,132	1,426,780,590	531,643	879,784,648	13,193,941,636
35	13,193,941,636	8,650,012	1,399,931,943	419,978	844,388,066	12,646,627,793
36	12,646,627,793	6,596,107	1,370,666,663	323,033	808,350,988	12,090,585,190
37	12,090,585,190	4,918,759	1,338,144,782	242,742	771,844,783	11,528,961,208
38	11,528,961,208	3,558,319	1,303,097,816	176,863	735,055,707	10,964,300,555
39	10,964,300,555	2,494,700	1,265,831,631	124,755	698,144,729	10,398,983,599
40	10,398,983,599	1,686,900	1,225,855,512	84,752	661,287,508	9,836,017,743
41	9,836,017,743	1,073,521	1,183,696,859	54,025	624,667,591	9,278,007,971
42	9,278,007,971	673,069	1,138,321,182	33,919	588,495,728	8,728,821,667
43	8,728,821,667	423,847	1,090,534,123	21,442	553,004,271	8,191,694,221
44	8,191,694,221	261,123	1,042,228,960	13,271	518,346,717	7,668,059,829
45	7,668,059,829	148,657	994,005,223	7,607	484,598,825	7,158,794,482
46	7,158,794,482	72,870	945,657,583	3,736	451,826,116	6,665,032,148
47	6,665,032,148	34,930	897,228,845	1,823	420,103,744	6,187,940,154
48	6,187,940,154	17,490	849,255,336	949	389,492,153	5,728,193,513
49	5,728,193,513	8,281	801,952,530	461	360,029,367	5,286,278,170
	5,286,278,170	2,718	755,382,853	155	331,745,970	4,862,643,850

Employer contributions as shown may differ substantially from those determined by a funding valuation.



Single Discount Rate Development Projection of Pension Plan Fiduciary Net Position Beginning July 1, 2023 (Years 51-100)

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.75%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	\$ 4,862,643,850	\$ 357	\$ 709,613,007	\$ 21	\$ 304,670,088	\$ 4,457,701,268
52	4,457,701,268	19	664,726,727	1	278,826,629	4,071,801,187
53	4,071,801,187	-	620,816,568	-	254,236,143	3,705,220,762
54	3,705,220,762	-	577,967,025	-	230,914,523	3,358,168,260
55	3,358,168,260	-	536,262,092	-	208,873,037	3,030,779,206
56	3,030,779,206	-	495,786,866	-	188,118,010	2,723,110,350
57	2,723,110,350	-	456,625,721	-	168,650,470	2,435,135,098
58	2,435,135,098	-	418,860,002	-	150,465,921	2,166,741,017
59	2,166,741,017	-	382,567,121	-	133,554,205	1,917,728,101
60	1,917,728,101	-	347,819,206	-	117,899,426	1,687,808,321
61	1,687,808,321	-	314,682,555	-	103,479,942	1,476,605,708
62	1,476,605,708	-	283,217,391	-	90,268,375	1,283,656,692
63	1,283,656,692	-	253,476,097	-	78,231,695	1,108,412,290
64	1,108,412,290	-	225,501,947	_	67,331,409	950,241,752
65	950,241,752	_	199,328,736	_	57,523,820	808,436,836
66	808,436,836	_	174,980,929	_	48,760,309	682,216,216
67	682,216,216		152,472,867		40,987,661	570,731,010
	570,731,010	-		-		
68		-	131,807,606	-	34,148,474	473,071,877
69 70	473,071,877	-	112,974,345	-	28,181,726	388,279,258
70	388,279,258	-	95,947,592	-	23,023,494	315,355,160
71	315,355,160	-	80,686,821	-	18,607,758	253,276,097
72	253,276,097	-	67,135,904	-	14,867,297	201,007,491
73	201,007,491	-	55,225,403	-	11,734,582	157,516,670
74	157,516,670	-	44,873,876	-	9,142,611	121,785,405
75	121,785,405	-	35,987,734	-	7,025,761	92,823,432
76	92,823,432	-	28,460,849	-	5,320,712	69,683,296
77	69,683,296	-	22,175,949	-	3,967,405	51,474,752
78	51,474,752	-	17,006,450	-	2,909,950	37,378,252
79	37,378,252	-	12,818,476	-	2,097,473	26,657,248
80	26,657,248	-	9,481,917	-	1,484,575	18,659,906
81	18,659,906	-	6,876,063	-	1,031,266	12,815,109
82	12,815,109	-	4,884,610	-	702,856	8,633,356
83	8,633,356	-	3,397,097	-	469,972	5,706,230
84	5,706,230	-	2,312,262	-	308,406	3,702,374
85	3,702,374	-	1,540,244	-	198,776	2,360,906
86	2,360,906	-	1,004,360	-	126,018	1,482,564
87	1,482,564	-	641,735	-	78,768	919,597
88	919,597	-	402,584	-	48,707	565,720
89	565,720	-	248,731	-	29,929	346,918
90	346,918	-	151,976	-	18,372	213,314
91	213,314	-	92,355	-	11,333	132,291
92	132,291	-	56,266	-	7,062	83,087
93	83,087	-	34,665	-	4,458	52,879
94	52,879	-	21,781	-	2,846	33,945
95	33,945	-	14,029	-	1,826	21,741
96	21,741	-	9,278	-	1,160	13,623
97	13,623	-	6,301	-	710	8,032
98	8,032	-	4,356	-	398	4,073
99	4,073	-	3,999	-	142	216
100	216	-	216	-	7	8

Employer contributions as shown may differ substantially from those determined by a funding valuation.



Single Discount Rate Development Present Values of Projected Pension Benefit Payments Beginning July 1, 2023 (Years 1-50)

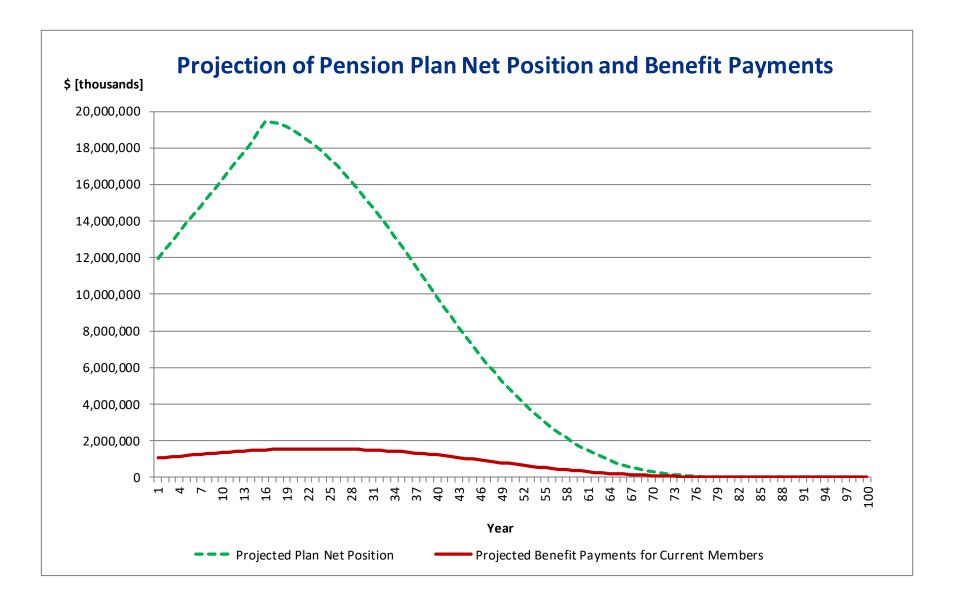
Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+sdr)^(a5)
1	\$ 11,459,384,732	\$ 1,052,148,434	\$ 1,052,148,434	\$ -	\$1,018,340,629	\$ -	\$ 1,018,340,629
2	11,951,000,421	1,088,291,021	1,088,291,021	-	986,718,386	-	986,718,386
3	12,434,419,172	1,123,953,000	1,123,953,000	-	954,615,412	-	954,615,412
4	12,920,472,041	1,159,015,075	1,159,015,075	-	922,149,833	-	922,149,833
5	13,402,487,731	1,194,354,340	1,194,354,340	-	890,179,760	-	890,179,760
6	13,880,891,618	1,228,335,609	1,228,335,609	-	857,617,593	-	857,617,593
7	14,357,580,234	1,261,420,443	1,261,420,443	-	825,027,873	-	825,027,873
8	14,833,723,929	1,294,259,562	1,294,259,562	-	792,980,038	-	792,980,038
9	15,309,882,784	1,325,251,777	1,325,251,777	-	760,626,381	-	760,626,381
10	15,788,814,496	1,356,678,012	1,356,678,012	-	729,427,095	-	729,427,095
11	16,271,081,523	1,385,765,056	1,385,765,056	-	697,954,043	-	697,954,043
12	16,759,979,058	1,413,298,216	1,413,298,216	-	666,811,603	-	666,811,603
13	17,258,290,376	1,438,292,412	1,438,292,412	-	635,694,777	-	635,694,777
14	17,770,026,573	1,460,493,501	1,460,493,501	-	604,690,574	-	604,690,574
15	18,299,899,187	1,480,798,353	1,480,798,353	-	574,330,142	-	574,330,142
16	18,851,923,720	1,498,587,339	1,498,587,339	-	544,477,405	-	544,477,405
17	19,431,018,172	1,514,778,735	1,514,778,735	-	515,559,886	-	515,559,886
18	19,391,286,594	1,528,709,152	1,528,709,152	-	487,401,544	-	487,401,544
19	19,327,458,973	1,540,871,270	1,540,871,270	-	460,214,724	-	460,214,724
20	19,148,985,898	1,551,415,249	1,551,415,249	-	434,064,555	-	434,064,555
21	18,938,430,658	1,559,518,460	1,559,518,460	-	408,741,660	-	408,741,660
22	18,696,331,598	1,565,737,776	1,565,737,776	-	384,423,148	-	384,423,148
23	18,422,543,871	1,569,645,758	1,569,645,758	-	361,014,186	-	361,014,186
24	18,117,376,554	1,571,137,161	1,571,137,161	-	338,507,920	-	338,507,920
25	17,781,305,381	1,568,735,805	1,568,735,805	-	316,618,771	-	316,618,771
26	17,416,681,283	1,561,542,439	1,561,542,439	-	295,238,342	-	295,238,342
27	17,027,317,166	1,551,974,677	1,551,974,677	-	274,875,298	-	274,875,298
28	16,614,684,332	1,539,854,600	1,539,854,600	-	255,483,533	-	255,483,533
29	16,180,528,421	1,526,005,733	1,526,005,733	-	237,176,404	-	237,176,404
30	15,725,759,059	1,509,791,116	1,509,791,116	-	219,818,529	-	219,818,529
31	15,252,136,969	1,491,507,355	1,491,507,355	-	203,425,291	-	203,425,291
32	14,761,203,593	1,472,049,392	1,472,049,392	-	188,076,288	-	188,076,288
33	14,253,550,527	1,450,750,628	1,450,750,628	-	173,634,710	-	173,634,710
34	13,730,411,090	1,426,780,590	1,426,780,590	-	159,967,990	-	159,967,990
35	13,193,941,636	1,399,931,943	1,399,931,943	-	147,033,040	-	147,033,040
36	12,646,627,793	1,370,666,663	1,370,666,663	-	134,856,529	-	134,856,529
37	12,090,585,190	1,338,144,782	1,338,144,782	-	123,331,880	-	123,331,880
38	11,528,961,208	1,303,097,816	1,303,097,816	-	112,507,475	-	112,507,475
39	10,964,300,555	1,265,831,631	1,265,831,631	-	102,379,363	-	102,379,363
40	10,398,983,599	1,225,855,512	1,225,855,512	-	92,876,936	-	92,876,936
41	9,836,017,743	1,183,696,859	1,183,696,859	-	84,011,977	-	84,011,977
42	9,278,007,971	1,138,321,182	1,138,321,182	-	75,682,879	-	75,682,879
43	8,728,821,667	1,090,534,123	1,090,534,123	-	67,921,020	-	67,921,020
44	8,191,694,221	1,042,228,960	1,042,228,960	-	60,807,927	-	60,807,927
45	7,668,059,829	994,005,223	994,005,223	-	54,327,265	-	54,327,265
46	7,158,794,482	945,657,583	945,657,583	-	48,416,702	-	48,416,702
47	6,665,032,148	897,228,845	897,228,845	-	43,032,506	-	43,032,506
48	6,187,940,154	849,255,336	849,255,336	-	38,156,085	-	38,156,085
49	5,728,193,513	801,952,530	801,952,530	-	33,752,528	-	33,752,528
50	5,286,278,170	755,382,853	755,382,853	-	29,782,207	-	29,782,207



Single Discount Rate Development Present Values of Projected Pension Benefit Payments Beginning July 1, 2023 (Concluded) (Years 51-100)

Year		jected Beginning lan Net Position		Projected Benefit Payments		Funded Portion of Benefit Payments	Ur	nfunded Portion of Benefit Payments	Fu Pa	esent Value of Inded Benefit Tyments using Dected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)		(b)		(c)		(d)		(e)	(f)	=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+sdr)^(a5)
51	\$	4,862,643,850	\$		¢	709,613,007	Ś	-	\$	26,208,577	\$ -	\$ 26,208,577
52	Ŷ	4,457,701,268	Ŷ	664,726,727	Ŷ	664,726,727	Ŷ	-	Ŷ	22,998,374	-	22,998,374
53		4,071,801,187		620,816,568		620,816,568		-		20,120,993	-	20,120,993
54		3,705,220,762		577,967,025		577,967,025		-		17,547,744	-	17,547,744
55		3,358,168,260		536,262,092		536,262,092		-		15,252,022	-	15,252,022
56		3,030,779,206		495,786,866		495,786,866		-		13,209,229	-	13,209,229
57		2,723,110,350		456,625,721		456,625,721		-		11,396,590	_	11,396,590
58		2,435,135,098		418,860,002		418,860,002		-		9,792,996	_	9,792,996
59		2,166,741,017		382,567,121		382,567,121		-		8,378,889	_	8,378,889
60		1,917,728,101		347,819,206		347,819,206		_		7,136,158	_	7,136,158
61		1,687,808,321		314,682,555		314,682,555		_		6,048,055	_	6,048,055
62		1,476,605,708		283,217,391		283,217,391				5,099,118		5,099,118
63						253,476,097		-			-	
		1,283,656,692		253,476,097				-		4,275,080	-	4,275,080
64		1,108,412,290		225,501,947		225,501,947		-		3,562,786	-	3,562,786
65		950,241,752		199,328,736		199,328,736		-		2,950,132	-	2,950,132
66		808,436,836		174,980,929		174,980,929		-		2,426,020	-	2,426,020
67		682,216,216		152,472,867		152,472,867		-		1,980,288	-	1,980,288
68		570,731,010		131,807,606		131,807,606		-		1,603,645	-	1,603,645
69		473,071,877		112,974,345		112,974,345		-		1,287,597	-	1,287,597
70		388,279,258		95,947,592		95,947,592		-		1,024,392	-	1,024,392
71		315,355,160		80,686,821		80,686,821		-		806,987	-	806,987
72		253,276,097		67,135,904		67,135,904		-		629,001	-	629,001
73		201,007,491		55,225,403		55,225,403		-		484,694	-	484,694
74		157,516,670		44,873,876		44,873,876		-		368,939	-	368,939
75		121,785,405		35,987,734		35,987,734		-		277,171	-	277,171
76		92,823,432		28,460,849		28,460,849		-		205,340	-	205,340
77		69,683,296		22,175,949		22,175,949		-		149,878	-	149,878
78		51,474,752		17,006,450		17,006,450		-		107,672	-	107,672
79		37,378,252		12,818,476		12,818,476		-		76,025	-	76,025
80		26,657,248		9,481,917		9,481,917		-		52,680	-	52,680
81		18,659,906		6,876,063		6,876,063		-		35,787	-	35,787
82		12,815,109		4,884,610		4,884,610		-		23,815	-	23,815
83		8,633,356		3,397,097		3,397,097		-		15,515	-	15,515
84		5,706,230		2,312,262		2,312,262		-		9,893	-	9,893
85		3,702,374		1,540,244		1,540,244		-		6,173	-	6,173
86		2,360,906		1,004,360		1,004,360		-		3,771	-	3,771
87		1,482,564		641,735		641,735		-		2,257	-	2,257
88		919,597		402,584		402,584		-		1,326	-	1,326
89		565,720		248,731		248,731		-		768	-	768
90		346,918		151,976		151,976		-		439	-	439
91		213,314		92,355		92,355		-		250	-	250
92		132,291		56,266		56,266		-		143	-	143
93		83,087		34,665		34,665		-		82	-	82
94		52,879		21,781		21,781		-		48	-	48
95		33,945		14,029		14,029		-		48 29	-	48 29
96		21,741		9,278		9,278		_		18	-	18
96 97		13,623		9,278 6,301		9,278 6,301		-		18	-	18
								-		7	-	7
98 99		8,032		4,356		4,356		-			-	6
		4,073		3,999		3,999		-		6	-	ь
100		216		216		216		- Totals		- 9,610,318,053	-	\$ 19,610,318,053







Measurement of the Net OPEB Liability

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 6.75%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

		Ν	et OPEB Liability		
Measurement Date			Current Single		Single Discount Rate
June 30	1% Decrease		Discount Rate	1% Increase	Assumption
2016	\$ 526,463,381	\$	484,105,215	\$ 447,486,556	7.25%
2017	497,606,504		457,233,955	422,254,184	7.25%
2018	476,527,879		457,845,765	405,513,854	7.25%
2019	475,523,490		438,411,116	406,162,814	7.25%
2020	475,306,336		437,708,995	405,067,127	6.75%
2021	435,328,116		400,456,828	370,116,638	6.75%
2022	410,261,439		377,887,685	349,692,649	6.75%
2023	371,141,754		341,720,194	316,050,762	6.75%

GASB No. 74 requires the sensitivity of the Net OPEB Liability to the healthcare cost trend assumption. Since the medical subsidy benefits are a fixed stipend, there is no sensitivity to change in the healthcare cost trend assumption.



Statement of Fiduciary Net Position as of June 30, 2023 OPEB*

Assets

Cash and Deposits	\$ 1,007,554
Receivables	
Due from Brokers for Securities Sold	\$ 53,787
Accrued Interest and Other Dividends	66,533
Contributions	5,045,849
Accounts Receivable - Other	41,334
Total Receivables	\$ 5,207,503
Investments	
Fixed Income	\$ 8,739,748
Domestic Equities	18,224,390
International Equities	3,234,458
Real Estate	5,067,834
Other	8,855,431
Total Investments	\$44,121,861
Total Assets	\$ 50,336,918
Liabilities	

Payables		
Accounts Payable - Purchase of Investments Due to Brokers	\$	116,943
Accrued Expenses		-
Accounts Payable - Other		61,120
Total Liabilities	\$	178,063
Net Position Restricted for OPEB	\$ 5	0,158,855

* Total is the actual amount on the balance sheet.



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Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2023 OPEB

Additions

Contributions	
Employer	\$43,619,351
Nonemployer contributing entities	0
Active Employees	0
Other	0
Total Contributions	\$43,619,351
Investment Income	
Net Appreciation/(Depreciation) in Fair Value of Investments	\$ 2,979,620
Interest and Dividends	904,181
Less Investment Expense	(232,769)
Net Investment Income/(Loss)	\$ 3,651,032
Other	\$ 0
Total Additions	\$ 47,270,383
Total Additions Deductions	\$ 47,270,383
	\$ 47,270,383 \$ 41,861,910
Deductions	
Deductions Benefit Payments	\$41,861,910
Deductions Benefit Payments OPEB Plan Administrative Expense	\$41,861,910 236,993
Deductions Benefit Payments OPEB Plan Administrative Expense Other	\$ 41,861,910 236,993 4,472
Deductions Benefit Payments OPEB Plan Administrative Expense Other Total Deductions	\$ 41,861,910 236,993 4,472 \$ 42,103,375
Deductions Benefit Payments OPEB Plan Administrative Expense Other Total Deductions Net Increase/(Decrease) in Net Position	\$ 41,861,910 236,993 4,472 \$ 42,103,375
Deductions Benefit Payments OPEB Plan Administrative Expense Other Total Deductions Net Increase/(Decrease) in Net Position Net Position Restricted for OPEB	\$41,861,910 236,993 4,472 \$42,103,375 \$ 5,167,008



Schedules of Required Supplementary Information Schedule of Changes in Net OPEB Liability and Related Ratios Ultimately 10 Fiscal Years Will Be Displayed

Fiscal year ending June 30,		2023		2022		2021		2020		2019		2018		2017		2016
Total OPEB liability																
Service cost	\$	462,843	\$	590,608	\$	730,979	\$	740,258	\$	856,820	\$	983,597	\$	1,099,249	\$	1,217,827
Interest on the total OPEB liability		27,147,150		28,933,370		30,512,423		32,785,640		34,197,051		34,247,087		35,235,164		36,541,607
Changes of benefit terms		0		0		0		0		0		-		-		-
Difference between expected and																
actual experience		(16,748,566)		(13,087,104)		(9,912,340)		(10,218,847)		(7,156,217)		12,666,860		-		(4,537,602)
Changes of assumptions		0		0		0		22,675,585		0		-		-		-
Benefit payments, including refunds																
of employee contributions		(41,861,910)		(43,809,125)		(45,499,366)		(46,816,286)		(47,797,941)		(49,250,676)		(50,559,778)		(51,805,133)
Net change in total OPEB liability		(31,000,483)		(27,372,251)		(24,168,304)		(833 <i>,</i> 650)		(19,900,287)		(1,353,132)		(14,225,365)		(18,583,301)
Total OPEB liability - beginning		422,879,532		450,251,783		474,420,087		475,253,737		495,154,024		496,507,156		510,732,521		529,315,822
Total OPEB liability - ending (a)	\$	391,879,049	\$	422,879,532	\$	450,251,783	\$	474,420,087	\$	475,253,737	\$	495,154,024	\$	496,507,156	\$	510,732,521
Plan fiduciary net position																
Contributions - Employer	\$	43,619,351	\$	42,064,183	\$	48,054,804	\$	46,459,763	\$	45,509,112	\$	44,194,281	\$	59,196,827	\$	58,174,145
Nonemployer contributing entities																
contributions		0		0		0		0		0		0		0		0
Contributions - Member		0		0		0		0		0		0		0		0
OPEB plan net investment income		3,651,032		(2,819,451)		10,703,398		397,486		1,980,805		3,128,478		4,045,745		148,536
Benefit payments, including refunds																
of employee contributions		(41,861,910)		(43,809,125)		(45,499,366)		(46,816,286)		(47,797,941)		(49,250,676)		(50,559,778)		(51,805,133)
OPEB plan administrative expense		(236,993)		(234,185)		(171,779)		(169,016)		(151,772)		(33,144)		(31,713)		(16,951)
Other custodial, professional and non-investment expenses, and contributions other than for contribution effort		(4,472)		(4,530)		(3,194)		(3,476)		(5,842)		(3,881)		(5,186)		(3,030)
Net change in plan fiduciary net position		5,167,008		(4,803,108)		13,083,863		(131,529)		(465,638)		(1,964,942)		12,645,895		6,497,567
Plan fiduciary net position - beginning	ć	44,991,847	ć	49,794,955	ć	36,711,092	ć	36,842,621	ć	37,308,259	ć	39,273,201	ć	26,627,306	<i>c</i>	20,129,739
Plan fiduciary net position - ending (b)	\$		\$	44,991,847	\$	49,794,955	\$	36,711,092	-		\$	37,308,259	\$	39,273,201		26,627,306
Net OPEB liability - ending (a) - (b)	\$	341,720,194	\$	377,887,685	\$	400,456,828	\$	437,708,995	\$	438,411,116	\$	457,845,765	\$	457,233,955	\$	484,105,215
Plan fiduciary net position as a percentage																
of total OPEB liability		12.80 %		10.64 %		11.06 %		7.74 %		7.75 %		7.53 %		7.91 %		5.21 %
Covered-Employee Payroll*	\$	3,178,096,144	\$	3,077,583,995	\$	2,972,968,504	\$	2,894,708,279	\$	2,825,006,022	\$	2,752,235,069	\$	2,667,611,532	\$2	,601,403,606
Net OPEB liability as a percentage																
of covered-employee payroll		10.75 %		12.28 %		13.47 %		15.12 %		15.52 %		16.64 %		17.14 %		18.61 %
Notes to Schedule:																

* Based on the June 30 census data for the applicable fiscal year. Covered-Employee payroll for employer's disclosure may differ.



Schedules of Required Supplementary Information Schedule of the Employers' Net OPEB Liability Ultimately 10 Fiscal Years Will Be Displayed

FY Ending June 30,	Total OPEB Liability	Plan Net Position	Net OPEB Liability	Plan Net Position as a % of Total OPEB Liability	Covered Payroll*	Net OPEB Liability as a % of Covered Payroll
2016	\$ 510,732,521	\$ 26,627,306	\$ 484,105,215	5.21 %	\$ 2,601,403,606	18.61 %
2017	496,507,156	39,273,201	457,233,955	7.91 %	2,667,611,532	17.14 %
2018	495,154,024	37,308,259	457,845,765	7.53 %	2,752,235,069	16.64 %
2019	475,253,737	36,842,621	438,411,116	7.75 %	2,825,006,022	15.52 %
2020	474,420,087	36,711,092	437,708,995	7.74 %	2,894,708,279	15.12 %
2021	450,251,783	49,794,955	400,456,828	11.06 %	2,972,968,504	13.47 %
2022	422,879,532	44,991,847	377,887,685	10.64 %	3,077,583,995	12.28 %
2023	391,879,049	50,158,855	341,720,194	12.80 %	3,178,096,144	10.75 %

* Based on the June 30 census data. Covered-employee payroll for employer's disclosure may differ.



Schedules of Required Supplementary Information Schedule of OPEB Contributions Ultimately 10 Fiscal Years Will Be Displayed

FY Ending June 30,	Actuarially Determined Contribution*	Actual Contribution*	Contribution Deficiency (Excess)	Covered Payroll**	Actual Contribution as a % of Covered Payroll		
2016	\$ 58,174,145	\$ 58,174,145	\$-	\$ 2,601,403,606	2.24 %		
2017	59,196,827	59,196,827	-	2,667,611,532	2.22 %		
2018	44,194,281	44,194,281	-	2,752,235,069	1.61 %		
2019	45,509,112	45,509,112	-	2,825,006,022	1.61 %		
2020	46,459,763	46,459,763	-	2,894,708,279	1.60 %		
2021	48,054,804	48,054,804	-	2,972,968,504	1.62 %		
2022	42,064,183	42,064,183	-	3,077,583,995	1.37 %		
2023	43,619,351	43,619,351	-	3,178,096,144	1.37 %		

* We do not compute a dollar amount for the Actuarially Determined Contribution. It is our understanding that employers contribute the Actuarially Determined Contribution. The amount shown in this column, therefore, matches the actual contributions. Contributions other than the Actuarially Determined Contributions are accounted for separately.

** Based on the June 30 census data. Covered employee payroll for employer's disclosure may differ.



Notes to Schedule of OPEB Contributions

Valuation Date	Actuarially determined contribution rates for the 2022-2023 biennium were determined based on the June 30, 2019 actuarial valuation. Actuarially determined contribution rates for the 2024-2025 biennium were determined based on the June 30, 2021 actuarial valuation. Future employer contribution rates for the purposes of the projection in this report are based on the statutory requirement of solvency funding with the Board's funding policy to maintain a 20% margin (50% for Teachers).
Methods and Assumptions:	
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	Not applicable under statutory funding
Asset Valuation Method	5-Year smoothed fair value; 20% corridor
Price Inflation	2.0% per year
Wage Inflation	2.75% per year (2.25% for Teachers) in the 2019 valuation
Salary Increases	5.4% average, including inflation
Investment Rate of Return	6.75% per year, net of OPEB plan investment expense, including inflation for determining solvency contributions
Funding Discount Rate	2.75% per year
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Based on the 2015-2019 experience study.
Mortality	Pub-2010 Healthy Retiree Mortality Tables with credibility adjustments for each group (Police and Fire combined) and projected fully generational mortality improvements using Scale MP-2019.
Health Care Trend Rates	Not applicable, given that the benefits are fixed stipends.
Aging Factors	Not applicable, given that the benefits are fixed stipends.
Other Information:	
Notes	The Board has adopted new assumptions based on the 2015-2019 experience study effective for employer contributions in the 2022-2023 and the 2024-2025 bienniums.

NOTE: A full list of actuarial assumptions and the summary of benefit provisions can be found starting on page 61. Actuarial assumptions for contributions made in the year ending June 30, 2023 can be found in the June 30, 2019 actuarial valuation report.



Summary of OPEB Participant Data as of June 30, 2022

For purposes of GASB Statement No. 74 disclosures, the System has adopted a roll-forward methodology for accounting purposes. This means that the June 30, 2023 Total OPEB Liability is based on a roll-forward of the June 30, 2022 valuation. A brief summary of the June 30, 2022 census data is shown below.

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	9,133
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	1,485
Total Plan Members	10,618

Additional information regarding the covered population as of June 30, 2022 may be found in the ACFR Schedules, GASB Statement Nos. 67 and 74 Plan Reporting and Accounting Schedules report issued November 7, 2022.



Calculation of the Single Discount Rate for OPEB

GASB Statement No. 74 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total OPEB Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects: (1) the long-term expected rate of return on OPEB plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits); and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 6.75%; the municipal bond rate is 3.86%; and the resulting Single Discount Rate is 6.75%.

The tables in this section provide background for the development of the SDR.

The **Projection of Contributions** table shows the development of expected contributions in future years. Since the medical subsidy plan is closed to new hires, normal cost contributions for future hires are not included.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the SDR. It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.



Single Discount Rate Development Projection of OPEB Plan Net Position Beginning July 1, 2023

(Years 1-50)

Year	Projected Beginning Plan Net Position	Projected Total Contributions*	Projected Benefit Payments	Projected Administrative Expenses (d)		Projected Investment Earnings at 6.750%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)		(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 50,158,855	\$ 35,937,704	\$ 44,019,992	\$ 236,993	\$	3,109,532	\$ 44,949,106
2	44,949,106	36,852,510	42,974,844	228,710		2,823,217	41,421,280
3	41,421,280	22,052,177	41,764,161	220,613		2,134,196	23,622,879
4	23,622,879	23,913,398	40,483,915	212,397		1,037,370	7,877,335
5	7,877,335	38,484,903	39,062,323	203,734		505,787	7,601,967
6	7,601,967	36,975,957	37,559,730	194,926		487,281	7,310,548
7	7,310,548	35,364,787	35,957,597	186,440		467,592	6,998,889
8	6,998,889	33,706,663	34,298,605	178,188		446,858	6,675,617
9	6,675,617	31,990,896	32,581,265	170,069		425,358	6,340,538
10	6,340,538	30,248,871	30,831,705	162,026		403,258	5,998,936
11	5,998,936	28,520,998	29,088,356	153,982		380,981	5,658,577
12	5,658,577	26,797,969	27,350,141	145,864		358,780	5,319,321
13	5,319,321	25,082,007	25,618,801	137,543		336,667	4,981,650
14	4,981,650	23,363,250	23,886,493	128,955		314,609	4,644,062
15	4,644,062	21,711,535	22,210,424	120,036		292,927	4,318,064
16	4,318,064	20,063,652	20,547,599	110,750		271,726	3,995,093
17	3,995,093	18,479,912	18,941,135	100,949		251,005	3,683,926
18	3,683,926	17,007,425	17,438,098	90,483		231,363	3,394,132
19	3,394,132	15,579,705	15,991,070	79,447		212,809	3,116,130
20	3,116,130	14,252,732	14,638,657	68,601		195,249	2,856,853
21	2,856,853	13,016,745	13,378,683	58,722		178,872	2,615,065
22	2,615,065	11,868,520	12,207,377	49,859		163,612	2,389,961
23	2,389,961	10,810,749	11,126,297	42,047		149,451	2,181,816
24	2,181,816	9,838,412	10,131,477	35,294		136,371	1,989,830
25	1,989,830	8,950,167	9,221,097	29,476		124,340	1,813,765
26	1,813,765	8,141,705	8,391,343	24,512		113,328	1,652,943
27	1,652,943	7,404,992	7,634,897	20,304		103,267	1,506,002
28	1,506,002	6,733,069	6,944,748	16,726		94,072	1,371,669
29	1,371,669	6,121,120	6,315,762	13,690		85,671	1,249,008
30	1,249,008	5,563,251	5,742,189	11,142		77,998	1,136,926
31	1,136,926	5,053,775	5,218,317	9,033		70,980	1,034,330
32	1,034,330	4,587,283	4,738,670	7,290		64,549	940,202
33	940,202	4,158,815	4,298,210	5,846		58,642	853,602
34	853,602	3,764,109	3,892,554	4,653		53,199	773,703
35	773,703	3,399,578	3,517,979	3,665		48,172	699,809
36	699,809	3,062,299	3,171,435	2,862		43,519	631,330
37	631,330	2,749,947	2,850,463	2,208		39,204	567,811
38	567,811	2,460,658	2,553,106	1,677		35,202	508,889
39	508,889	2,192,973	2,277,829	1,261		31,491	454,263
40	454,263	1,945,764	2,023,426	936		28,053	403,719
41	403,719	1,718,094	1,788,927	682		24,877	357,081
42	357,081	1,509,169	1,573,514	481		21,951	314,206
43	314,206	1,318,282	1,376,471	327		19,266	274,956
44	274,956	1,144,766	1,197,119	214		16,814	239,202
45	239,202	987,915	1,034,757	129		14,587	206,818
46	206,818	846,987	888,651	70		12,575	177,658
47	177,658	721,175	758,001	35		10,768	151,564
48	151,564	609,610 511,401	641,943	15		9,157	128,373
49 50	128,373	511,401	539,587	5		7,729	107,912
50	107,912	425,619	450,005	1		6,474	90,000

* Employer contributions as shown may differ substantially from those determined by a funding valuation.



Single Discount Rate Development Projection of OPEB Plan Net Position Beginning July 1, 2023

(Years 51-100)

Year	Projected Beginning Plan Net Position	Projected Total Contributions*	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.750%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	\$ 90,000		\$ 372,240	\$ 0	\$ 5,380	\$ 74,448
52	74,448	287,504	305,321	0	4,434	61,064
53	61,064	233,233	248,266	0	3,623	49,653
54	49,653	187,537	200,104	0	2,934	40,021
55	40,021	149,483	159,883	0	2,356	31,977
56	31,977	118,162	126,679	0	1,876	25,336
57	25,336	92,700	99,597	0	1,481	19,919
58	19,919	72,268	77,791	0	1,161	15,558
59	15,558	56,096	60,466	0	905	12,093
60	12,093	43,472	46,890	0	703	9,378
61	9,378	33,752	36,396	0	545	7,279
62	7,279	26,369	28,394	0	424	5,679
63	5,679	20,829	22,367	0	332	4,473
64	4,473	16,714	17,876	0	263	3,575
65	3,575	13,677	14,554	0	212	2,911
66	2,911	11,440	12,104	0	174	2,421
67	2,421	9,787	10,295	0	147	2,059
68	2,059	8,554	8,949	0	126	1,790
69	1,790	7,616	7,930	0	110	1,586
70	1,586	6,888	7,143	0	99	1,429
71	1,429	6,306	6,520	0	89	1,304
72	1,304	5,830	6,013	0	82	1,203
73	1,203	5,431	5,592	0	76	1,118
74	1,118	5,090	5,232	0	71	1,046
75	1,046	4,790	4,919	0	66	984
76	984	4,521	4,640	0	62	928
77	928	4,276	4,386	0	59	877
78	877	4,046	4,149	0	56	830
79	830	3,826	3,924	0	53	785
80	785	3,610	3,704	0	50	741
81	741	3,396	3,487	0	47	697
82	697	3,182	3,270	0	44	654
83	654	2,966	3,051	0	41	610
84	610	2,746	2,829	0	38	566
85	566	2,523	2,604	0	36	521
86	521	2,298	2,376	0	33	475
87	475	2,073	2,148	0	30	430
88	430	1,850	1,922	0	27	384
89	384	1,631	1,700	0	24	340
90	340	1,419	1,483	0	21	297
91	297	1,215	1,274	0	18	255
92	255	1,023	1,077	0	15	215
93	215	846	895	0	13	179
94	179	686	730	0	11	146
95	146	545	583	0	9	117
96	117	422	455	0	7	91
97	91	320	347	0	5	69
98	69	236	258	0	4	52
99	52	0	52	0	2	1
100	1	0	1	0	0	0

* Employer contributions as shown may differ substantially from those determined by a funding valuation.



Single Discount Rate Development Present Values of Projected OPEB Benefits Beginning July 1, 2023

(Years 1-50)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments Using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate (vf)	Present Value of All Benefit Payments Using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+SDR)^(a5)
1	\$ 50,158,855	\$ 44,019,992	\$ 44,019,992	\$ 0	\$ 42,605,534	\$ 0	\$ 42,605,534
2	44,949,106	42,974,844	42,974,844	0	38,963,906	0	38,963,906
3	41,421,280	41,764,161	41,764,161	0	35,471,867	0	35,471,867
4	23,622,879	40,483,915	40,483,915	0	32,210,310	0	32,210,310
5	7,877,335	39,062,323	39,062,323	0	29,114,048	0	29,114,048
6	7,601,967	37,559,730	37,559,730	0	26,224,010	0	26,224,010
7	7,310,548	35,957,597	35,957,597	0	23,517,947	0	23,517,947
8	6,998,889	34,298,605	34,298,605	0	21,014,416	0	21,014,416
9	6,675,617	32,581,265	32,581,265	0	18,699,971	0	18,699,971
10	6,340,538	30,831,705	30,831,705	0	16,576,875	0	16,576,875
11	5,998,936	29,088,356	29,088,356	0	14,650,633	0	14,650,633
12	5,658,577	27,350,141	27,350,141	0	12,904,135	0	12,904,135
13	5,319,321	25,618,801	25,618,801	0	11,322,967	0	11,322,967
14	4,981,650	23,886,493	23,886,493	0	9,889,765	0	9,889,765
15	4,644,062	22,210,424	22,210,424	0	8,614,350	0	8,614,350
16	4,318,064	20,547,599	20,547,599	0	7,465,500	0	7,465,500
17	3,995,093	18,941,135	18,941,135	0	6,446,677	0	6,446,677
18	3,683,926	17,438,098	17,438,098	0	5,559,825	0	5,559,825
19	3,394,132	15,991,070	15,991,070	0	4,776,081	0	4,776,081
20	3,116,130	14,638,657	14,638,657	0	4,095,694	0	4,095,694
20	2,856,853	13,378,683	13,378,683	0	3,506,483	0	3,506,483
22	2,615,065	12,207,377	12,207,377	0	2,997,180	0	2,997,180
23	2,389,961	11,126,297	11,126,297	0	2,559,018	0	2,559,018
23	2,181,816	10,131,477	10,131,477	0	2,182,868	0	2,182,868
25	1,989,830	9,221,097	9,221,097	0	1,861,099	0	1,861,099
26	1,813,765	8,391,343	8,391,343	0	1,586,538	0	1,586,538
20	1,652,943	7,634,897	7,634,897	0	1,352,241	0	1,352,241
28	1,506,002	6,944,748	6,944,748	0	1,152,231	0	1,152,231
29	1,371,669	6,315,762	6,315,762	0	981,615	0	981,615
30	1,249,008	5,742,189	5,742,189	0	836,036	0	836,036
31	1,136,926	5,218,317	5,218,317	0	711,721	0	711,721
32	1,034,330	4,738,670	4,738,670	0	605,436	0	605,436
33	940,202	4,738,070	4,738,070	0	514,436	0	514,436
34	853,602	3,892,554		0	436,426	0	436,426
35	773,703		3,892,554 3,517,979	0	369,489	0	369,489
		3,517,979					, , , , , , , , , , , , , , , , , , , ,
36	699,809	3,171,435	3,171,435	0	312,030	0	312,030
37	631,330	2,850,463	2,850,463	0	262,717	0	262,717
38	567,811	2,553,106	2,553,106	0	220,431	0	220,431
39	508,889	2,277,829	2,277,829	0	184,229	0	184,229
40	454,263	2,023,426	2,023,426	0	153,305	0	153,305
41	403,719	1,788,927	1,788,927	0	126,968	0	126,968
42	357,081	1,573,514	1,573,514	0	104,617	0	104,617
43	314,206	1,376,471	1,376,471	0	85,730	0	85,730
44	274,956	1,197,119	1,197,119	0	69,845	0	69,845
45	239,202	1,034,757	1,034,757	0	56,555	0	56,555
46	206,818	888,651	888,651	0	45,498	0	45,498
47	177,658	758,001	758,001	0	36,355	0	36,355
48	151,564	641,943	641,943	0	28,842	0	28,842
49	128,373	539,587	539,587	0	22,710	0	22,710
50	107,912	450,005	450,005	0	17,742	0	17,742

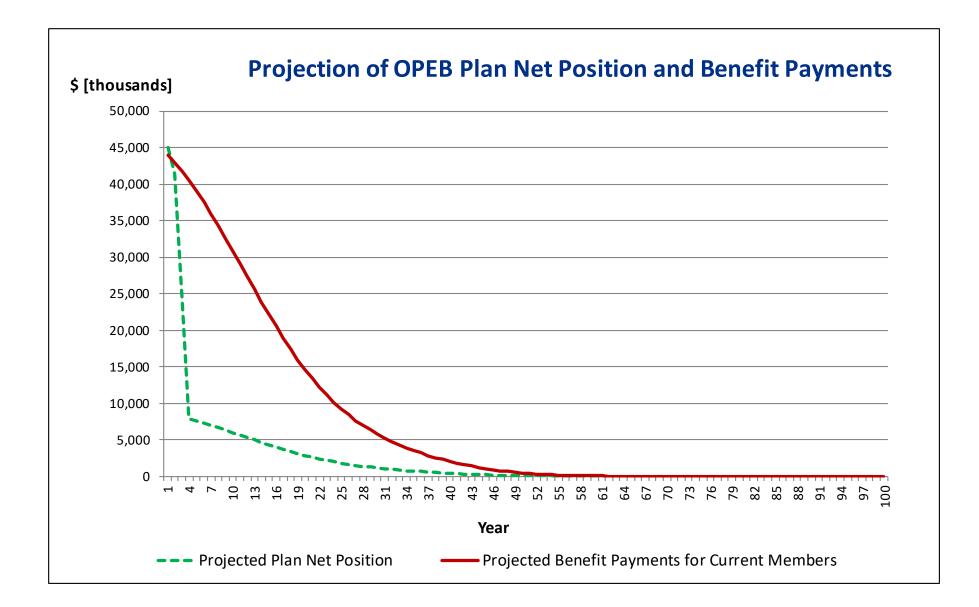


Single Discount Rate Development Present Values of Projected OPEB Benefits Beginning July 1, 2023

(Years 50-100)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments Using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate (vf)	Present Value of All Benefit Payments Using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+SDR)^(a5)
51	\$ 90,000	\$ 372,240	\$ 372,240	\$ 0	\$ 13,748	\$ 0	\$ 13,748
52	74,448	305,321	305,321	0	10,564	0	10,564
53	61,064	248,266	248,266	0	8,046	0	8,046
54	49,653	200,104	200,104	0	6,075	0	6,075
55	40,021	159,883	159,883	0	4,547	0	4,547
56	31,977	126,679	126,679	0	3,375	0	3,375
57	25,336	99,597	99,597	0	2,486	0	2,486
58	19,919	77,791	77,791	0	1,819	0	1,819
58	15,558	60,466	60,466	0	1,313	0	1,324
60	12,093	46,890	46,890	0	962	0	962
61	9,378	36,396	40,890 36,396	0	902 700	0	700
62		28,394	28,394	0	511	0	511
63	7,279			0		0	377
	5,679	22,367	22,367	0	377		
64	4,473	17,876	17,876		282	0	282
65	3,575	14,554	14,554	0	215	0	215
66	2,911	12,104	12,104	0	168	0	168
67	2,421	10,295	10,295	0	134	0	134
68	2,059	8,949	8,949	0	109	0	109
69	1,790	7,930	7,930	0	90	0	90
70	1,586	7,143	7,143	0	76	0	76
71	1,429	6,520	6,520	0	65	0	65
72	1,304	6,013	6,013	0	56	0	56
73	1,203	5,592	5,592	0	49	0	49
74	1,118	5,232	5,232	0	43	0	43
75	1,046	4,919	4,919	0	38	0	38
76	984	4,640	4,640	0	33	0	33
77	928	4,386	4,386	0	30	0	30
78	877	4,149	4,149	0	26	0	26
79	830	3,924	3,924	0	23	0	23
80	785	3,704	3,704	0	21	0	21
81	741	3,487	3,487	0	18	0	18
82	697	3,270	3,270	0	16	0	16
83	654	3,051	3,051	0	14	0	14
84	610	2,829	2,829	0	12	0	12
85	566	2,604	2,604	0	10	0	10
86	521	2,376	2,376	0	9	0	9
87	475	2,148	2,148	0	8	0	8
88	430	1,922	1,922	0	6	0	6
89	384	1,700	1,700	0	5	0	5
90	340	1,483	1,483	0	4	0	4
91	297	1,274	1,274	0	3	0	3
92	255	1,077	1,077	0	3	0	3
93	215	895	895	0	2	0	2
94	179	730	730	0	2	0	2
95	146	583	583	0	1	0	1
96	117	455	455	0	1	0	1
97	91	347	347	0	1	0	1
98	69	258	258	0	0	0	0
99	52	52	52	0	0	0	0
100	1	1	1	0	0	0	0
				Totals	\$ 393,561,012	\$0	\$ 393,561,012







SECTION C

ACTUARIAL SECTION

Summary of Changes from June 30, 2022 to June 30, 2023 (\$ in Millions)

			Pension		
	Employees	Teachers	Police	Fire	Total*
Reconciliation of UAAL					
Expected	\$1,848.6	\$2 <i>,</i> 303.9	\$959.0	\$381.1	\$5,492.6
Impact of Asset (Gain)Loss	(6.6)	(5.7)	(3.5)	(1.5)	(17.3)
Impact of Liability (Gain)Loss	(0.1)	14.6	23.2	19.8	57.6
Impact of Method Change	0.0	0.0	0.0	0.0	0.0
Impact of Plan Change	<u>18.7</u>	<u>25.2</u>	<u>22.2</u>	<u>10.5</u>	<u>76.6</u>
Total	\$1,860.6	\$2,338.0	\$1,000.9	\$409.9	\$5,609.5
Funded %					
Prior Valuation	65.8 %	62.6 %	68.1 %	72.1 %	65.6 %
Expected Change	1.7 %	2.0 %	2.5 %	2.5 %	2.0 %
Impact of Gain(Loss)	0.1 %	(0.1)%	(0.4)%	(0.8)%	(0.1)%
Impact of Method Change	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Impact of Plan Change	<u>(0.2)%</u>	<u>(0.2)%</u>	<u>(0.4)%</u>	<u>(0.5)%</u>	<u>(0.3)%</u>
Total	67.4 %	64.3 %	69.8 %	73.3 %	67.2 %

	Medical Subsidy										
	State	Political Subdivision									
	Employees	Employees	Teachers	Police & Fire	Total*						
Reconciliation of UAAL											
Expected	\$35.0	\$31.0	\$172.7	\$254.1	\$492.8						
Impact of Asset (Gain)Loss	0.1	0.1	0.1	0.0	0.2						
Impact of Liability (Gain)Loss	(1.3)	(1.9)	(6.1)	(9.2)	(18.5)						
Impact of Method Change	0.0	0.0	0.0	0.0	0.0						
Impact of Plan Change	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>						
Total	\$33.8	\$29.2	\$166.7	\$244.9	\$474.5						

* Totals may not add due to rounding.

The pension funded percent of 67.2% is the ratio of the actuarial value of assets to the actuarial accrued liability for NHRS in total. That ratio is 67.0% based on market value of assets.

The funded percent is appropriate for assessing the need for future contributions, but does not give an indication for the amount of such contributions. The funded percent is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations.



Development of Actuarial Value of Assets

Year Ended June 30:	2021	2022	2023	2024	2025	2026	2027
A. Actuarial Value Beginning of Year	\$ 9,485,963,700	\$ 10,312,682,279	\$ 10,895,279,638				
B. Market Value End of Year	11,573,674,295	10,753,348,857	11,509,543,587				
C. Market Value Beginning of Year	9,134,075,534	11,573,674,295	10,753,348,857				
D. Non-Investment Net Cash Flow*	(189,334,651) (127,984,808)	(98,613,371)				
E. Investment Income							
E1. Market Total: B - C - D	2,628,933,412	(692,340,630)	854,808,101				
E2. Assumed Rate	6.75%	6.75%	6.75%				
E3. Amount for Immediate Recognition	633,912,505	691,786,567	732,103,174				
E4. Amount for Phased-In Recognition: E1-E3	1,995,020,907	(1,384,127,197)	122,704,927				
F. Phased-In Recognition of Investment Income							
F1. Current Year: 0.20 x E4	399,004,181	(276,825,439)	24,540,985				
F2. First Prior Year	(102,051,727) 399,004,181	(276,825,439)	\$ 24,540,985			
F3. Second Prior Year	(27,538,113) (102,051,727)	399,004,181	(276,825,439) \$	24,540,985		
F4. Third Prior Year	26,206,697	(27,538,113)	(102,051,727)	399,004,181	(276,825,439)	\$ 24,540,985	
F5. Fourth Prior Year	86,519,687	26,206,698	(27,538,115)	(102,051,726)	399,004,183	(276,825,441) \$	24,540,987
F6. Total Recognized Investment Gain	382,140,725	18,795,600	17,129,885	44,668,001	146,719,729	(252,284,456)	24,540,987
G. Preliminary Actuarial Value End of Year: A + D + E3 + F6	\$ 10,312,682,279	\$ 10,895,279,638	\$ 11,545,899,326				
H. Additional Recognized G/L due to Corridor	-	-	-				
I. Final Actuarial Value after 20% Corridor	\$ 10,312,682,279	\$ 10,895,279,638	\$ 11,545,899,326				
J. Difference between Market & Actuarial Value: B-I	\$ 1,260,992,016	\$ (141,930,781)	\$ (36,355,739)				
K. Recognized Rate of Return	10.82%	6.93%	6.91%				
L. Market Rate of Return	29.08%	6.02%)	7.99%				
M. Ratio of Actuarial Value to Market Value	89.10%	6 101.32%	100.32%				

* Information regarding net cash flows for funding purposes is provided separately from the GASB Statement Nos. 67 and 74 information and may differ. Total non-investment net cash flow includes \$681,061 in expenses that were unallocated in the GASB accounting statements. Additionally, the non-investment net cash flow excludes \$2,600 in contributions that were reported for GASB accounting statements.

The Funding Value of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased-in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. The Funding Value of Assets is unbiased with respect to Market Value. At any time, it may be either greater or less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value. Final Funding Value of Assets may not be less than 80% nor more than 120% of Market Value of Assets.



Historical Rates of Investment Return (Market Return vs. Actuarial Return)

Plan Year Ending						
June 30 of	Market*	Actuarial				
2014	17.23%	12.28%				
2015	3.41%	10.72%				
2016	0.83%	6.83%				
2017	13.31%	9.11%				
2018	8.77%	8.40%				
2019	5.58%	6.55%				
2020	1.12%	5.54%				
2021	29.08%	10.82%				
2022	-6.02%	6.93%				
2023	7.99%	6.91%				
Average Returns						
Last 5 Years	6.94%	7.33%				
Last 10 Years	7.74%	8.39%				

* Annual market rate of return calculated by the actuary is determined on a simplified money-weighted basis, using market value of assets at beginning and end of year and reported cashflows during the year. The rates of return shown above will differ from calculations of investment return on a time-weighted basis, and may differ slightly from rates of return calculated on a dollar-weighted basis by investment professionals.





Allocation of Assets

	Employees	Teachers	Police	Fire	Total
Allocated Fund Assets (Actuarial Value)	\$ 3,863,565,651	\$ 4,225,683,188	\$ 2,332,653,172	\$ 1,123,997,315	\$11,545,899,326
Less Reserve for TSAs	0	0	0	0	0
Less 401(h) Account	12,864,306	14,703,773	22,096,936	652,279	50,317,294
Net Pension Valuation Assets	\$ 3,850,701,345	\$ 4,210,979,415	\$ 2,310,556,236	\$ 1,123,345,036	\$11,495,582,032

The Actuarial Value of Assets was allocated to the pension and medical subsidy plans based on the Market Value of those plans. The Actuarial Value of Assets was then further allocated to each fund (either pension or medical subsidy) based on the Market Value of those funds. The 401(h) account for Police and Fire is combined. The allocation between Police and Fire is based on the percentage of the medical subsidy market value of assets.



Historical Retirement System Cash Flows

		Expenditures										External			
		Benefit Administrative								Cash Flow for the Market Value				Market Value	External Cash Flow as a Percent
June 30	Contributions ¹		Payments		Refunds		Expenses		Other ²	Total		Year ³		of Assets	of Market Value
(1)	(2)		(3)		(4)		(5)		(6)	(7)		(8)		(9)	(10)
2023	\$909,771,922	\$	(971,121,035)	\$	(27,386,598)	\$	(9,637,702)	\$	(1,072,273)	\$ (1,009,217,608)	\$	(99,445,686)	\$	11,459,384,732	(0.9)%
2022	823,009,765		(913,994,579)		(23,726,778)		(9,523,523)		(1,109,775)	(948,354,655)		(125,344,890)		10,708,357,010	(1.2)%
2021	696,156,378		(858,210,462)		(19,883,792)		(8,417,146)		(790,708)	(887,302,108)		(191,145,730)		11,523,879,340	(1.7)%
2020	674,747,435		(816,708,118)		(23,312,151)		(8,281,785)		(892,659)	(849,194,713)		(174,447,278)		9,097,364,441	(1.9)%
2019	658,402,312		(780,906,714)		(23,464,493)		(7,436,447)		(958,942)	(812,766,596)		(154,364,284)		9,170,772,530	(1.7)%
2018	640,230,909		(741,752,669)		(24,010,459)		(7,767,254)		(911,824)	(774,442,206)		(134,211,297)		8,836,866,976	(1.5)%
2017	579,713,841		(706,303,846)		(23,408,460)		(7,670,827)		(1,254,518)	(738,637,651)		(158,923,810)		8,253,987,979	(1.9)%
2016	565,431,123		(670,359,868)		(24,233,277)		(7,061,317)		(1,263,550)	(702,918,012)		(137,486,889)		7,434,317,371	(1.8)%
2015	536,357,394		(631,310,997)		(26,344,739)		(7,581,315)		(1,626,866)	(666,863,917)		(130,506,523)		7,509,926,452	(1.7)%
2014	527,477,252		(599,475,606)		(26,119,759)		(7,376,270)		(1,446,882)	(634,418,517)		(106,941,265)		7,390,628,021	(1.4)%

¹ Column (2) includes employee and employer contributions.

² Includes other custodial, professional and non-investment expenses, and contributions other than for contribution effort.

³ Column (8) = Column (2) + Column (7).



	Total Present Value	by	ortion Covered Future Normal Cost Contributions	Ad	tuarial Accrued Liabilities
Actuarial Present Value of	(1)		(2)		(1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 7,778,403,479	\$	1,750,558,416	\$	6,027,845,063
Disability benefits likely to be paid to present active members	191,058,966		128,838,191		62,220,775
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	72,610,348		38,818,620		33,791,728
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	1,247,724,218		884,326,137		363,398,081
Benefits likely to be paid to current inactive and vested deferred members	551,224,493		-		551,224,493
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	 10,066,564,295		-		10,066,564,295
Total	\$ 19,907,585,799	\$	2,802,541,364	\$	17,105,044,435
Actuarial Value of Assets	\$ 11,495,582,032	\$	-	\$	11,495,582,032
Liabilities to be Covered by Future Contributions	\$ 8,412,003,767	\$	2,802,541,364	\$	5,609,462,403
Funded Ratio					67.2%



Actuarial Balance Sheet as of June 30, 2023

Assets and Present Value of Expected Future Contributions

		Pension	Medical Subsidy
Α.	Present valuation assets		
	1. Net assets from system financial statements	\$ 11,459,384,732	\$ 50,158,855
	2. Actuarial value adjustment	36,197,300	158,439
	3. Actuarial valuation assets	11,495,582,032	50,317,294
В.	Actuarial present value of expected future employer contributions		
	1. For normal costs	678,949,041	4,423,004
	2. For unfunded actuarial accrued liability	5,609,462,403	474,537,172
	3. Total	6,288,411,444	478,960,176
C.	Actuarial present value of expected future member contributions	2,123,592,323	-
D.	Total Present and Expected Future Resources	\$ 19,907,585,799	\$ 529,277,470

Present Value of Expected Future Benefit Payments

	Pension	Medical Subsidy
A. To retirees and beneficiaries	\$ 10,066,564,295	\$ 484,951,801
B. To vested terminated members	399,594,723	-
C. To non-vested terminated members (outstanding refunds)	151,629,770	-
D. To present active members		
1. Allocated to service rendered prior to		
valuation date - actuarial accrued liability	6,487,255,647	39,902,665
2. Allocated to service likely to be rendered		
after valuation date	2,802,541,364	4,423,004
3. Total	9,289,797,011	44,325,669
E. Total Actuarial Present Value of Expected Future Benefit		
Payments	\$ 19,907,585,799	\$ 529,277,470



Experience Gain/(Loss) as of June 30, 2022 and June 30, 2023

	Pension	Med	dical Subsidy
(1) Actual UAAL* as of June 30, 2022	\$ 5,693,792,702	\$	521,643,030
(2) Normal cost from 2022 valuation	343,321,918		1,043,340
(3) Actual contributions (employer and employee)	909,771,922		43,619,351
(4) Interest accrual: [(1)+1/2 [(2)-(3)]] x {.0675 for pension;			
.0275 for medical subsidy}	365,213,320		13,759,763
(5) Expected UAAL end of year: (1)+(2)-(3)+(4)	5,492,556,018		492,826,782
(6) Change from legislation	76,628,190		-
(7) Change from revised actuarial assumptions	-		-
(8) Expected UAAL after changes: (5)+(6)+(7)	5,569,184,208		492,826,782
(9) Actual UAAL* as of June 30, 2023	5,609,462,403		474,537,172
(10) Gain/(loss) for year: (8)-(9)	(40,278,195)		18,289,610
(11) Gain/(loss) as percent of actuarial accrued			
liabilities at start of year	(0.2)%		3.2 %

	Pension	Medical Subsidy
(1) Actual UAAL* as of June 30, 2021	\$ 5,722,902,159	\$ 569,824,165
(2) Normal cost from 2021 valuation	332,259,571	1,411,825
(3) Actual contributions (employer and employee)	823,009,765	42,064,183
(4) Interest accrual: [(1)+1/2 [(2)-(3)]] x {.0675 for pension; .0275 for medical subsidy}	369,733,077	15,111,195
(5) Expected UAAL end of year: (1)+(2)-(3)+(4)	5,601,885,042	544,283,002
(6) Change from legislation	-	-
(7) Change from revised actuarial assumptions	-	-
(8) Expected UAAL after changes: (5)+(6)+(7)	5,601,885,042	544,283,002
(9) Actual UAAL* as of June 30, 2022	5,693,792,702	521,643,030
(10) Gain/(loss) for year: (8)-(9)	(91,907,660)	22,639,972
(11) Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.6)%	3.7 %

* Unfunded Actuarial Accrued Liabilities.



Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the NHRS' funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- 1. Investment Risk actual investment returns may differ from the expected returns;
- 2. Asset/Liability Mismatch changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- Contribution Risk actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
- 4. Salary and Payroll Risk actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- 5. **Longevity Risk** members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
- 6. **Other Demographic Risks** members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures are discussed in the following pages. A historical summary of these plan maturity measures can be found on page 48.

Funded Ratio

The ratio of actuarial value of assets to actuarial accrued liabilities is expected to trend toward 100% by June 30, 2045. Each subsequent change in liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

Ratio of Actual Total Payroll to Expected Total Payroll

This ratio is expected to remain near 100% each year.

Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of actives to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

Ratio of Unfunded Actuarial Accrued Liability to Payroll

The ratio of the unfunded actuarial accrued liability to payroll is expected to trend toward 0% by June 30, 2045.

Ratio of Actuarial Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the actuarial value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.



Plan Maturity Measures (Concluded)

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time. Total AAL / Total Payroll is expected to grow as the System matures. The rate of growth may slow down as members hired on or after July 1, 2011 replace current members.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Standard Deviation of Investment Return to Payroll

This measure illustrates the impact of a one standard deviation change in investment return as a percent of payroll. Investment return experience other than expected ultimately affects the employer contribution rates. The higher the ratio of this risk metric, the greater the expected volatility in employer contribution rates. Absent changes in investment policy, this metric is expected to increase as the assets grow to 100% of the AAL.

Standard Deviation of Contribution Rate

This measure illustrates the impact of a one standard deviation change in investment return on the annual contribution rate. Absent a change in amortization policy, this rate is expected to increase substantially as the amortization period decreases.

Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.



Summary of Risk Measures Pension

		Funded Percentage of AA									Ratio	to Payroll	
Valuation Year	– NHRS in Total	Aggregate Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members	Actual Total Payroll / Expected Total Payroll		Ratio of Actives to Retirees ¹	UAAL Amortization Period	UAAL	AVA	AAL		Standard Deviation of Contribution Rate
					,							***	***
June 30, 2008	67.8%	100%	83%	0%	101%	· · /		30	109%	230%	339%		
June 30, 2009*	58.3	100	63	0	103	(2.3)	2.1	30	145	202	346	23%	0.3%
June 30, 2010	58.5	100	61	0	98	(2.8)	2.0	30	150	211	361	23	0.3%
June 30, 2011#*	57.4	100	63	0	98	(3.1)	1.8	29	169	228	397	26	0.3%
June 30, 2012	56.1	100	58	0	96	(2.3)	1.7	28	183	234	417	28	0.3%
June 30, 2013	56.7	100	59	0	97	(2.9)	1.6	27	185	243	428	29	0.3%
June 30, 2014	60.7	100	67	0	97	(1.7)	1.6	26	173	267	440	32	0.4%
June 30, 2015#^	59.2	100	66	0	99	(1.8)	1.5	25	195	283	478	33	0.4%
June 30, 2016	60.0	100	67	0	98	(1.7)	1.5	24	196	294	489	34	0.4%
June 30, 2017#	61.8	100	72	0	99	(2.0)	1.3	23	189	306	495	36	0.5%
June 30, 2018	63.6	100	75	0	100	(1.7)	1.3	22	181	317	498	37	0.5%
June 30, 2019#*@^	60.8	100	73	0	100	(1.8)	1.3	21	209	323	531	40	0.6%
June 30, 2020	61.0	100	72	0	100	(1.9)	1.3	20	209	326	535	40	0.6%
June 30, 2021	64.2	100	78	0	100	(2.1)	1.3	19	193	345	538	42	0.6%
June 30, 2022	65.6	100	81	0	101	(1.1)	1.2	18-20	185	353	538	43	0.7%
June 30, 2023*	67.2	100	84	0	101	(0.9)	1.2	17-20	177	362	538	44	0.7%

After reflection of changes in assumptions.

* After reflection of changes in legislation.

@ After reflection of changes in methodology.

*** Unavailable.

^ The standard deviation of investment return was updated in the experience study.

¹ Beginning with the valuation year ended June 30, 2019, the ratio of actives to retirees excludes additional data records which have resulted from additional annuities, survivor benefits, or members having benefits in more than one valuation group. There were 4,014 such records in 2023.

These risk measures are provided in accordance with the System's Actuarial Funding Policy. Short term fluctuations will occur due to experience, plan changes, and assumption and method changes. Long-term expectations are described on the prior pages.

UAAL Amortization Period: The unfunded liability as of June 30, 2021 shall be amortized through 2039 (a 16-year period beginning on July 1, 2023). Each subsequent change in liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.



Low-Default-Risk Obligation Measure

INTRODUCTION

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

"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**."

COMPARING THE ACCRUED LIABILITIES AND THE LDROM

One of the fundamental financial objectives of NHRS is to finance each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method) as a level percentage of payroll. To fulfill this objective, the discount rate that is used to value the accrued liabilities of NHRS is set equal to the **expected return** on the System's diversified portfolio of assets (referred to sometimes as the investment return assumption). For NHRS, the investment return assumption is 6.75%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-default-risk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the entry age actuarial cost method and discount rates based upon the June 2023 Treasury Yield Curve Spot Rates (monthly average). The 1-, 5-, 10- and 30-year rates follow: 5.29%, 3.99%, 3.61% and 3.84%.

Presented below are the actuarial accrued liability and the LDROM as of June 30, 2023 for NHRS.

Type of Member	Valuation Accrued Liabilities	LDROM
Retirees	\$ 10,066,564,295	\$12,998,065,612
Deferreds/Inactives	551,224,493	749,019,160
Actives	6,487,255,647	10,644,954,873
Totals	\$ 17,105,044,435	\$24,392,039,645



Low-Default-Risk Obligation Measure

COMMENTARY REGARDING THE LDROM

Some ways in which the LDROM can assist the NHRS Board of Trustees in a decision-making process include:

- (1) It provides information to potentially allow for better risk management for NHRS.
- (2) It places the appropriateness of potential employer contribution rate reductions or benefit enhancements in a better context.
- (3) It provides more complete information regarding the benefit security of the membership's benefits earned as of the measurement date.
- (4) It brings into consideration a potential value for a "withdrawal liability" for employers that may want to leave NHRS.

Potentially Allows for Better Risk Management: A very useful risk metric to exhibit potential contribution rate volatility (or amortization period volatility for fixed rate plans) is the ratio of assets to payroll or AAL to payroll. How could we reduce that potential contribution rate volatility (or amortization period volatility for fixed rate plans)? The LDROM and liability driven investing (LDI) are closely related concepts.

Other than reducing benefits, all other things being equal, the only way to reduce that volatility is to immunize (i.e., LDI) a portion of the System's liability. This does not mean that the System needs to immunize all of the liability. For example, if they could immunize half of it, they could reduce the contribution rate volatility in half. This would require the actuary to use a cash flow matching method to value that portion of the liabilities. This means that the actuary would not use the System's investment return assumption for this portion of the liability, but the yield curve resulting from the fixed income portfolio that is being used to immunize the liability. The value of the assets (i.e., fixed income portfolio) and the value of the immunized liability would move in tandem with any changes (up or down) in future interest rates. The result being that the immunized portion of the System's liability would reduce the potential of producing new unfunded actuarial accrued liabilities. However, the fixed income portfolio would still have the minor potential for credit default risk.

Places the Appropriateness of Potential Employer Contribution Rate Reductions or Benefit Enhancements in a Better Context: Many public employee retirement systems have adopted a funding policy. Many funding policies already take into account the System's funded ratio (based upon the AAL) when considering whether to allow for benefit enhancements or contribution rate reductions. For example, a System may not allow for a benefit enhancement if the funded ratio does not exceed a certain threshold. Similarly, a System may not allow for an employer contribution rate reduction in some circumstances. For example, a reduction to the employer normal cost contribution may not be allowed until the System reaches a funded ratio of 120%. Given the fact that most criteria are based upon the <u>expectation</u> of earning the investment return assumption, a System may want to consider extending these criteria to a funded ratio based upon the LDROM in addition to the AAL.

Provides more Complete Information Regarding the Benefit Security of the Membership's Benefits Earned as of the Measurement Date: Too often a high funded ratio (e.g., 100% funded) on an AAL basis is interpreted as benefit security for the participants. The fact that this funded ratio is based upon an expected measure is many times overlooked. If the AAL and LDROM measures are relatively close, then the System at least has the opportunity to make benefits payable in the future more secure.



Pension Solvency Test

The New Hampshire Retirement System's funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due -- the ultimate test of financial soundness.

A solvency test is one means of checking a system's progress under its funding program. In a solvency test, the plan's present assets (cash and investments) are compared with:

- 1) Active member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives; and
- 3) The liabilities for service already rendered by active and inactive members.

In a system that has been following the discipline of level percent-of-payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the system.

Total of all Groups (\$ in Thousands)

		Proj	ected Pension Lia	bilities for				
		(1)	(2)	(3)	-	Percer	tage of A	ccrued
		Aggregate	Current	Active & Inactive	Net Assets	Liabilitie	es Covered	d by Net
Fiscal		Member	Retirees &	Members (Employer	Available	Ass	ets Availa	ble
Year		Contributions	Beneficiaries	Financed Portion)	for Benefits	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>
2014		\$2,842,340	\$5,789,052	\$2,413,782	\$6,700,553	100%	67%	0%
2015	#	2,949,169	6,098,512	2,440,932	7,280,761	100%	72%	0%
2016		2,978,817	6,964,227	2,789,822	7,636,066	100%	67%	0%
2017	#	2,915,811	7,315,440	2,977,198	8,165,684	100%	72%	0%
2018		2,927,793	7,667,448	3,107,908	8,710,939	100%	75%	0%
2019	#*@	3,019,358	8,392,790	3,602,017	9,121,933	100%	73%	0%
2020		3,119,450	8,739,587	3,628,978	9,447,838	100%	72%	0%
2021		3,087,943	9,151,819	3,751,453	10,268,313	100%	78%	0%
2022		3,036,430	9,678,163	3,828,894	10,849,694	100%	81%	0%
2023	*	3,043,329	10,066,564	3,995,151	11,495,582	100%	84%	0%

After reflection of changes in assumptions.

* After reflection of changes in legislation.

@ After reflection of changes in methodology.



Pension Solvency Test -- Comparative Statement (\$ in Thousands)

		Proje	cted Pension L	iabilities for					
		(1)	(2)	(3)	-	Percer	ntage of A	crued	
		Aggregate Current Active & Inact		Active & Inactive	Net Assets	Liabilities Covered by Net			
	Fiscal	Member	Member Retirees & Members (Emplo		Available	Ass	ets Availa	ble	
Group	Year	Contributions	Beneficiaries	Financed Portion)	for Benefits	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	
Employees	2014	\$ 1,083,878	\$ 1,823,517	\$ 784,437	\$ 2,195,284	100%	61%	0%	
Teachers	2014	1,113,650	2,198,892	966,511	2,482,496	100%	62%	0%	
Police	2014	422,972	1,209,741	454,133	1,361,280	100%	78%	0%	
Fire	2014	221,840	556,902	208,701	661,493	100%	79%	0%	
Employees	2015 #	1,137,601	2,007,299	863,247	2,403,294	100%	63%	0%	
Teachers	2015 #	1,155,922	2,555,611	1,141,245	2,682,083	100%	60%	0%	
Police	2015 #	433,215	1,364,908	543,229	1,477,517	100%	77%	0%	
Fire	2015 #	222,431	637,704	241,223	717,867	100%	78%	0%	
Employees	2016	1,152,928	2,139,549	857,347	2,538,563	100%	65%	0%	
Teachers	2016	1,171,831	2,692,037	1,156,821	2,799,863	100%	60%	0%	
Police	2016	430,490	1,460,840	535,225	1,546,665	100%	76%	0%	
Fire	2016	223,568	671,801	240,428	750,975	100%	79%	0%	
Employees	2017	1,133,071	2,272,436	934,564	2,734,558	100%	70%	0%	
Teachers	2017 #	1,132,876	2,819,228	1,211,560	2,979,005	100%	65%	0%	
Police	2017	426,606	1,526,761	570,755	1,650,908	100%	80%	0%	
Fire	2017	223,258	697,015	260,320	801,214	100%	83%	0%	
Employees	2018	1,128,180	2,391,404	974,131	2,922,358	100%	75%	0%	
Teachers	2018	1,142,455	2,956,675	1,268,903	3,176,932	100%	69%	0%	
Police	2018	428,859	1,596,512	591,281	1,758,301	100%	83%	0%	
Fire	2018	228,299	722,857	273,593	853,348	100%	86%	0%	
Employees	2019 #*@	1,160,917	2,646,257	1,181,832	3,063,967	100%	72%	0%	
Teachers	2019 #*@	1,181,186	3,195,041	1,461,286	3,326,088	100%	67%	0%	
Police	2019 #*@	441,940	1,768,684	666,606	1,838,868	100%	79%	0%	
Fire	2019 #*@	235,315	782,808	292,293	893,010	100%	84%	0%	
Employees	2020	1,194,410	2,766,799	1,202,228	3,173,612	100%	72%	0%	
Teachers	2020	1,225,030	3,310,020	1,470,570	3,450,798	100%	67%	0%	
Police	2020	458,081	1,847,135	658,558	1,900,199	100%	78%	0%	
Fire	2020	241,928	815,632	297,625	923,229	100%	84%	0%	
Employees	2021	1,187,629	2,892,159	1,246,883	3,449,619	100%	78%	0%	
Teachers	2021	1,220,158	3,429,767	1,532,995	3,752,083	100%	74%	0%	
Police	2021	445,546	1,958,854	649,018	2,062,170	100%	83%	0%	
Fire	2021	234,610	871,038	322,557	1,004,441	100%	88%	0%	
Employees	2022	1,170,371	3,071,698	1,300,176	3,645,813	100%	81%	0%	
Teachers	2022	1,210,287	3,552,414	1,585,896	3,976,505	100%	78%	0%	
Police	2022	424,441	2,129,277	633,839	2,171,111	100%	82%	0%	
Fire	2022	231,331	924,774	308,983	1,056,265	100%	89%	0%	
Employees	2023 *	1,174,827	3,205,138	1,331,338	3,850,701	100%	83%	0%	
Teachers	2023 *	1,210,843	3,673,198	1,664,969	4,210,979	100%	82%	0%	
Police	2023 *	428,186	2,217,875	665,444	2,310,556	100%	85%	0%	
Fire	2023 *	229,473	970,353	333,400	1,123,345	100%	92%	0%	

After reflection of changes in assumptions.

* After reflection of changes in legislation.

@ After reflection of changes in methodology.



Employees

	Total Present Value	Portion Covered by Future Normal Cost Contributions			tuarial Accrued Liabilities	
Actuarial Present Value of	(1)		(2)	(1) - (2)		
Age and service allowances based on total service likely to be rendered by present active members	\$ 2,562,220,840	\$	495,985,593	\$	2,066,235,247	
Disability benefits likely to be paid to present active members	67,721,338		41,103,901		26,617,437	
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	28,888,231		14,712,553		14,175,678	
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	510,381,319		362,780,242		147,601,077	
Benefits likely to be paid to current inactive and vested deferred members	251,535,394		-		251,535,394	
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	3,205,138,417		_		3,205,138,417	
Tettiees	 3,203,130,417				3,203,130,417	
Total	\$ 6,625,885,539	\$	914,582,289	\$	5,711,303,250	
Actuarial Value of Assets	\$ 3,850,701,345	\$	-	\$	3,850,701,345	
Liabilities to be Covered by Future Contributions	\$ 2,775,184,194	\$	914,582,289	\$	1,860,601,905	
Funded Ratio					67.4%	



Teachers

	То	tal Present Value	Portion Covered by Future Normal Cost Contributions			tuarial Accrued Liabilities
Actuarial Present Value of		(1)		(2)		(1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 3	3,133,086,375	\$	696,019,048	\$	2,437,067,327
Disability benefits likely to be paid to present active members		26,551,764		12,647,630		13,904,134
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)		22,278,035		10,443,819		11,834,216
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members		539,957,396		357,904,615		182,052,781
Benefits likely to be paid to current inactive and vested deferred members		230,953,556		-		230,953,556
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	3	3,673,198,115		-		3,673,198,115
Total	\$7	7,626,025,241	\$	1,077,015,112	\$	6,549,010,129
Actuarial Value of Assets	\$4	1,210,979,415	\$	-	\$	4,210,979,415
Liabilities to be Covered by Future Contributions	\$3	3,415,045,826	\$	1,077,015,112	\$	2,338,030,714
Funded Ratio						64.3%



Police

	•	Total Present Value	Cost Contributions	Ac	tuarial Accrued Liabilities
Actuarial Present Value of		(1)	(2)		(1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$	1,327,290,866	\$ 341,197,748	\$	986,093,118
Disability benefits likely to be paid to present active members		73,069,219	53,544,537		19,524,682
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)		13,606,538	8,724,089		4,882,449
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members		162,022,871	134,049,714		27,973,157
Benefits likely to be paid to current inactive and vested deferred members		55,156,308	-		55,156,308
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees		2,217,875,155			2,217,875,155
Total	\$	3,849,020,957	\$ 537,516,088	\$	3,311,504,869
Actuarial Value of Assets	\$	2,310,556,236	\$ -	\$	2,310,556,236
Liabilities to be Covered by Future Contributions	\$	1,538,464,721	\$ 537,516,088	\$	1,000,948,633
Funded Ratio					69.8%



Fire

	-	Total Present Value	by I	rtion Covered Future Normal Cost ontributions	Ac	tuarial Accrued Liabilities
Actuarial Present Value of		(1)		(2)		(1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$	755,805,398	\$	217,356,027	\$	538,449,371
Disability benefits likely to be paid to present active members		23,716,645		21,542,123		2,174,522
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion) Separation benefits (refunds of contributions		7,837,544		4,938,159		2,899,385
and deferred allowances) likely to be paid to present active members		35,362,632		29,591,566		5,771,066
Benefits likely to be paid to current inactive and vested deferred members		13,579,235		-		13,579,235
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees		970,352,608				970,352,608
Total	\$	1,806,654,062	\$	273,427,875	\$	1,533,226,187
Actuarial Value of Assets	\$	1,123,345,036	\$	-	\$	1,123,345,036
Liabilities to be Covered by Future Contributions	\$	683,309,026	\$	273,427,875	\$	409,881,151
Funded Ratio						73.3%



OPEB Solvency Test

The New Hampshire Retirement System funding objective is to contribute the minimum amount necessary to maintain assets sufficient to pay medical subsidy benefits in each of the four subaccounts. Given the absence of assets from prior pre-funding (as exists for pension benefits), medical subsidy benefits payable in the future will be largely funded by future employer contributions. If the contributions to the System are soundly executed, the System will pay all promised benefits when due -- the ultimate test of financial soundness.

A solvency test is one means of checking a system's progress under its funding program. In a solvency test, the plan's present assets (cash and investments) are compared with:

- 1) The liabilities for future benefits to present retired lives; and
- 2) The liabilities for service already rendered by active and inactive members.

Total of all Groups (\$ in Thousands)

	Projected OPEB Liabilities for								
			(1)		(2)			Percentag	e of Accrued
		C	Current	Active	& Inactive	Ne	t Assets	Liabilities Co	overed by Net
Fiscal		Re	tirees &	Membe	rs (Employer	Av	ailable	Assets	Available
Year	_	Ben	eficiaries	Financ	ed Portion)	for	Benefits	<u>(1)</u>	<u>(2)</u>
2015	#	\$	610,819	\$	150,523	\$	19,515	3%	0%
2016			591,335		138,797		27,350	5%	0%
2017	#		568,676		127,872		38,853	7%	0%
2018			576,261		113,316		36,777	6%	0%
2019	#		595,066		100,358		36,646	6%	0%
2020			572,222		84,426		38,125	7%	0%
2021			548,025		66,169		44,370	8%	0%
2022			517,625		49,604		45,586	9%	0%
2023			484,952		39,902		50,317	10%	0%

After reflection of changes in assumptions.



Valuation Methods

Pension

Actuarial Cost Method - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an Individual Entry-Age Actuarial Cost Method having the following characteristics:

- (i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gain/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of Unfunded Actuarial Accrued Liabilities - Unfunded Actuarial Accrued Liabilities are amortized by level (principal & interest combined) percent-of-payroll contributions from the contribution effective date. The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

The rate-setting valuations project the unfunded actuarial accrued liability to the beginning of the applicable biennium to determine the unfunded amortization rate. We projected the normal cost rates from the first year of the rate setting biennium to better reflect the impact of the changing benefit tiers and generational mortality. We developed projected normal cost rates based on a new entrant profile determined by the current active population with 3-8 years of service.

Medical Subsidy

Liabilities are determined under the entry-age actuarial cost method.

Under New Hampshire Statute, contribution rates to the 401(h) sub-trust are determined as the lesser of 25% of the employers' total contributions or the actuarial required contribution rate that keeps the medical subsidy sub-trust solvent (the "solvency rate"). Under IRS Regulations, 401(h) sub-trust contributions are limited by 25% of the total contributions to the plan (other than contributions to fund past service credits). NHRS maintains the historical information for determining compliance with IRC Section 401(h). A test for compliance with IRC Section 401(h) was outside the scope of this valuation.

Solvency rates for medical subsidy benefits are set such that a specified margin is established by the end of the biennium and for all future years thereafter. The margin is intended to mitigate the risk of insolvency due to adverse experience.

At the November 12, 2013 Board meeting, the Board elected to incorporate a 20% margin requirement for all four member classifications.

At the June 9, 2020 Board meeting, the Board elected to increase the margin for the Teachers group from 20% to 50%. No change to the margin requirement of 20% was made for the other groups.



Valuation Methods (Concluded)

Actuarial Value of Assets - The Actuarial Value of Assets recognizes assumed investment return fully each year. Differences between actual return on the Market Value of assets and assumed return on the Actuarial Value of Assets are phased-in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than Market Value. The Actuarial Value of Assets is unbiased with respect to Market Value. At any time, it may be either greater or less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value. Actuarial Value is limited to a 20% corridor around the Market Value.

The Actuarial Value of Assets was allocated to the pension and medical subsidy plans based on the Market Value of those plans. The Actuarial Value of Assets was then further allocated to each fund (either pension or medical subsidy) based on the Market Value of those funds.

For purposes of determining the medical subsidy solvency rates, the Market Value of Assets was used for all group funds due to the short time horizon before these closed group funds are expected to become pay-as-you-go.



Development of Amortization Payment

The employer contribution rates determined by the 2023 valuation are for the 2026-2027 biennium. The Unfunded Actuarial Accrued Liability (UAAL) was determined using the Actuarial Value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), is the level percent of pay required to fully amortize the UAAL over multiple periods beginning on July 1, 2023. This UAAL payment reflects any payments expected to be made and interest to be accrued between the valuation date and the date contributions determined by the June 30, 2023 Funding report are scheduled to begin. It was assumed that the entire pension contribution as determined by the June 30, 2021 valuation effective from July 1, 2023 to June 30, 2025 would be contributed to the net pension assets. The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.



Valuation Assumptions

The actuarial assumptions used in the valuation are shown in this section. All actuarial assumptions and the rationale for the assumptions are based on the July 1, 2015 to June 30, 2019 experience study.

All actuarial assumptions are expectations of future experience, not market measures. Under RSA 100-A:14 IX, the Board of Trustees sets the actuarial assumptions after consulting with the actuary.

Economic Assumptions

The investment return rate assumed in the valuations is 6.75% per year, compounded annually (net after investment expenses). **The investment return rate** assumed in the medical subsidy valuations is 2.75% per year, compounded annually (net after investment expenses) for purposes of computing accrued liabilities. However, for determining the solvency contribution rate for the medical subsidy account and GASB Statement No. 74, the investment return rate assumption was 6.75% on the market value of assets.

The *Wage Inflation Rate* assumed in this valuation was 2.75% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

The *Price Inflation* assumption is 2.0% per year.

The assumed **Real Rate of Return** over wage inflation is defined to be the portion of total investment return that is more than the assumed total wage growth rate. Considering other economic assumptions, the 6.75% investment return rate translates to an assumed real rate of return over wage inflation of 4.00%. The assumed real rate of return over price inflation would be higher – at 4.75%, with a 2.0% price inflation assumption.

The active member population for Employees, Police and Fire is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at the wage inflation rate – 2.75% per year. For Teachers, the active member population is assumed to decline by 0.50% per year. For purposes of financing the unfunded liabilities, total payroll for Teachers is assumed to grow at the wage inflation rate minus 0.50% which is 2.25% per year.

Pay increase assumptions for individual active members are shown for sample ages on the following pages. Part of the assumption for each age is for merit and/or seniority increase, and the other 2.75% recognizes wage inflation, including price inflation, productivity increases, and other macroeconomic forces.



Valuation Assumptions

Employees

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

	Salary	Increase Assumptio	ns			
	for an Individual Member Merit & Base Increase					
Service	Merit &	Base	Increase			
Index	Seniority	(Economy)	Next Year			
1	12.00%	2.75%	14.75%			
2	6.00%	2.75%	8.75%			
3	3.00%	2.75%	5.75%			
4	2.75%	2.75%	5.50%			
5	2.50%	2.75%	5.25%			
6	2.25%	2.75%	5.00%			
7	2.00%	2.75%	4.75%			
8	1.75%	2.75%	4.50%			
9	1.50%	2.75%	4.25%			
10	1.25%	2.75%	4.00%			
11	1.00%	2.75%	3.75%			
12	0.75%	2.75%	3.50%			
13	0.50%	2.75%	3.25%			
14	0.50%	2.75%	3.25%			
15	0.50%	2.75%	3.25%			
16	0.50%	2.75%	3.25%			
17	0.50%	2.75%	3.25%			
18	0.50%	2.75%	3.25%			
19	0.50%	2.75%	3.25%			
20	0.50%	2.75%	3.25%			
21	0.50%	2.75%	3.25%			
22	0.50%	2.75%	3.25%			
23	0.50%	2.75%	3.25%			
24	0.50%	2.75%	3.25%			
25	0.50%	2.75%	3.25%			



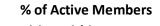
Valuation Assumptions

Employees (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

For Members Hired Prior to July 1, 2011

Retiring within Next Year								
Retirement	Male		Female					
Ages	Normal	Early	Early Rule of 70	Normal	Early	Early Rule of 70		
45			0.60%			0.60%		
46			0.60%			0.60%		
47			0.70%			0.70%		
48			0.90%			0.90%		
49			1.10%			1.10%		
50		0.50%	1.80%		0.50%	1.80%		
51		0.50%	2.10%		0.50%	2.10%		
52		0.60%	2.40%		0.60%	2.40%		
53		0.70%	3.50%		0.70%	3.50%		
54		0.90%	3.90%		0.90%	3.90%		
55		1.50%	6.30%		1.50%	6.30%		
56		2.10%	6.90%		2.10%	6.90%		
57		2.10%	9.80%		2.10%	9.80%		
58		2.90%	11.10%		2.90%	11.10%		
59		3.90%	13.70%		3.90%	13.70%		
60	10.80%			10.80%				
61	10.10%			10.50%				
62	15.50%			13.90%				
63	16.10%			13.60%				
64	13.50%			14.30%				
65	17.10%			19.20%				
66	24.80%			24.00%				
67	23.10%			23.70%				
68	19.80%			20.20%				
69	18.80%			20.10%				
70	100.00%			100.00%				





Employees (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

For Members Hired on or after July 1, 2011

	% of Active Members			
	Re	tiring with	nin Next Yea	r
Retirement	Ma	le	Fema	ale
Ages	Normal	Early	Normal	Early
60		10.8%		10.8%
61		10.1%		10.5%
62		15.5%		13.9%
63		16.1%		13.6%
64		13.5%		14.3%
65	45.0%		44.0%	
66	45.0%		44.0%	
67	23.0%		22.0%	
68	21.0%		18.0%	
69	20.0%		19.0%	
70	100.0%		100.0%	



Employees (Concluded)

Rates of separation from active membership were as shown below (rates do not apply to members eligible for normal retirement and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

		% of Active Members		
Sample	Years of	Separating within Next Year		
Ages	Service	Male	Female	
	0	27.00%	27.00%	
	1	21.00%	21.00%	
	2	15.00%	15.00%	
	3	12.00%	12.00%	
	4	10.00%	10.00%	
25	5+	8.26%	8.26%	
30		6.84%	6.84%	
35		5.74%	5.74%	
40		4.97%	4.97%	
45		4.39%	4.39%	
50		3.81%	3.81%	
55		3.48%	3.48%	
60		3.23%	3.23%	

Rates of disability among active members. 60% are assumed to be ordinary disability and 40% are assumed to be accidental disability.

Sample	% of Active Members Becoming Disabled within Next Year			
Ages	Male	Female		
20	0.000%	0.000%		
25	0.011%	0.011%		
30	0.014%	0.014%		
35	0.018%	0.018%		
40	0.038%	0.038%		
45	0.072%	0.072%		
50	0.150%	0.150%		
55	0.281%	0.281%		



Teachers

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

	Salary Increase Assumptions				
	for an Individual Member				
Service	Merit &	Base	Increase		
Index	Seniority	(Economy)	Next Year		
1	8.00%	2.75%	10.75%		
2	8.00%	2.75%	10.75%		
3	4.00%	2.75%	6.75%		
4	3.50%	2.75%	6.25%		
5	3.25%	2.75%	6.00%		
6	3.00%	2.75%	5.75%		
7	2.75%	2.75%	5.50%		
8	2.50%	2.75%	5.25%		
9	2.25%	2.75%	5.00%		
10	2.00%	2.75%	4.75%		
11	1.75%	2.75%	4.50%		
12	1.50%	2.75%	4.25%		
13	1.25%	2.75%	4.00%		
14	1.00%	2.75%	3.75%		
15	1.00%	2.75%	3.75%		
16	1.00%	2.75%	3.75%		
17	1.00%	2.75%	3.75%		
18	1.00%	2.75%	3.75%		
19	1.00%	2.75%	3.75%		
20	1.00%	2.75%	3.75%		
21	1.00%	2.75%	3.75%		
22	1.00%	2.75%	3.75%		
23	1.00%	2.75%	3.75%		
24	1.00%	2.75%	3.75%		
25	1.00%	2.75%	3.75%		

The Teachers' active head count is assumed to decline 0.50% per year. The open group payroll growth assumption is consequently 2.25% per year (2.75% - 0.50%).



Teachers (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

For Members Hired Prior to July 1, 2011

			tive Members vithin Next Year			
Retirement	Ma			Fem	ale	
Ages	Normal	Early	Early Rule of 70	Normal	Early	Early Rule of 70
45			0.60%			0.60%
46			0.60%			0.60%
47			0.60%			0.60%
48			0.60%			0.60%
49			0.60%			0.60%
50		0.40%	0.80%		0.40%	0.80%
51		0.50%	1.00%		0.50%	1.00%
52		0.60%	1.20%		0.60%	1.20%
53		0.70%	0.90%		0.70%	0.90%
54		1.00%	1.90%		1.00%	1.90%
55		1.50%	4.80%		1.50%	4.80%
56		2.00%	6.60%		2.00%	6.60%
57		2.90%	9.00%		2.90%	9.00%
58		4.30%	12.00%		4.30%	12.00%
59		6.80%	15.90%		6.80%	15.90%
60	16.00%			13.00%		
61	16.00%			14.00%		
62	20.00%			18.00%		
63	16.00%			19.00%		
64	20.00%			19.00%		
65	24.50%			28.00%		
66	32.00%			35.00%		
67	28.00%			32.00%		
68	28.00%			28.00%		
69	28.00%			30.00%		
70	100.00%			100.00%		

% of Active Members



Teachers (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

For Members Hired on or after July 1, 2011

	% of Active Members Retiring within Next Year			
Retirement	Male		Fema	ale
Ages	Normal	Early	Normal	Early
60		16%		13%
61		16%		14%
62		20%		18%
63		16%		19%
64		20%		19%
65	58%		56%	
66	58%		56%	
67	25%		27%	
68	25%		27%	
69	25%		27%	
70	100%		100%	



Teachers (Concluded)

Rates of separation from active membership were as shown below (rates do not apply to members eligible for normal retirement and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

		% of Active Members		
Sample	Years of	Separating wi	thin Next Year	
Ages	Service	Male	Female	
	0	25.0%	25.0%	
	1	15.0%	15.0%	
	2	12.0%	12.0%	
	3	10.0%	10.0%	
	4	8.0%	8.0%	
25	5+	7.7%	7.7%	
30		6.0%	6.0%	
35		4.6%	4.6%	
40		3.7%	3.7%	
45		2.8%	2.8%	
50		2.4%	2.4%	
55		2.3%	2.3%	
60		2.3%	2.3%	

Rates of disability among active members. 80% percent are assumed to be ordinary disability and 20% percent are assumed to be accidental disability.

Sample	% of Active Members Becoming Disabled within Next Year			
Ages	Male	Female		
20	0.000%	0.000%		
25	0.004%	0.004%		
30	0.005%	0.005%		
35	0.006%	0.006%		
40	0.013%	0.013%		
45	0.024%	0.024%		
50	0.050%	0.050%		
55	0.094%	0.094%		



Police

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

	Salary Increase Assumptions				
_	for an Individual Member				
Service	Merit &	Base	Increase		
Index	Seniority	(Economy)	Next Year		
1	25.00%	2.75%	27.75%		
2	19.00%	2.75%	21.75%		
3	6.00%	2.75%	8.75%		
4	4.50%	2.75%	7.25%		
5	3.50%	2.75%	6.25%		
6	2.75%	2.75%	5.50%		
7	2.25%	2.75%	5.00%		
8	1.80%	2.75%	4.55%		
9	1.50%	2.75%	4.25%		
10	1.50%	2.75%	4.25%		
11	1.50%	2.75%	4.25%		
12	1.50%	2.75%	4.25%		
13	1.50%	2.75%	4.25%		
14	1.50%	2.75%	4.25%		
15	1.50%	2.75%	4.25%		
16	1.50%	2.75%	4.25%		
17	1.50%	2.75%	4.25%		
18	1.50%	2.75%	4.25%		
19	1.50%	2.75%	4.25%		
20	1.50%	2.75%	4.25%		
21	1.50%	2.75%	4.25%		
22	1.50%	2.75%	4.25%		
23	1.50%	2.75%	4.25%		
24	1.50%	2.75%	4.25%		
25	1.50%	2.75%	4.25%		



Police (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

July 1, 2011	embers Hired Prior to Who Have Vested Status of January 1, 2012			After July 1, 20 ve Non-Vested		
Retirement	% of Active Members	Age 46	Age 47	Age 48	Age 49	Age 50
Ages	Retiring within Next Year	with 21 Years	with 22 Years	with 23 Years	with 24 Years	with 25 Year
45	21%					
46	21%	27%				
47	21%	27%	31%			
48	21%	25%	31%	34%		
49	21%	25%	31%	34%	38%	
50	21%	25%	27%	34%	38%	40%
51	21%	21%	27%	31%	38%	40%
52	21%	21%	21%	31%	33%	40%
53	21%	21%	21%	21%	33%	38%
54	21%	21%	21%	21%	21%	38%
55	21%	21%	21%	21%	21%	21%
56	21%	21%	21%	21%	21%	21%
57	21%	21%	21%	21%	21%	21%
58	21%	21%	21%	21%	21%	21%
59	21%	21%	21%	21%	21%	21%
60	21%	21%	21%	21%	21%	21%
61	21%	21%	21%	21%	21%	21%
62	21%	21%	21%	21%	21%	21%
63	21%	21%	21%	21%	21%	21%
64	21%	21%	21%	21%	21%	21%
65	21%	21%	21%	21%	21%	21%
66	21%	21%	21%	21%	21%	21%
67	21%	21%	21%	21%	21%	21%
68	21%	21%	21%	21%	21%	21%
69	21%	21%	21%	21%	21%	21%
70	100%	100%	100%	100%	100%	100%



Police (Concluded)

Rates of separation from active membership were as shown below (rates do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

		% of Active Members		
Sample	Years of	Separating wit	hin Next Year	
Ages	Service	Male	Female	
	0	25.00%	25.00%	
	1	16.00%	16.00%	
	2	10.50%	10.50%	
	3	7.00%	7.00%	
	4	5.50%	5.50%	
25	5+	6.58%	6.58%	
30		4.97%	4.97%	
35		3.84%	3.84%	
40		2.99%	2.99%	
45		2.39%	2.39%	
50		2.03%	2.03%	
55		1.88%	1.88%	
60		1.88%	1.88%	

Rates of disability among active members. 25% percent are assumed to be ordinary disability and 75% percent are assumed to be accidental disability.

	% of Active Members Becoming			
Sample	Disabled wit	hin Next Year		
Ages	Ordinary	Accidental		
20	0.013%	0.039%		
25	0.013%	0.039%		
30	0.013%	0.039%		
35	0.029%	0.088%		
40	0.064%	0.191%		
45	0.114%	0.343%		
50	0.183%	0.549%		
55	0.272%	0.818%		



Fire

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

for an Individual Me	
Base	
buse	Increase
y (Economy)	Next Year
% 2.75%	27.75%
% 2.75%	17.75%
% 2.75%	9.75%
% 2.75%	7.75%
% 2.75%	6.50%
% 2.75%	5.25%
% 2.75%	4.75%
% 2.75%	4.25%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
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% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
% 2.75%	3.75%
	y(Economy)%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%%2.75%



Fire (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

luly 1, 2011 W	nbers Hired Prior to /ho Have Vested Status as January 1, 2012		rs Hired on or A	After July 1, 20	11 and for Mar	1.1
of J	lanuary 1, 2012		-	11 Who Have N	Ion-Vested Sta	
			aso	of January 1, 20)12	
Retirement Ages	% of Active Members Retiring within Next Year	Age 46 with 21 Years	Age 47 with 22 Years	Age 48 with 23 Years	Age 49 with 24 Years	Age 50 with 25 Years
45	11%					
43	11%	15%				
40	11%	15%	18%			
47	11%	15%	18%	22%		
48	11%	15%	18%	22%	26%	
49 50	16%	15%	18%	22%	26%	30%
51	16%	16%	18%	21%	26%	30%
52	16%	16%	16%	21%	20%	30%
53	16%	16%	16%	16%	21%	22%
53 54	16%	16%	16%	16%	16%	22%
55	19%	19%	10%	10%	10%	19%
56	19%	19%	19%	19%	19%	19%
57	19%	19%	19%	19%	19%	19%
58	19%	19%	19%	19%	19%	19%
59	19%	19%	19%	19%	19%	19%
60	23%	23%	23%	23%	23%	23%
61	23%	23%	23%	23%	23%	23%
62	23%	23%	23%	23%	23%	23%
63	23%	23%	23%	23%	23%	23%
64	23%	23%	23%	23%	23%	23%
65	23%	23%	23%	23%	23%	23%
65 66	28%	28% 28%	28% 28%	28% 28%	28% 28%	28% 28%
						28% 28%
67 68	28%	28%	28%	28%	28%	
68 60	28%	28%	28%	28%	28%	28%
69 70	28% 100%	28% 100%	28% 100%	28% 100%	28% 100%	28% 100%



Fire (Concluded)

Rates of separation from active membership were as shown below (rates do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

		% of Activ	e Members
Sample	Years of	Separating wi	thin Next Year
Ages	Service	Male	Female
	0	7.25%	7.25%
	1	5.00%	5.00%
	2	2.50%	2.50%
	3	2.00%	2.00%
	4	1.50%	1.50%
25	5 & Over	1.15%	1.15%
30		1.15%	1.15%
35		1.15%	1.15%
40		1.15%	1.15%
45		1.15%	1.15%
50		1.15%	1.15%
55		1.15%	1.15%
60		1.15%	1.15%

Rates of disability among active members. 40% percent are assumed to be ordinary disability and 60% percent are assumed to be accidental disability.

	% of Active Members Becoming		
Sample	Disabled within Next Year		
Ages	Ordinary	Accidental	
20	0.029%	0.043%	
25	0.042%	0.063%	
30	0.051%	0.076%	
35	0.062%	0.093%	
40	0.085%	0.127%	
45	0.125%	0.187%	
50	0.182%	0.274%	
55	0.275%	0.413%	



Healthy Mortality

The standard mortality tables for death after retirement are the Pub-2010 Healthy Retiree Mortality Tables with credibility adjustments for each group (Police and Fire combined) and projected fully generational mortality improvements using Scale MP-2019.

The applicable published healthy mortality tables for each valuation group are shown below.

Employees:	PubG-2010 amount-weighted Healthy Retiree General Mortality Tables
Teachers:	PubT-2010 amount-weighted Healthy Retiree Teachers Mortality Tables
Police and Fire:	PubS-2010 amount-weighted Healthy Retiree Safety Mortality Tables

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

Sample rates of mortality and future life expectancy years are shown in the following tables.

Sample Attained	Probability of Dying Next Year*			re Life cy (Years)*
Ages	Male	Female	Male	Female
35	0.072%	0.035%	51.39	53.80
40	0.088%	0.047%	46.10	48.46
45	0.117%	0.071%	40.84	43.14
50	0.282%	0.231%	35.71	37.95
55	0.418%	0.321%	30.81	32.99
60	0.637%	0.442%	26.09	28.14
65	0.924%	0.645%	21.57	23.42
70	1.428%	1.035%	17.28	18.90
75	2.410%	1.827%	13.32	14.68
80	4.325%	3.365%	9.82	10.89

Employees

* Applicable to calendar year 2023. Rates and life expectancy in future years are determined by the MP-2019 projection scale. The rates shown include the credibility adjustment for each member classification.



Sample Attained	Probabilit Next	y of Dying Year*		re Life cy (Years)*
Ages	Male	Female	Male	Female
35	0.046%	0.029%	53.86	55.93
40	0.056%	0.039%	48.57	50.62
45	0.072%	0.051%	43.30	45.32
50	0.109%	0.081%	38.06	40.05
55	0.219%	0.209%	32.91	34.88
60	0.374%	0.319%	27.92	29.90
65	0.605%	0.452%	23.12	25.04
70	1.012%	0.722%	18.56	20.32
75	1.851%	1.366%	14.31	15.85
80	3.519%	2.719%	10.54	11.82

Teachers

Police and Fire

Sample Attained	Probability of Dying Next Year*			re Life cy (Years)*
Ages	Male	Female	Male	Female
35	0.068%	0.050%	51.93	53.80
40	0.081%	0.061%	46.64	48.48
45	0.123%	0.086%	41.41	43.19
50	0.173%	0.141%	36.24	37.95
55	0.282%	0.263%	31.15	32.83
60	0.500%	0.467%	26.23	27.91
65	0.847%	0.736%	21.58	23.23
70	1.395%	1.175%	17.23	18.81
75	2.424%	2.023%	13.25	14.70
80	4.394%	3.604%	9.76	11.06

* Applicable to calendar year 2023. Rates and life expectancy in future years are determined by the MP-2019 projection scale. The rates shown include the credibility adjustment for each member classification.



Disabled Mortality

Disabled pension mortality is based on the Pub-2010 Disabled Retiree Mortality Tables for males and females with fully generational mortality improvements using Scale MP-2019. Due to limited disabled mortality experience, credibility adjustments were not applied.

The applicable published disabled mortality tables for each valuation group are shown below.

Employees:	PubG-2010 amount-weighted Disabled Retiree General Mortality Tables
Teachers:	PubT-2010 amount-weighted Disabled Retiree Teachers Mortality Tables
Police and Fire:	PubS-2010 amount-weighted Disabled Retiree Safety Mortality Tables

The probabilities of disabled mortality at sample attained ages are as follows:

	Probability of Occurrence Next Year*			
Sample	Disable	Disabled Death		
Ages	Male	Female		
20	0.440%	0.262%		
25	0.339%	0.206%		
30	0.506%	0.357%		
35	0.690%	0.560%		
40	0.850%	0.759%		
45	1.061%	0.987%		
50	1.503%	1.413%		
55	2.030%	1.796%		

Employees

* Applicable to calendar year 2023. Rates and life expectancy in future years are determined by the MP-2019 projection scale.



Sample	Probability of Occurrence Next Year* Disabled Death		
Ages	Male Female		
20	0.440%	0.262%	
25	0.339%	0.206%	
30	0.506%	0.357%	
35	0.690%	0.560%	
40	0.850%	0.759%	
45	1.061%	0.987%	
50	1.503%	1.413%	
55	2.030%	1.796%	

Teachers

Police and Fire

	Probability of Occurrence Next Year*		
Sample	Disabled Death		
Ages	Male	Female	
20	0.129%	0.060%	
25	0.131%	0.082%	
30	0.175%	0.124%	
35	0.208%	0.169%	
40	0.229%	0.198%	
45	0.255%	0.224%	
50	0.331%	0.290%	
55	0.461%	0.475%	

* Applicable to calendar year 2023. Rates and life expectancy in future years are determined by the MP-2019 projection scale.



Pre-Retirement Mortality

For active members dying before retirement, the Pub-2010 Employee Mortality Tables for males and females with fully generational mortality improvements using Scale MP-2019. Due to limited active member mortality experience, credibility adjustments were not applied.

The applicable published disabled mortality tables for each valuation group are shown below.

Employees:	PubG-2010 amount-weighted Employee General Mortality Tables
Teachers:	PubT-2010 amount-weighted Employee Teachers Mortality Tables
Police and Fire:	PubS-2010 amount-weighted Employee Safety Mortality Tables

The probabilities of dying prior to retirement at sample attained ages are as follows:

Employees

	Probability of Occurrence Next Year*		
Sample	Death Before Retirement		
Ages	Male	Female	
20	0.040%	0.015%	
25	0.034%	0.011%	
30	0.052%	0.021%	
35	0.071%	0.032%	
40	0.087%	0.043%	
45	0.103%	0.056%	
50	0.140%	0.079%	
55	0.210%	0.127%	

* Applicable to calendar year 2023. Rates and life expectancy in future years are determined by the MP-2019 projection scale.



Teachers

	Probability of Occurrence Next Year*		
Sample	Death Before Retirement		
Ages	Male Female		
20	0.036%	0.015%	
25	0.020%	0.011%	
30	0.032%	0.020%	
35	0.045%	0.028%	
40	0.055%	0.037%	
45	0.071%	0.048%	
50	0.104%	0.070%	
55	0.165%	0.110%	

Police and Fire

	Probability of Occur	rence Next Year*	
Sample	Death Before Retirement		
Ages	Male	Female	
20	0.044%	0.018%	
25	0.045%	0.025%	
30	0.059%	0.038%	
35	0.071%	0.050%	
40	0.078%	0.059%	
45	0.086%	0.067%	
50	0.112%	0.087%	
55	0.168%	0.127%	

Probability of Occurrence Next Year*

* Applicable to calendar year 2023. Rates and life expectancy in future years are determined by the MP-2019 projection scale.

Weighting of Mortality

The weighting of ordinary and accidental deaths by member classification is as follows:

	Employees	Teachers	Police	Fire
Ordinary	98%	98%	50%	50%
Accidental	2%	2%	50%	50%



Miscellaneous and Technical Assumptions

Administrative & Investment Expenses	The investment return assumption is intended to be the return net of investment expenses. Assumed administrative expenses are added to the Normal Cost, and were 0.35% of payroll.
Benefit Service	Exact Fractional service is used to determine the amount of benefit payable.
COLA	None assumed.
Decrement Operation	Disability and turnover decrements do not operate during normal retirement eligibility for Group I and Group II members. They do operate for early retirement for Group I members.
Decrement Timing	Normal and early retirement decrements for the Teachers group are assumed to occur at the beginning of the year. All other decrements for all groups were assumed to occur mid-year.
Eligibility Testing	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Incidence of Contributions	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Liability Adjustments	Normal, early and vesting retirement liabilities are increased by 8.5%, 5.5%, 11.0% and 12.0% for Employees, Teachers, Police and Fire respectively to account for end of career pay increases. Group I members hired after July 1, 2011 or who have non-vested status as of January 1, 2012 are assumed to have no adjustment for end of career payments. Normal, early and vesting retirement liabilities are increased by 5.5% and 6.0% for Police and Fire respectively for Group II members hired after July 1, 2011 or who have non-vested status as of January 1, 2012 to account for end of career pay increases.
Marriage Assumption	Group I: 55% of males and 55% of females are assumed to be married for purposes of death-in-service benefits. Group II: 65% of males and 65% of females are assumed to be married for purposes of death-in- service and death after retirement benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.



Normal Form of Benefit	This valuation assumes that members will elect the normal form of payment. Alternate forms of payment are available and are actuarially adjusted based on the valuation interest and mortality.
	Group I: The assumed normal form of benefit is a straight life benefit.
	Group II: The assumed normal form of benefit is straight life for single members and joint and 50% survivor for married members.
Option Factors	Annuity values and factors are based on a 6.75% interest rate and the Pub-2010 Healthy Retiree mortality tables for males and females, adjusted for improvements using Scale MP-2019. While the tables used in the valuations are based on generational mortality, a static model with five years of projection was used for purposes of determining the option factors.
	Unisex mortality was used based on active male/female blends observed in the June 30, 2019 valuation of 39%/61%, 22%/78%, 87%/13% and 97%/3% for Employees, Teachers, Police and Fire, respectively.
	Disabled mortality is based on the Pub-2010 Disabled Retiree mortality tables using a static model with five years of mortality improvement projection.
	For the Group I Straight Life factors, the current practice of not reflecting the changing benefit at age 65 is in the factor.
	Each option factor is determined on an actuarial equivalent basis using valuation assumptions. No adjustment for optional forms of payment are reflected in the valuation.
Pay Increase Timing	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
New Entrant Profile	For purposes of projecting the normal cost to the beginning of the rate setting biennium, the new entrant profile is based on actual members with 3-8 years of service on the valuation date.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.
Service Purchases	One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.



Split Benefits	Active members with service in more than one plan are valued as if all service accrued is in their current plan. Split benefits are valued upon retirement, as reported in the data.
Data Adjustments	 Active Data New active member pays were annualized. 160 active records were excluded due to reported pays being \$0. 2 active records were excluded due to reported employment service being less than 0. 6 active members reported as being vested as of 12/31/2011 were also reported as being hired on or after 7/1/2011. For the purposes of retirement eligibility, it was assumed these members were not hired on or after 7/1/2011.
	 Deferred Data 121 deferred members had a reported accrued benefit of \$0. These members were assumed to receive a refund of member contributions equal the accumulated member contributions reported in the data.
	Retiree Data - 1,133 payee records were excluded due to non-blank Benefit Termination Dates.
	Medical Subsidy Data - 463 records were excluded due to non-blank Benefit Termination Dates.
Medical Subsidy	Actual medical subsidy recipients are included in the valuation plus 25% of those who opted-out. For those members reported as eligible in the future but not currently receiving, we assumed that members would commence benefits at age eligibility.
	The solvency rates for the medical subsidy benefits were determined to provide an estimated margin of 20% of the benefits (50% for Teachers) by the end of the first year of the biennium and thereafter. The margin is intended to mitigate the risk of insolvency due to adverse experience.
	A retired member's medical subsidy amount is provided by System staff. If the member is under the age of 65, the pre-65 subsidy amount used is the amount reported by System staff, and the post-65 subsidy amount is assumed to be at the post-65 rates.
	It is assumed that 80% of active married members will have their spouses continue to receive a medical subsidy under the plan.
IRC Section 415(b) and 401(a)(17)	For purposes of the valuation, the limitations under IRC Section 401(a)(17) and 415(b) were not reflected due to immateriality.



Statute	Amended and Restated under New Hampshire Revised Statutes Annotated (RSA) Chapter 100-A. Most recently amended under legislation passed in the year ending June 30, 2011.	
Effective Date	July 1, 1967	
Plan Year	July 1 through June 30	
Type of Plan	Qualified, governmental-defined benefit retirement plan; it is a single plan for financial reporting purposes.	
Eligibility Requirements	Any employee or teacher becomes a Group I member as a condition of employment. Membership is optional for elected officials, officials appointed for fixed terms, unclassified state employees or employees of the general court.	
Creditable Service	Service measured from date of employment to date of retirement or prior termination plus service credited under one or more of the predecessor systems.	
Earnable Compensation	For members who have attained vested status prior to January 1, 2012, full base rate of compensation paid plus any overtime pay, holiday and vacation pay, sick pay, longevity or severance pay, cost of living bonus, additional pay for extracurricular and instructional activities or any military differential pay, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax. Earnable compensation in the final 12 months prior to termination shall be limited to 1 ½ times the higher of the earnable compensation in the 12-month period preceding the final 12 months or the highest compensation year excluding the final 12 months. Earnable compensation is subject to IRC Section 401(a)(17) limits.	
	For members who have not attained vested status prior to January 1, 2012, full base rate of compensation paid plus any overtime pay, longevity pay, cost of living bonus, additional pay for extracurricular and instructional activities, and any military differential pay, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax, but excluding other compensation except supplemental pay paid by the employer while the member is receiving workers' compensation and teacher development pay that is not part of the contracted annual salary. Earnable compensation shall not include incentives to encourage members to retire, severance pay, or end-of-career longevity payments and pay for unused sick or vacation time. Earnable compensation in the final 12 months prior to termination shall be limited to 1 ½ times the higher of the earnable compensation in the 12-month period preceding the final 12 months or the highest compensation year excluding the final 12 months.	



	The new definition of earnable compensation is applicable January 1, 2012 for members who have not attained vested status prior to January 1, 2012 and immediately for members who commence service on or after July 1, 2011.
Average Final Compensation	For members who have attained vested status prior to January 1, 2012 – Average annual earnable compensation during the highest 3 years of creditable service.
	For members who commence service on or after July 1, 2011 or who have not attained vested status prior to January 1, 2012 – Average annual earnable compensation during the highest 5 years of creditable service.
Service Retirement	Eligibility: Age 60 years (age 65 for members who commence service on or after July 1, 2011).
	Benefit: A member annuity that is the actuarial equivalent of the member's accumulated contributions plus a state annuity.
	Prior to full retirement age for Social Security, the state annuity, together with the member annuity, shall be equal to $1/60^{\text{th}}$ of AFC times creditable service ($1/66^{\text{th}}$ of AFC times creditable service for members who commence service on or after July 1, 2011).
	After full retirement age for Social Security, the state annuity, together with the member annuity, shall be equal to 1/66 th of AFC times creditable service.
	Normal Form: Straight life annuity.
Early Retirement	Eligibility: Completion of 20 years of creditable service and age plus service at least 70, or attainment of age 50. (Age 60 with 30 years of creditable service for members who commence service on or after July 1, 2011.)
	Benefit: Service Retirement Benefit accrued to date of retirement, reduced for each month prior to age 60 by 1/8 of 1% if the member has 35 years or more of creditable service, by 1/4 of 1% if the member has 30 years but less than 35, by 1/3 of 1% if the member has at least 25 years but not 30, by 5/12 of 1% if the member has at least 20 years but not 25, and by 5/9 of 1% if the member has less than 20 years of creditable service.
	For members who commence service on or after July 1, 2011, normal retirement benefit is reduced 1/4 of 1% for each month prior to age 65.



Ordinary Disability	Eligibility: 10 or more years of creditable service.
	Benefit: If age 60 or older, the Service Retirement Benefit at attained normal retirement eligibility age as calculated under benefit provisions for members hired prior to July 1, 2011. Under age 60, a member annuity plus state annuity that shall be equal to 1.5% times AFC times years of creditable service. The disability retirement allowance shall not be less than 25% of AFC.
Accidental Disability	Eligibility: Permanently disabled in the performance of duty.
	Benefit: Service Retirement Benefit if at least age 60, not less than 50% of AFC. Under age 60, a member annuity plus state annuity that shall be equal to 50% times AFC.
Accidental Death Benefits	Eligibility: Accidental death in the performance of duty.
	Benefit: 50% times AFC.
Ordinary Death Benefits	Eligibility: Death other than accidental death.
	Benefit: If 10 years creditable service or eligible for service retirement, surviving spouse receives 50% of the service retirement benefit until death or remarriage. If no surviving spouse, designated beneficiary receives a lump sum equal to the greater of \$3,600 or the member's annual compensation.
	If less than 10 years creditable service and not eligible for service retirement, the member's spouse or designated beneficiary receives a lump sum equal to the greater of \$3,600 or the member's annual compensation.
Post Retirement Death	Not applicable.
Optional Forms	Each of the following options shall be of equivalent actuarial value to the allowance payable in the absence of election of an option.
	Option 1. Full cash refund. Option 2. 100% Joint and Survivor. Option 3. 50% Joint and Survivor. Option 4. Other Joint and Survivor.
Vested Termination	If a member terminates with less than 10 years of service prior to attaining service retirement age, the member's accumulated contributions are refunded. If a member terminates with 10 or more years of service, the member either receives a service retirement benefit beginning at any age after age 60 (age 65 for members who commence service on or after July 1, 2011) or a reduced early service retirement benefit beginning at any age after age 50 (age 60 for members who commence service on or after July 1, 2011) or a reduced early service retirement benefit beginning at any age after age 50 (age 60 for members who commence service on or after July 1, 2011 and have at least 30 years of creditable service) or the member may apply for a refund of the member's accumulated contributions.



Maximum Benefit	For members who commenced service prior to July 1, 2009 or have attained vested status prior to January 1, 2012, a member's retirement benefit shall not exceed 100% of the member's highest year of earnable compensation. For members who commenced service on or after July 1, 2009 and have not attained vested status prior to January 1, 2012, a member's retirement benefit shall not exceed the lesser of 85% of the member's highest average final compensation or \$120,000.
Refunds	 Termination for reasons other than retirement or death and the member has not elected a vested deferred retirement benefit. Upon death in service other than accidental death described above, the member's accumulated contributions are payable to the beneficiary or estate if, at the time of death, the member is not eligible for a service retirement. Upon death prior to age 60 of a member electing vested deferred retirement, the member's accumulated contributions at the time of death are payable to the beneficiary or estate. Upon death of a retired member prior to electing an optional allowance, any excess of the member's accumulated contributions at retirement over the sum of retirement allowance payments received.
Member Contributions	7.0% of earnable compensation. Interest on member contributions shall be 2 percentage points less than either the most recent board of trustees approved assumed rate of return determined under RSA 100-A:16, II(g) or the actual rate of return, whichever is lower.
Employer Contributions	As prescribed in RSA 100-A:16.
Temporary Supplemental Allowances	All System members who retired on or before July 1, 2014, or any beneficiaries of such members receiving a survivorship pension benefit shall receive a one-time 1.5% COLA on the first \$50,000 of an annual pension benefit. The COLA will take effect on the retired member's first anniversary date of retirement occurring after July 1, 2020. The adjustment shall become a permanent addition to the member's base retirement allowance.
Other Ancillary Benefits	There are no ancillary benefits - retirement type benefits not required by statutes but which might be deemed a liability if continued beyond the availability of funding by the current funding source.



Statute	Amended and Restated under New Hampshire Revised Statutes Annotated (RSA) Chapter 100-A. Most recently amended under legislation passed in the year ending June 30, 2011.
Effective Date	July 1, 1967
Plan Year	July 1 through June 30
Type of Plan	Qualified, governmental defined benefit retirement plan; it is a single plan for financial reporting purposes.
Eligibility Requirements	Any permanent policeman or permanent fireman becomes a Group II member as a condition of employment.
Creditable Service	Service measured from date of employment to date of retirement or prior termination plus service credited under one or more of the predecessor systems.
Earnable Compensation	For members who have attained vested status prior to January 1, 2012, full base rate of compensation paid plus any overtime pay, holiday and vacation pay, sick pay, longevity or severance pay, cost of living bonus, additional pay for extra or special duty, and other compensation paid to the member by the employer, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax. Earnable compensation in the final 12 months prior to termination shall be limited to 1 ½ times the higher of the earnable compensation in the 12-month period preceding the final 12 months or the highest compensation year excluding the final 12 months. Earnable compensation is subject to IRC section 401(a)(17) limits. Compensation for extra and special duty, as determined by the employer, shall be included but limited during the highest 3 years of creditable service as provided in paragraph RSA 100-A:1 XVIII as amended.
	For members who have not attained vested status prior to January 1, 2012, full base rate of compensation paid plus any overtime pay, longevity pay, cost of living bonus, and any military differential pay, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax, but excluding other compensation except supplemental pay paid by the employer while the member is receiving workers' compensation and teacher development pay that is not part of the contracted annual salary. Earnable compensation is subject to IRC section 401(a)(17) limits. Compensation for extra and special duty, as determined by the employer, shall be included but limited during the highest 5 years of creditable service as provided in paragraph RSA 100-A:1 XVIII as amended. Compensation for extra and special duty shall be eliminated for members who commence service on or after July 1, 2011.



	Earnable compensation shall not include incentives to encourage members to retire, severance pay, or end-of- career longevity payments and pay for unused sick or vacation time. Earnable compensation in the final 12 months prior to termination shall be limited to 1 ½ times the higher of the earnable compensation in the 12-month period preceding the final 12 months or the highest compensation year excluding the final 12 months. The new definition of earnable compensation is applicable January 1, 2012
	for members who have not attained vested status prior to January 1, 2012 and immediately for members who commence service on or after July 1, 2011.
Average Final Compensation	For members who have attained vested status prior to January 1, 2012 – Average annual earnable compensation during the highest 3 years of creditable service.
	For members who commence service on or after July 1, 2011 or who have not attained vested status prior to January 1, 2012 – Average annual earnable compensation during the highest 5 years of creditable service.
Service Retirement	Eligibility: Age 45 and 20 years of creditable service or age 60 (age 50 with 25 years of creditable service or age 60 for members who commence service on or after July 1, 2011).
	Benefit: A member annuity that is the actuarial equivalent of the member's accumulated contributions plus a state annuity.
	The state annuity, together with the member annuity, shall be equal to 2-1/2% of AFC times creditable service up to 40 years (2% of AFC times creditable service up to 42.5 years for members who commence service on or after July 1, 2011. However, a member who commenced service on or after July 1, 2011 shall not receive a service retirement allowance until attaining the age of 52.5, but may receive a reduced allowance after age 50 if the member has at least 25 years of creditable service where the allowance shall be reduced, for each month by which the benefit commencement date precedes the month after which the member attains 52.5 years of age, by ¼ of 1%).
	Members hired prior to July 1, 2011 who have not attained vested status prior to January 1, 2012 shall be subject to transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on January 1, 2012. The state annuity, together with the member annuity, shall be equal to the multiplier times AFC times creditable service up to 40.5 years. The transition provisions are provided in the following table.



	Minimum		
Creditable Service on	Years of	Minimum	Annuity
January 1, 2012	Service	Age Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Members who have attained vested status prior to January 1, 2012 who have attained the age of 45 with at least 20 years of creditable service, members who commenced service on or after July 1, 2011 who have attained the age of 50 with at least 25 years of creditable service, and members hired prior to July 1, 2011 who have not attained vested status prior to January 1, 2012 who qualify as provided in the transition provisions shall receive a minimum annual service retirement allowance of \$10,000.

Normal Form: straight life annuity (with surviving spouse's benefit payable as described under post-retirement death benefit).

Ordinary Disability Eligibility: 10 or more years of creditable service.

Benefit: Service Retirement Benefit. The disability retirement allowance shall not be less than 25% of the member's final compensation at the date of the member's disability.

Accidental Disability Eligibility: Permanently disabled in the performance of duty.

Benefit: Members who have attained vested status prior to January 1, 2012 are eligible for an accidental disability benefit and shall receive a benefit equal to 2/3 of AFC. If a member has more than 26-2/3 years of service, the member will receive a supplemental disability benefit equal to 2-1/2% of AFC times years of creditable service in excess of 26-2/3 years but not in excess of 40 years.

Members hired prior to July 1, 2011 who have not attained vested status prior to January 1, 2012 are eligible for an accidental disability benefit and shall receive a benefit equal to 2/3 of AFC. The calculation of the supplemental allowance shall be as provided in the transition provisions with the number of years for the supplement adjusted proportionally.

Members who commence service on or after July 1, 2011 are eligible for an accidental disability benefit and shall receive a benefit equal to 2/3 of AFC. If a member has more than 33-1/3 years of service, the member will receive a supplemental disability benefit equal to 2% of AFC times years of creditable service in excess of 33-1/3 years but not in excess of 42.5 years.



Accidental Death Benefits	Eligibility: Accidental death in the performance of duty.
	Benefit: 50% times the member's annual rate of earnable compensation at the date of the member's death.
Post-Retirement Death	Retired prior to April 1, 1987, benefit payable to surviving spouse until death or remarriage equal to 50% of the member's service (if the member had at least 20 years of creditable service), ordinary disability or accidental disability retirement allowance. Upon the death of a member receiving a service or ordinary disability retirement, a lump sum of \$3,600 is payable also.
	Retired on or after April 1, 1987, benefit payable to surviving spouse until death or remarriage equal to 50% of the member's service, ordinary disability or accidental disability retirement allowance plus a lump sum as defined below.
	Retired on or after April 1, 1987, but before July 1, 1988, hired before July 1, 1988, lump sum of \$3,600.
	Retired on or after July 1, 1988, hired before July 1, 1988, lump sum of \$10,000.
	Retired on or after July 1, 1988, hired on or after July 1, 1988 but before July 1, 1993, lump sum of \$3,600.
Optional Forms	Each of the following options shall be of equivalent actuarial value to the straight life allowance payable in the absence of election of an option.
	Option 1. Full cash refund. Option 2. 100% Joint and Survivor. Option 3. 50% Joint and Survivor. Option 4. Other Joint and Survivor.
Vested Termination	If a member terminates with less than 10 years of service, the member's accumulated contributions are refunded. If a member terminates with 10 or more years of service, the member either receives his service retirement at the age the member would have attained service or reduced early service retirement eligibility requirement, or age 60 or the member may apply for a refund of accumulated contributions.



Maximum Benefit	For members who commenced service prior to July 1, 2009 or have attained vested status prior to January 1, 2012, a member's retirement benefit shall not exceed 100% of the member's highest year of earnable compensation. For members who commenced service on or after July 1, 2009 and have not attained vested status prior to January 1, 2012, a member's retirement benefit shall not exceed the lesser of 85% of the member's highest average final compensation or \$120,000.
Refunds	 Termination for reasons other than retirement or death and the member has not elected a vested deferred retirement benefit. Upon death in service other than accidental death described above, the member's accumulated contributions are payable to the beneficiary or estate, if at the time of death, the member is not eligible for a service retirement. Upon death prior to commencement of benefits of a member electing vested deferred retirement, the member's accumulated contributions are payable to the beneficiary or estate at the time of death. Upon death of a survivor of a member retired on accidental disability with spouse receiving accidental disability survivor benefits, the excess of the member's accumulated contributions at retirement over the sum of payments received. Upon death of a retired member prior to electing an optional allowance, any excess of the member's accumulated contributions at retirement over the sum of retirement allowance payments received.
Member Contributions	Fire members: 11.80% of earnable compensation. Police members: 11.55% of earnable compensation.
	Member contributions cease for members who have attained vested status prior to January 1, 2012 with creditable service in excess of 40 years. Member contributions cease for all other Group II members with creditable service in excess of 42.5 years.
	Interest on member contributions shall be 2 percentage points less than either the most recent board of trustees approved assumed rate of return determined under RSA 100-A:16, II(g) or the actual rate of return, whichever is lower.
Employer Contributions	As prescribed in RSA 100-A:16.
Temporary Supplemental Allowances	All System members who retired on or before July 1, 2014, or any beneficiaries of such members receiving a survivorship pension benefit shall receive a one-time 1.5% COLA on the first \$50,000 of an annual pension benefit. The COLA will take effect on the retired member's first anniversary date of retirement occurring after July 1, 2020. The adjustment shall become a permanent addition to the member's base retirement allowance.
Other Ancillary Benefits	There are no ancillary benefits - retirement type benefits not required by statutes but which might be deemed a liability if continued beyond the availability of funding by the current funding source.



History of Recent Changes in Plan Provisions

2023 Legislative Session

House Bill No. 2:

This bill modifies the effective date of the statutory pension recalculation for Group I (Employee and Teacher) members who retire on or after July 1, 2023. The change defers the recalculation of a Group I retiree's NHRS benefit to his or her full retirement age under the federal Social Security system.

This bill grants a one-time payment of \$500 to members who retired on or before July 1, 2018 with at least 20 years of creditable service, or any beneficiaries of such member who is receiving a survivorship pension benefit who has an annual retirement allowance of no more than \$40,000 on June 30, 2023. The one-time payment will be made during state fiscal year 2024.

2022 Legislative Session

House Bill No. 1535:

This bill grants a one-time payment of \$500 to members who retired on or before July 1, 2017, or any beneficiaries of such member who is receiving a survivorship pension benefit who has an annual retirement allowance of no more than \$30,000 on June 30, 2022. The one-time payment will be made during state fiscal year 2023.

House Bill No. 1587:

This bill modifies the calculation of compensation paid in excess of the full base rate of pay under the definition of Average Final Compensation (AFC) for Group II members hired prior to July 1, 2011, who had not attained vested status prior to January 1, 2012. The projected cost increase associated with this bill will be pre-funded by the state.

Senate Bill No. 363:

This bill allows members who commenced Group II service between January 1, 2002, and June 30, 2011, to purchase nonqualified service time in order to reduce certain transition provision requirements for service retirement. The member is responsible for paying the full actuarial cost of the service credit purchased.

2019 Legislative Session

House Bill No. 616:

This bill grants a one-time, 1.5% COLA on the first \$50,000 of an annual pension benefit to members who retired on or before July 1, 2014, or any beneficiaries of such member who is receiving a survivorship pension benefit. The COLA will take effect on the retired member's first anniversary date of retirement occurring after July 1, 2020. The adjustment shall become a permanent addition to the member's base retirement allowance.



History of Recent Changes in Plan Provisions (Continued)

2014 Legislative Session

House Bill No. 1494:

This bill: (1) adds definitions of terms used in RSA 100-A and clarifies existing definitions; (2) revises the procedure for calculating the cost of purchasing credit for certain types of prior service; (3) clarifies the ability to earn service credit while on a salary continuance plan; (4) corrects an inconsistency in the statute regarding the approval date of the Annual Comprehensive Financial Report; (5) adds penalties for employers who fail to remit correct data in a timely manner; and (6) repeals obsolete provisions.

2012 Legislative Session

- (a) Modifies the calculation of Average Final Compensation (AFC) for members not vested prior to January 1, 2012, by changing the "compensation over base pay" factor used in the AFC formula from a dollar average to a percentage average.
- (b) Clarifies the date from which NHRS must begin calculating a 7-year average of Extra or Special Duty Pay for Group II (Police and Fire) members vested prior to January 1, 2012. This change excludes from the calculation any months prior to July 1, 2009, which is when ESDP began to be separately reported to NHRS.
- (c) Clarifies the number of years of creditable service Group II (Police and Fire) members in service prior to July 1, 2011, but not vested prior to January 1, 2012, must have in order to qualify for the supplemental disability benefit available to eligible Accidental Disability retirees.
- (d) Changes the annual effective date of changes to the member interest rate from a fiscal year to a calendar year.
- (e) Clarifies the definition of "compensation over base pay" for members not vested prior to January 1, 2012.
- (f) Clarifies that the maximum benefit limit for members hired before July 1, 2009, is 100 percent of Earnable Compensation and the maximum benefit limit for members hired after that date, and not vested by January 1, 2012, is the lesser of 85 percent of AFC or \$120,000 per year.
- (g) Modifies the definition of "part-time" for NHRS retirees employed by NHRS-participating employers.
- (h) Changes the date by which NHRS Trustees must approve the retirement system's Annual Comprehensive Financial Report from December 1 to December 31 of each year.
- (i) RSA 100-A:53, II; RSA 100-A:53-e, II; RSA 100-A:16, II(h); and RSA 100-A:16, II(j), relative to the Special Account, are repealed.
- (j) RSA 100-A:16, III-a, commonly known as the employer "spiking" assessment, is repealed.



History of Recent Changes in Plan Provisions (Continued)

2011 Legislative Session

House Bill No. 2 as Amended by 2011-2513-CofC:

- (a) Change the definition of Earnable Compensation for active members who begin service on or after July 1, 2011 or who are not in vested status on and after January 1, 2012.
- (b) For active members who commenced service on or after July 1, 2011 or who have non-vested status on or after January 1, 2012 AFC equals the average annual earnable compensation during the highest 5 years of creditable service.
- (c) For members who commenced service on or after July 1, 2009 or are non-vested as of January 1, 2012, a member's retirement benefit shall not exceed the lesser of 85% of the member's highest average final compensation or \$120,000.
- (d) Group I members commencing service on or after July 1, 2011 are eligible to retire at age 65 and are eligible for a reduced annuity at age 60 with 30 years of creditable service. Prior to age 65, the state annuity, together with the member annuity, shall be equal to 1/66th of AFC times creditable service reduced for each month prior to the month after the member attains age 65 by 1/4 of 1%. After age 65, the state annuity, together with the member with the member annuity, shall be equal to 1/66th of AFC times creditable service, reduced for each month prior to the month after the member attains age 65 by 1/4 of 1%.
- (e) Group II members commencing service on or after July 1, 2011 are eligible to retire at age 50 with 25 years of creditable service or age 60. The benefit shall be equal to 2% of AFC times creditable service up to 42.5 years. However, a member who commenced service on or after July 1, 2011 shall not receive a service retirement allowance until attaining the age of 52.5, but may receive a reduced allowance after age 50 if the member has at least 25 years of creditable service where the allowance shall be reduced, for each month by which the benefit commencement date precedes the month after which the member attains 52.5 years of age, by ¼ of 1%.
- (f) Group II members hired prior to July 1, 2011 who have non-vested status as of January 1, 2012 shall be subject to transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on January 1, 2012.
- (g) Group II members commencing service on or after July 1, 2011 are eligible for an accidental disability benefit and shall receive a benefit equal to 2/3 of AFC. If a member has more than 33-1/3 years of service, the member will receive a supplemental disability benefit equal to 2% of AFC times years of creditable service in excess of 33-1/3 years but not in excess of 42.5 years.
- (h) Member Contributions

Group I members: 7.0% of earnable compensation. Group II fire members: 11.80% of earnable compensation. Group II police members: 11.55% of earnable compensation.



History of Recent Changes in Plan Provisions (Concluded)

Group II member contributions cease for members who are in vested status before January 1, 2012 with creditable service in excess of 40 years. Member contributions cease for all other Group II members with creditable service in excess of 42.5 years.

- (i) *Medical Subsidy* After July 1, 2007 and including each July 1, thereafter, the rate payable shall not be increased.
- (j) Interest on the individual accounts of members in the member annuity savings fund shall be credited interest at 2 percentage points less than either the most recent board of trustees approved assumed rate of return determined under RSA 100-A:16, II(h) or the actual rate of return, whichever is lower for the immediately preceding fiscal year as reported in the ACFR as approved and accepted by the Board of Trustees by December 1, of each year, provided the rate shall not be less than zero.
- (k) Any retired member who is receiving a medical subsidy under RSA 100-A:52 or RSA 100-A:52-a shall be entitled to receive an additional supplemental allowance. The amount of the additional temporary supplemental allowance shall be \$500 for retirees taking a one-person medical benefit and \$1,000 for retirees taking a 2-person medical benefit, paid from the respective component of the reserve for TSAs. The supplemental allowance shall apply only for the fiscal years beginning July 1, 2008 up to and including the fiscal year beginning July 1, 2012.
- (I) Transfer the balance in each special account component (Employees, Teachers, Police and Fire) to the corresponding components of the State annuity accumulation fund except for funds necessary to comply with RSA 100-A:41-d, III as amended.

2010 Legislative Session

- (a) **Special Session House Bill No. 1: COLA, TSA approved -** Provides cost-of-living adjustments (COLAs) and temporary supplemental allowances (TSAs) for eligible retirees or beneficiaries;
- (b) Senate Bill 504: "Spiking" provision deferred Extends the effective date of the 2008 legislation creating the so-called "spiking" provision (125% assessment) from July 1, 2010 to July 1, 2011. A study commission continues to evaluate proposals for the assessment methodology; and
- (c) House Bill 1668: State medical subsidy insurance for Group II members [RSA 21-I30] Requires Group II (Police and Fire) members whose service with a state agency or department began on or after July 1, 2010, complete at least 20 years of creditable service with the state in order to qualify for post-retirement state medical subsidy insurance coverage.



Medical Subsidy Plan Provisions

	Monthly Amounts		
	Pre-65	Post-65	
Single	\$375.56	\$236.84	
Couple	\$751.12	\$473.68	

Subsidy Benefits as of July 1, 2007 and thereafter are as follows:

The above amounts will not increase.

The following Group I members and their qualified spouses are eligible for coverage under the postretirement medical plan:

- Employee and Teacher members of political subdivisions who are eligible to retire as of July 1, 2008, on Service, Early Service or Ordinary Disability, have at least 20 years of credited service as of July 1, 2008 and who actually retire on or before July 1, 2009 would become eligible for the medical subsidy at age 60 with at least 20 years of creditable service; or as early as age 55 with at least 30 years of creditable service.
- Employee and Teacher members of political subdivisions who are eligible to retire as of July 1, 2008, on Vested Deferred retirement and who actually retire on or before July 1, 2009 would become eligible for the medical subsidy at age 60 with at least 20 years of creditable service; or as early as age 55 with at least 30 years of creditable service.
- Employee and Teacher members of political subdivisions who retired on Accidental Disability Retirement on or before July 1, 2004.
- Employee members of the State who retired on or before July 1, 2004, on Service, Ordinary Disability or Vested Deferred Retirement would become eligible for the medical subsidy at age 60 with at least 20 years of creditable service; or as early as age 55 with at least 30 years of creditable service.
- Employee and Teacher members of political subdivisions who are eligible to retire as of July 1, 2008 and who actually retire on or before July 1, 2009, on Service, Early Service, Vested Deferred or Ordinary Disability retirement after completing at least 20 years of creditable service and who subsequently attain age 60 or after completing at least 30 years of creditable service and who subsequently attain age 55.
- Surviving spouses of deceased Employee and Teacher members of political subdivisions who die while in service and would otherwise have been eligible for a medical subsidy benefit, provided that such surviving spouse was covered as the member's spouse in the employer-sponsored plan before the member's death and is entitled to a monthly allowance under Accidental Death, Ordinary Death, or an Optional Allowance.
- Surviving spouses and children of Employee and Teacher members of political subdivisions who die as the natural and proximate result of injuries suffered while in the performance of duty. Eligibility for the medical subsidy ceases when the dependent child attains age 18, or age 23 if attending school on a full-time basis.



Medical Subsidy Plan Provisions (Concluded)

- Surviving spouses and children of Employee members of the State who died as the natural and proximate result of injuries suffered while in the performance of duty. Payment of the subsidy ceases when the dependent child attains age 18 or age 23, if attending school on a full-time basis.
- Vested terminated Employee members of the State (and spouses) who completed at least 20 years of creditable service and prior to July 1, 2004 receives an allowance and who subsequently attains age 60.
- Employee members of the State (and spouses) who retire after completing at least 20 years of creditable service and who subsequently attains age 60 before July 1, 2004 or after completing at least 30 years of creditable service and who subsequently attains age 55 before July 1, 2004.
- Surviving spouses of deceased Employee members of the State who died while in service on or before July 1, 2004, provided that such surviving spouse was covered as the member's spouse in the employer-sponsored plan before the member's death and is entitled to a monthly allowance under Accidental Death, Ordinary Death, or an Optional Allowance.
- Any certifiably dependent child with a disability living in the household and being cared for by the qualified retired member, member's spouse, or qualified surviving spouse would also qualify.

The following Group II members are eligible for the postretirement medical premium subsidy:

- Active or Retired Group II police officer members (or beneficiaries) as of June 30, 2000.
- Active or Retired Group II firefighter members (or beneficiaries) as of June 30, 2000.
- Persons who prior to July 1, 1988 had completed at least 20 years of Group II service and are eligible as of July 1, 1993 for a vested deferred retirement benefit.
- Group II members retired as of July 1, 1991 with a split benefit under RSA 100-A:19-c who have at least 10 years of Group II service.
- Group II members as of June 30, 2005 who subsequently became disabled while in the performance of duty at any time in the future.
- Surviving spouses of deceased Group II members who retired prior to April 1, 1987 and who are not receiving a monthly allowance.

The System subsidy covers the retired member's spouse and any of the retired member's certifiably dependent and disabled children.

It is the legislative intent that future members shall be included only to the extent that the total cost can be terminally funded.

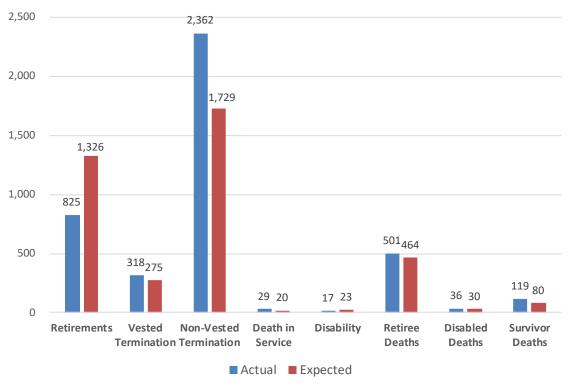


SECTION D

STATISTICAL SECTION

Reconciliation of Member Record Counts – Employees

		Inactive, N Men	lonretired abers		Annuitants				
	Active Members	Vested	Non Vested	Service Retirees	Disabled Retirees	Survivors			
Participants 6/30/2022	24,644	1,530	11,488	18,029	934	1,788			
Terminations - Refund paid	(482)	(24)	(236)						
Terminations - Refund due	(1,880)	0	1,880						
Vested Termination	(318)	318							
Retirement	(825)	(115)		974	1				
Disability	(17)				17				
Death before retirement - refund	(27)	(4)	(7)						
Death before retirement - annuity	(2)					2			
Death of annuitant - survivor benefit due				(110)	(9)	122			
Death of annuitant - no further benefits due				(391)	(27)	(119)			
New Entrants	3,314								
Transfers to Other Member Group	(163)								
Transfers from Other Member Group	129								
Reemployments	267	(41)	(214)	(12)	0				
Data adjustments and corrections	0	4	94	65	6	32			
Participants 6/30/2023	24,640	1,668	13,005	18,555	922	1,825			

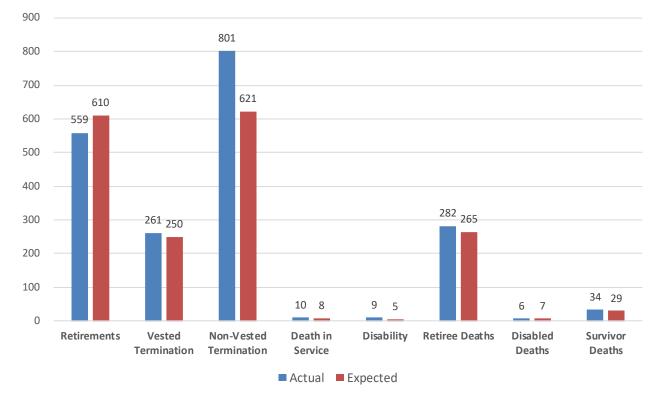


Actual vs. Expected Decrements - Employees



Reconciliation of Member Record Counts – Teachers

		Inactive, N Mem	lonretired nbers	Annuitants				
	Active Members	Vested	Non Vested	Service Retirees	Disabled Retirees	Survivors		
Participants 6/30/2022	18,217	1,263	4,174	14,069	193	892		
Terminations - Refund paid	(77)	(24)	(99)					
Terminations - Refund due	(724)	0	724					
Vested Termination	(261)	261						
Retirement	(559)	(89)		671	1			
Disability	(9)				9			
Death before retirement - refund	(8)	0	(3)					
Death before retirement - annuity	(2)					3		
Death of annuitant - survivor benefit due				(70)	0	70		
Death of annuitant - no further benefits due				(212)	(6)	(34)		
New Entrants	1,287							
Transfers to Other Member Group	(107)							
Transfers from Other Member Group	133							
Reemployments	251	(54)	(186)	(11)	0			
Data adjustments and corrections	0	7	16	14	1	17		
Participants 6/30/2023	18,141	1,364	4,626	14,461	198	948		



Actual vs. Expected Decrements - Teachers



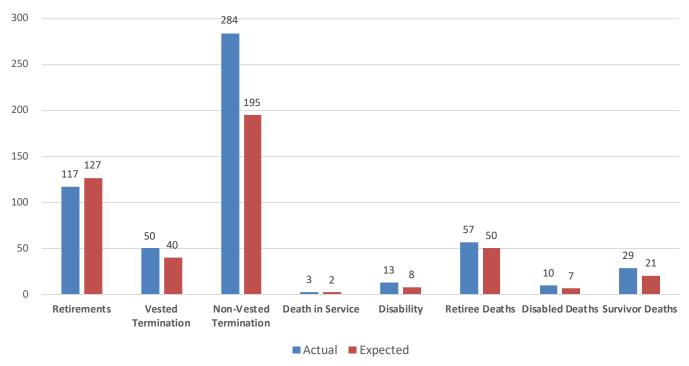
Reconciliation of Member Record Counts – Police

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		Inactive, N	lonretired				
		Men	nbers		Annuitants		
	Active		Non	Service	Disabled		
	Members	Vested	Vested	Retirees	Retirees	Survivors	
Participants 6/30/2022	4,103	160	964	3,622	411	611	
Terminations - Refund paid	(102)	(8)	(46)				
Terminations - Refund due	(182)	0	182				
Vested Termination	(50)	50					
Retirement	(117)	(15)		140	0		
Disability	(13)				13		
Death before retirement - refund	(2)	0	0				
Death before retirement - annuity	(1)					2	
Death of annuitant - survivor benefit due				(27)	(6)	48	
Death of annuitant - no further benefits due				(30)	(4)	(29)	
New Entrants	382						
Transfers to Other Member Group	(23)						
Transfers from Other Member Group	22						
Reemployments	25	(2)	(16)	(7)	0		
Data adjustments and corrections	0	0	8	11	3	6	
Participants 6/30/2023	4,042	185	1,092	3,709	417	638	

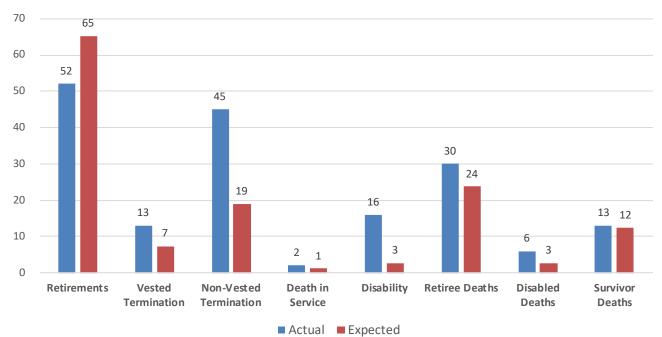
Actual vs. Expected Decrements - Police





Reconciliation of Member Record Counts – Fire

		Inactive, N Mem		Annuitants				
	Active Members	Vested	Non Vested	Service Retirees	Disabled Retirees	Survivors		
Participants 6/30/2022	1,723	37	91	1,431	122	313		
Terminations - Refund paid	(17)	0	(7)					
Terminations - Refund due	(28)	0	28					
Vested Termination	(13)	13						
Retirement	(52)	(1)		56	0			
Disability	(16)				16			
Death before retirement - refund	(2)	0	0					
Death before retirement - annuity	0					0		
Death of annuitant - survivor benefit due				(15)	(4)	28		
Death of annuitant - no further benefits due				(15)	(2)	(13)		
New Entrants	153							
Transfers to Other Member Group	(4)							
Transfers from Other Member Group	13							
Reemployments	9	(1)	(7)	(1)	0			
Data adjustments and corrections	0	1	(2)	5	0	9		
Participants 6/30/2023	1,766	49	103	1,461	132	337		

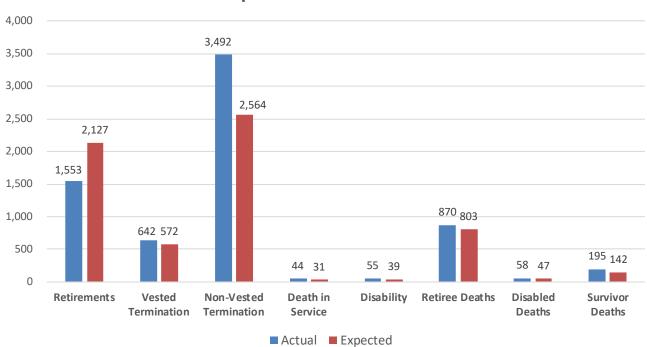


Actual vs. Expected Decrements - Fire



Reconciliation of Member Record Counts – NHRS Total

		Inactive, N						
		Merr	nbers		Annuitants			
	Active Members	Vested	Non Vested	Service Retirees	Disabled Retirees	Survivors		
Participants 6/30/2022	48,687	2,990	16,717	37,151	1,660	3,604		
Terminations - Refund paid Terminations - Refund due	(678) (2,814)	(56)	(388) 2,814					
Vested Termination Retirement Disability	(642) (1,553) (55)	642 (220)		1,841	2 55			
Death before retirement - refund Death before retirement - annuity	(39) (5)	(4)	(10)			7		
Death of annuitant - survivor benefit due Death of annuitant - no further benefits due New Entrants	5,136			(222) (648)	(19) (39)	268 (195)		
Reemployments Data adjustments and corrections	552 0	(98) 12	(423) 116	(31) 95	10	64		
Participants 6/30/2023	48,589	3,266	18,826	38,186	1,669	3,748		



Actual vs. Expected Decrements - NHRS Total



	Emple	oyees	Teachers		Pol	ice	Fire		
Year	Number	Average	Number	Average	Number	Average	Number	Average	
Ending	of	Monthly	of	Monthly	of	Monthly	of	Monthly	
June 30,	Recipients	Benefit	Recipients	Benefit	Recipients	Benefit	Recipients	Benefit	
2023	21,302	\$ 1,277	15,607	\$ 1,953	4,764	\$ 3,318	1,930	\$ 3,747	
2022	20,751	1,250	15,154	1,931	4,644	3,266	1,866	3,696	
2021	20,046	1,214	14,685	1,894	4,427	3,183	1,816	3,579	
2020	19,434	1,184	14,198	1,872	4,227	3,113	1,753	3,447	
2019	18,824	1,165	13,740	1,853	4,082	3,076	1,706	3,384	
2018	18,193	1,141	13,223	1,836	3,923	3,027	1,673	3,314	
2017	17,573	1,121	12,696	1,817	3,786	2,992	1,639	3,253	
2016	16,142	1,152	11,410	1,928	3,629	2,978	1,595	3,213	
2015	15,483	1,122	10,859	1,913	3,457	2,917	1,551	3,130	
2014	15,314	1,078	10,965	1,783	3,282	2,930	1,493	3,047	
2013	14,712	1,063	10,407	1,780	3,163	2,905	1,447	3,050	
2012	14,141	1,049	9,956	1,777	2,981	2,894	1,376	3,038	
2011	13,487	1,040	9,427	1,777	2,880	2,823	1,336	2,967	



Historical Membership Data - Retired (Dollars in Thousands)

-	Add	ed to Rolls	Remov	ed from Rolls	Rolls	End of Year	Average	% Increase in
Fiscal		Annual		Annual		Annual	Annual	Average Annual
Year	No.**	Allowances*	No.	Allowances	No.	Allowances	Allowances	Allowances
2007	3,211	\$ 73,490	913	\$ 12,081	21,248	\$ 357,763	\$ 16,837	N/A
2008	2,216	53,600	594	10,923	22,870	400,440	17,509	4.0 %
2009	2,152	51,234	521	8,349	24,501	443,325	18,094	3.3 %
2010	2,161	50,732	817	12,002	25,845	482,055	18,652	3.1 %
2011	1,965	42,344	680	10,051	27,130	514,348	18,959	1.6 %
2012	2,073	41,213	749	11,543	28,454	544,018	19,119	0.8 %
2013	2,153	43,865	878	14,738	29,729	573,145	19,279	0.8 %
2014	2,105	42,200	780	12,676	31,054	602,669	19,407	0.7 %
2015 #	2,731	54,769	2,435	20,416	31,350	637,022	20,320	4.7 %
2016	2,208	53,489	782	12,236	32,776	678,275	20,694	1.8 %
2017	3,794	55,619	876	20,782	35,694	713,112	19,978	(3.5)%
2018	2,168	51,057	850	14,738	37,012	749,431	20,248	1.4 %
2019	2,355	56,216	1,015	17,011	38,352	788,636	20,563	1.6 %
2020	2,222	53,529	962	16,622	39,612	825,543	20,841	1.4 %
2021	2,398	64,482	1,036	17,040	40,974	872,985	21,306	2.2 %
2022	2,662	74,972	1,221	20,660	42,415	927,297	21,862	2.6 %
2023	2,342	60,863	1,154	19,391	43,603	968,769	22,218	1.6 %

* Includes additional COLA allowances. The benefit amounts shown are the monthly benefits as of the valuation date annualized and are not the actual benefits paid during the fiscal year.

** Includes beneficiaries in receipt but excludes deferred vested terminations.

As part of a data cleaning process, some records for individual participants were merged into one record; others were split to reflect split benefits.



Retirees and Beneficiaries Age Distribution Employees

Age		Males		Females				
Group	Number	Amount	Average	Number	Amount	Average		
45 - 49	23	\$ 90,899	\$ 3,952	5	\$ 45,491	\$ 9 <i>,</i> 098		
50 - 54	85	781,596	9,195	31	493,175	15,909		
55 - 59	233	4,724,202	20,276	246	5,063,314	20,583		
60 - 64	810	18,523,829	22,869	1,258	25,219,617	20,047		
65 - 69	1,680	33,498,532	19,940	2,630	41,492,035	15,776		
70 - 74	1,879	34,442,097	18,330	2,869	39,450,441	13,751		
75 - 79	1,461	24,142,258	16,524	2,093	24,836,375	11,866		
80 - 84	759	11,374,930	14,987	1,140	11,779,129	10,333		
85 - 89	367	4,986,933	13,588	553	4,932,915	8,920		
90 - 94	134	1,929,930	14,402	202	1,689,172	8,362		
95 - 99	25	265,008	10,600	64	468,233	7,316		
100 & Over	2	21,941	10,971	6	38,594	6,432		
TOTAL	7,458	\$ 134,782,155	\$ 18,072	11,097	\$ 155,508,491	\$ 14,014		

SERVICE RETIREMENTS

DISABILITY RETIREMENTS

Age		Males		Females				
Group	Number	Amount	Average	Number		Amount	Average	
30 - 34				1	\$	11,156	\$ 11,156	
35 - 39	1	\$ 22,032	\$ 22,032					
40 - 44	6	78,001	13,000	10		156,161	15,616	
45 - 49	5	87,937	17,587	15		254,198	16,947	
50 - 54	25	393,140	15,726	19		293,703	15,458	
55 - 59	48	763,122	15,898	45		690,014	15,334	
60 - 64	86	1,400,785	16,288	97		1,513,340	15,601	
65 - 69	79	1,187,374	15,030	128		1,776,720	13,881	
70 - 74	83	1,218,980	14,687	85		1,065,839	12,539	
75 - 79	44	674,267	15,324	74		924,260	12,490	
80 - 84	25	388,890	15,556	29		377,212	13,007	
85 - 89	8	94,710	11,839	5		61,468	12,294	
90 - 94	1	17,937	17,937	3		39,788	13,263	
95 - 99								
100 & Over								
TOTAL	411	\$ 6,327,175	\$ 15,395	511	\$	7,163,859	\$ 14,019	



Retirees and Beneficiaries Age Distribution Employees

Age		Males			Females					
Group	Number	Amount	Average	Number		Amount	Average			
Under 20				1	\$	3,276	\$ 3,276			
20 - 24	2	\$ 5,225	\$ 2,613	1		11,376	11,376			
25 - 29	1	1,801	1,801	4		13,326	3,332			
30 - 34	3	32,229	10,743	2		6 <i>,</i> 384	3,192			
35 - 39	5	48,188	9,638	1		4,246	4,246			
40 - 44	8	35,223	4,403	6		22,920	3,820			
45 - 49	6	49,347	8,225	8		38,064	4,758			
50 - 54	12	85,111	7,093	18		105,845	5,880			
55 - 59	16	172,300	10,769	29		298,054	10,278			
60 - 64	32	272,407	8,513	105		1,394,719	13,283			
65 - 69	45	462,291	10,273	157		2,130,057	13,567			
70 - 74	55	557,443	10,135	236		3,370,736	14,283			
75 - 79	79	775,012	9,810	285		3,880,511	13,616			
80 - 84	58	530,027	9,138	248		3,311,072	13,351			
85 - 89	40	315,460	7,887	202		2,745,897	13,594			
90 - 94	17	113,397	6,670	107		1,511,635	14,127			
95 - 99	2	31,810	15,905	33		310,284	9,403			
100 & Over	1	8,380	8,380			,-•	-,			
TOTAL	382	\$ 3,495,651	\$ 9,151	1,443	\$	19,158,402	\$ 13,277			

BENEFICIARIES OF DECEASED MEMBERS



Retirees and Beneficiaries Age Distribution Teachers

Age		Males			Females					
Group	Number	Amount	A	Average		Number		Amount	Average	
45 - 49	2	\$ 4,171	\$	2,086		2	\$	18,087	\$ 9,044	
50 - 54	9	126,356		14,040		22		447,090	20,322	
55 - 59	48	1,377,712		28,702		155		4,036,670	26,043	
60 - 64	288	8,852,432		30,738		1,129		31,090,053	27,538	
65 - 69	557	15,285,913		27,443		2,439		60,480,164	24,797	
70 - 74	993	24,910,871		25,086		3,330		77,154,959	23,170	
75 - 79	945	23,034,828		24,375		2,370		49,945,503	21,074	
80 - 84	392	9,497,343		24,228		921		18,150,976	19,708	
85 - 89	163	4,277,506		26,242		422		8,271,683	19,601	
90 - 94	67	1,617,202		24,137		140		2,846,467	20,332	
95 - 99	16	333,719		20,857		45		719,163	15,981	
100 & Over						6		65,373	10,896	
TOTAL	3,480	\$ 89,318,053	\$	25,666		10,981	\$	253,226,188	\$ 23,060	

SERVICE RETIREMENTS

DISABILITY RETIREMENTS

Age	Males Females									
Group	Number Amount		Amount	Average			Number		Amount	Average
40 - 44		\$	-	\$	-		2	\$	28,575	\$ 14,288
45 - 49	1		15,392		15,392		6		110,794	18,466
50 - 54	4		83,308		20,827		8		179,795	22,474
55 - 59	5		91,818		18,364		20		409,678	20,484
60 - 64	6		114,520		19,087		26		510,411	19,631
65 - 69	4		59,817		14,954		27		556,887	20,625
70 - 74	8		115,025		14,378		30		546,044	18,201
75 - 79	6		141,458		23,576		20		314,597	15,730
80 - 84	2		50,778		25,389		12		193,555	16,130
85 - 89	2		39,478		19,739		6		116,927	19,488
90 - 94	1		10,225		10,225		2		41,282	20,641
TOTAL	39	\$	721,819	\$	18,508		159	\$	3,008,545	\$ 18,922



Retirees and Beneficiaries Age Distribution Teachers

Age	Males Females						
Group	Number	Amount	Average	Number	Amount	Average	
	_					4	
25 - 29	2	\$ 18,29	. ,	1	, ,	\$ 9,096	
30 - 34	3	22,96	4 7,655	2	13,237	6,619	
35 - 39	2	9,09	9 4,550	5	32,554	6,511	
40 - 44	2	24,65	0 12,325	5	37,727	7,545	
45 - 49	3	44,56	0 14,853	3	9,732	3,244	
50 - 54	8	101,62	6 12,703	6	71,748	11,958	
55 - 59	14	148,19	4 10,585	14	146,342	10,453	
60 - 64	19	242,68	12,773	25	563,970	22,559	
65 - 69	38	664,87	9 17,497	54	1,041,863	19,294	
70 - 74	68	1,440,04	2 21,177	106	2,318,824	21,876	
75 - 79	81	1,428,10	6 17,631	136	3,449,848	25,367	
80 - 84	63	1,082,07	1 17,176	130	3,214,977	24,731	
85 - 89	32	539,08	6 16,846	73	1,862,268	25,511	
90 - 94	13	247,14	7 19,011	29	628,607	21,676	
95 - 99	2	45,92	8 22,964	8	113,168	14,146	
100 & Over				1	3,401	3,401	
TOTAL	350	\$6,059,32	.6 \$17,312	598	\$13,517,362	\$22,604	

BENEFICIARIES OF DECEASED MEMBERS



Retirees and Beneficiaries Age Distribution Police

Age		Males		Females					
Group	Number Amount Average		Number Amount Av	Average					
40 - 44	1	\$ 14,326	\$ 14,326	5 \$ 38 <i>,</i> 920 \$	7,784				
45 - 49	189	10,580,460	55,981	30 1,000,398 3	33,347				
50 - 54	407	23,520,926	57,791	96 2,981,831 3	31,061				
55 - 59	513	29,205,566	56,931	114 3,127,345	27,433				
60 - 64	570	29,821,231	52,318	131 3,400,449	25,958				
65 - 69	493	22,473,962	45,586	119 2,458,973	20,664				
70 - 74	385	14,952,283	38,837	77 1,560,477	20,266				
75 - 79	269	9,424,527	35,035	53 766,340	14,459				
80 - 84	140	4,547,282	32,481	23 315,032	13,697				
85 - 89	63	1,714,545	27,215	4 63,546	15,887				
90 - 94	19	400,681	21,088	5 86,213	17,243				
95 - 99	2	44,985	22,493	1 14,883	14,883				
100 & Over									
TOTAL	3,051	\$ 146,700,774	\$ 48,083	658 \$ 15,814,407 \$ 2	24,034				

SERVICE RETIREMENTS

DISABILITY RETIREMENTS

Age			Males		Females			
Group	Number Amount		Amount	Average	verage Number			Average
30 - 34	6	\$	203,114	\$ 33,852				
35 - 39	4		185,709	46,427	3	\$	73,604	\$ 24,535
40 - 44	16		705,747	44,109	6		230,695	38,449
45 - 49	36		1,711,132	47,531	10		381,552	38,155
50 - 54	34		1,467,032	43,148	9		365,853	40,650
55 - 59	61		2,428,569	39,813	12		397,760	33,147
60 - 64	46		1,593,595	34,643	8		242,010	30,251
65 - 69	43		1,411,783	32,832	9		273,424	30,380
70 - 74	35		1,199,603	34,274	9		247,800	27,533
75 - 79	34		1,032,508	30,368	8		175,935	21,992
80 - 84	18		591,012	32,834	1		23,142	23,142
85 - 89	7		214,456	30,637				
90 - 94	2		42,836	21,418				
95 - 99								
100 & Over								
TOTAL	342	\$	12,787,096	\$ 37,389	75	\$	2,411,775	\$ 32,157



Retirees and Beneficiaries Age Distribution Police

Age			Males		Females					
Group	Number		Amount	Average	Number	Amount	Average			
Under 20					2	\$ 3,728	\$ 1,864			
20 - 24										
25 - 29	2	\$	26,065	\$ 13,033						
30 - 34	1		10,983	10,983						
35 - 39	3		17,440	5,813	2	78,522	39,261			
40 - 44	1		3,478	3,478	5	165,613	33,123			
45 - 49	1		3,478	3,478	6	107,553	17,926			
50 - 54	1		4,051	4,051	16	375,235	23,452			
55 - 59	4		39,789	9,947	16	531,371	33,211			
60 - 64	3		39,247	13,082	58	1,240,408	21,386			
65 - 69	7		100,438	14,348	98	2,139,154	21,828			
70 - 74	5		60,505	12,101	96	1,681,487	17,515			
75 - 79	3		44,089	14,696	111	2,276,404	20,508			
80 - 84	1		17,919	17,919	90	1,526,574	16,962			
85 - 89	3		26,835	8,945	65	889,440	13,684			
90 - 94					28	436,860	15,602			
95 - 99					7	109,247	15,607			
100 & Over	1		5,441	5,441	2	18,976	9,488			
			,	,		,	, -			
TOTAL	36	\$	399,758	\$ 11,104	602	\$ 11,580,572	\$ 19,237			

BENEFICIARIES OF DECEASED MEMBERS



Retirees and Beneficiaries Age Distribution Fire

Age		Males		Females						
Group	Number	Amount	Average	Number	Amount	Average				
40 - 44				2	\$ 7,990	\$ 3,995				
45 - 49	36	\$ 2,016,461	\$56,013	1	31,808	31,808				
50 - 54	97	5,954,274	61,384	23	447,792	19,469				
55 - 59	223	14,695,304	65,898	32	739,383	23,106				
60 - 64	248	16,366,906	65,996	35	666,261	19,036				
65 - 69	268	14,363,113	53,594	29	464,488	16,017				
70 - 74	219	10,687,330	48,801	20	326,191	16,310				
75 - 79	110	4,544,930	41,318	5	113,233	22,647				
80 - 84	66	2,637,751	39,966	1	12,216	12,216				
85 - 89	30	1,015,327	33,844	1	27,002	27,002				
90 - 94	10	310,920	31,092							
95 - 99	5	130,047	26,009							
100 & Over		-	·							
TOTAL	1,312	\$72,722,363	\$55,429	149	\$ 2,836,364	\$ 19,036				

SERVICE RETIREMENTS

DISABILITY RETIREMENTS

Age		Males			Females				
Group	Number Amount		Average	Number	Amount	Average			
25 - 29	2	\$ 88,731	\$ 44,366						
30 - 34	1	49,635	49,635	1	\$ 44,138	\$ 44,138			
35 - 39	1	16,583	16,583						
40 - 44	8	289,468	36,184						
45 - 49	9	341,328	37,925						
50 - 54	16	767,420	47,964	1	18,984	18,984			
55 - 59	19	853,876	44,941	4	130,194	32,549			
60 - 64	16	519,363	32,460	2	77,885	38,943			
65 - 69	17	648,897	38,170	1	26,851	26,851			
70 - 74	13	385,189	29,630						
75 - 79	8	221,587	27,698						
80 - 84	7	233,588	33,370						
85 - 89	6	146,577	24,430						
90 - 94									
100 & Over									
TOTAL	123	\$4,562,242	\$37,091	9	\$298,052	\$33,117			



Retirees and Beneficiaries Age Distribution Fire

Males **Females** Age Amount Group Number Number Amount Average Average Under 20 20 - 24 1 \$ 6,001 \$ 6,001 25 - 29 30 - 34 1 6,001 6,001 35 - 39 2 \$ 53,501 \$ 26,751 40 - 44 45 - 49 2 62,244 31,122 50 - 54 3 36,986 12,329 4 103,057 25,764 55 - 59 1 4,030 4,030 369,480 23,093 16 60 - 64 1 4,030 4,030 21 381,032 18,144 65 - 69 2 5,677 21,707 2,839 49 1,063,627 70 - 74 51 943,002 18,490 75 - 79 1,405,661 21,963 64 80 - 84 775,997 14,641 53 85 - 89 654,814 18,709 1 16,091 16,091 35 90 - 94 340,472 16,213 21 95 - 99 1 25,450 25,450 8 111,761 13,970 100 & Over TOTAL \$104,266 \$9,479 326 \$6,264,648 \$ 19,217 11

BENEFICIARIES OF DECEASED MEMBERS



Active Members by Valuation Division

Valuation	Active	Valuation	Average					
Group	Members	Payroll	Age	Service*	Рау			
Employees:								
Male	9,812	\$ 617,985,150	48.0	10.3	\$62,983			
Female	14,828	794,509,133	49.1	10.0	53,582			
Total	24,640	1,412,494,283	48.7	10.1	57,325			
Teachers:								
Male	3,740	275,512,225	46.1	14.3	73,666			
Female	14,401	984,727,396	45.4	12.6	68,379			
Total	18,141	1,260,239,621	45.5	13.0	69,469			
Police:								
Male	3,422	301,989,841	38.4	10.7	88,250			
Female	620	47,479,468	37.8	8.2	76,580			
Total	4,042	349,469,309	38.3	10.3	86,460			
Fire:								
Male	1,687	150,392,790	40.6	12.4	89,148			
Female	79	5,500,141	34.0	6.9	69,622			
Total	1,766	155,892,931	40.4	12.1	88,275			
Total:								
Male	18,661	1,345,880,006	45.2	11.3	72,123			
Female	29,928	1,832,216,138	47.0	11.2	61,221			
Grand Total	48,589	\$3,178,096,144	46.3	11.3	\$65,408			

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,870	\$ 628,330,727
Political Subdivisions	14,770	784,163,556
Subtotal	24,640	1,412,494,283
Teachers:	18,141	1,260,239,621
Police:		
State	1,008	94,372,975
Political Subdivisions	3,034	255,096,334
Subtotal	4,042	349,469,309
Fire:		
State	30	2,428,519
Political Subdivisions	1,736	153,464,412
Subtotal	1,766	155,892,931
Total	48,589	\$ 3,178,096,144



Employees June 30, 2023

EMPLOYEES

								Totals			
Attained			Valuation								
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll		
15-19	60							60	\$ 1,834,546		
20-24	678	2						680	24,580,970		
25-29	1,298	206	1					1,505	67,524,830		
30-34	1,257	562	89	1				1,909	99,621,437		
35-39	1,222	668	286	174	3			2,353	130,647,197		
40-44	1,119	579	296	374	126			2,494	143,856,279		
45-49	1,048	562	275	360	294	76	1	2,616	159,477,270		
50-54	1,119	674	408	475	399	245	117	3,437	211,148,040		
55-59	1,072	707	492	585	462	281	355	3 <i>,</i> 954	242,410,466		
60-64	799	641	485	662	463	248	340	3,638	216,455,105		
65-69	282	302	206	293	213	124	128	1,548	89,537,046		
70+	113	63	54	74	57	33	52	446	25,401,097		
TOTAL	10,067	4,966	2,592	2,998	2,017	1,007	993	24,640	\$ 1,412,494,283		

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 48.7 years Service: 10.1 years Annual Pay: \$57,325



Teachers June 30, 2023

									Totals
Attained			Valuation						
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	292							292	\$ 12,182,056
25-29	1,133	220						1,353	65,638,611
30-34	775	995	127					1 <i>,</i> 897	104,966,698
35-39	571	656	762	181				2,170	138,902,692
40-44	552	499	550	960	160	1		2,722	192,824,480
45-49	442	436	378	598	797	101	1	2,753	205,707,170
50-54	321	410	356	460	528	480	57	2,612	198,834,863
55-59	237	278	255	404	359	311	308	2,152	165,800,859
60-64	122	150	156	296	287	190	327	1,528	121,615,946
65-69	60	38	50	86	102	75	132	543	44,143,163
70+	12	5	14	25	22	15	26	119	9,623,083
TOTAL	4,517	3,687	2,648	3,010	2,255	1,173	851	18,141	\$ 1,260,239,621

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.5 years Service: 13.0 years Annual Pay: \$69,469



Police June 30, 2023

									Totals
Attained		Years	s of Serv			Valuation			
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
15-19	5							5	\$ 203,306
20-24	259	1						260	14,030,166
25-29	546	146						692	48,444,490
30-34	292	365	86					743	59,415,332
35-39	132	174	242	100				648	57,804,122
40-44	56	70	92	288	74	3		583	57,639,217
45-49	35	40	43	113	174	23		428	44,509,491
50-54	32	26	33	93	90	65	11	350	35,879,942
55-59	29	35	21	40	46	15	24	210	20,420,061
60-64	13	13	12	16	13	7	10	84	7,818,264
65-69	4	3	5	6	4	1	6	29	2,555,350
70+	3	1	1	1		1	3	10	749,568
TOTAL	1,406	874	535	657	401	115	54	4,042	\$ 349,469,309

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 38.3 years Service: 10.3 years Annual Pay: \$86,460



Fire June 30, 2023

				-		Totals			
Attained		Years	s of Serv	ice to V	aluation	Date			Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	74							74	\$ 4,405,759
25-29	176	65						241	16,973,112
30-34	118	119	44					281	21,319,787
35-39	65	74	86	61				286	23,970,458
40-44	38	41	36	112	36	1		264	24,387,706
45-49	15	10	22	66	78	18		209	21,430,343
50-54	6	8	12	50	84	31	11	202	21,513,891
55-59	8	3	6	26	52	25	22	142	15,410,820
60-64	3	8	2	7	14	6	10	50	4,985,256
65-69	2	1		2	3		4	12	1,259,540
70+			1					1	62,119
TOTAL	509	329	209	324	267	81	47	1,766	\$ 155,892,931

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 40.4 years Service: 12.1 years Annual Pay: \$88,275



Total June 30, 2023

								Totals						
Attained		Years	of Servi	ce to Va	luation	Date	-		Valuation					
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll					
15-19	69							69	\$ 2,211,992					
20-24	1,303	3						1,306	55,198,951					
25-29	3,153	637	1					3,791	198,581,043					
30-34	2,442	2,041	346	1				4,830	285,323,254					
35-39	1,990	1,572	1,376	516	3			5 <i>,</i> 457	351,324,469					
40-44	1,765	1,189	974	1,734	396	5		6 <i>,</i> 063	418,707,682					
45-49	1,540	1,048	718	1,137	1,343	218	2	6,006	431,124,274					
50-54	1,478	1,118	809	1,078	1,101	821	196	6,601	467,376,736					
55-59	1,346	1,023	774	1,055	919	632	709	6 <i>,</i> 458	444,042,206					
60-64	937	812	655	981	777	451	687	5,300	350,874,571					
65-69	348	344	261	387	322	200	270	2,132	137,495,099					
70+	128	69	70	100	79	49	81	576	35,835,867					
TOTAL	16,499	9,856	5,984	6,989	4,940	2,376	1,945	48,589	\$ 3,178,096,144					

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 46.3 years Service: 11.3 years Annual Pay: \$65,408



Historical Membership Data - Active

Valuation	Active M	lembers	Covered Pay	roll		Average	Salary	Av	erage	
Date	No.	% Inc.*	 \$ Amount	% Inc.*	\$ /	Amount	% Inc.*	Age	Service	
2007	50,802	(0.3%)	\$ 2,195,339,382	3.6%	\$	43,214	3.9%	45.6	10.6	
2008	50,988	0.2%	2,308,320,669	5.1%		45,272	4.8%	45.7	10.6	
2009	51,032	0.0%	2,448,287,042	6.1%		47,976	6.0%	46.0	10.9	
2010	50,467	(0.6%)	2,481,383,620	1.4%		49,168	2.5%	46.3	11.1	
2011	49,738	(0.7%)	2,517,779,470	1.5%		50,621	3.0%	46.6	11.4	
2012	48,625	(1.1%)	2,487,757,437	(1.2%)		51,162	1.1%	46.9	11.8	
2013	48,688	0.1%	2,501,741,708	0.6%		51,383	0.4%	47.0	12.0	
2014	48,307	(0.4%)	2,507,898,809	0.2%		51,916	1.0%	47.1	12.1	
2015	47,812	(0.5%)	2,575,031,210	2.7%		53,857	3.7%	47.0	12.1	
2016	48,069	0.3%	2,601,403,606	1.0%		54,118	0.5%	46.9	12.1	
2017	47,886	(0.2%)	2,667,611,532	2.5%		55,708	2.9%	46.9	12.1	
2018	48,121	0.2%	2,752,235,069	3.2%		57,194	2.7%	46.8	12.0	
2019	48,288	0.2%	2,825,006,022	2.6%		58,503	2.3%	46.7	11.9	
2020	48,479	0.2%	2,894,708,279	2.5%		59,711	2.1%	46.7	11.8	
2021	48,582	0.1%	2,972,968,504	2.7%		61,195	2.5%	46.5	11.7	
2022	48,687	0.1%	3,077,583,995	3.5%		63,212	3.3%	46.3	11.4	
2023	48,589	(0.1%)	3,178,096,144	3.3%		65,408	3.5%	46.3	11.3	

Total

* Average annual increase.

By Valuation Group (Valuation Payroll in Thousands)

	Fiscal Year	Active Members [#]	Valuation Payroll	Average Compensation	% lnc.*
Employees	2023	24,640	\$1,412,494	\$57,325	3.31 %
Teachers		18,141	1,260,240	69,469	3.18 %
Police		4,042	349,469	86,460	5.42 %
Fire		1,766	155,893	88,275	3.45 %
Total		48,589	\$3,178,096	\$65,408	3.47 %
	Fiscal	Active	Valuation	Average	
	Year	Members [#]	Payroll	Compensation	% Inc.*
Employees	2022	24,644	\$1,367,483	\$55,489	4.75 %
Teachers		18,217	1,226,570	67,331	1.88 %
Police		4,103	336,500	82,013	4.83 %
Fire		1,723	147,032	85,335	(0.43)%
Total		48,687	\$3,077,585	\$63,212	3.30 %

Excludes temporary inactive members.

* Average annual increase.



Historical Active Member Data

Employees

	Active M	embers		Valuation P	ayroll		Average	Salary		
Fiscal		Percent	-	Amount in	Percent			Percent	Average	Average
Year	Number	Change	\$	Thousands	Change	\$.	Amount	Change	Age	Service
2023	24,640	0.3%	\$	1,412,494	3.3%	\$	57,325	3.3%	48.7	10.1
2022	24,644	0.4%		1,367,483	5.1%		55,489	4.7%	48.7	10.3
2021	24,558	-0.2%		1,300,926	2.1%		52,974	2.2%	48.9	10.7
2020	24,602	-0.2%		1,274,597	2.4%		51,809	2.6%	49.0	10.8
2019	24,654	0.6%		1,244,930	3.3%		50,496	2.7%	49.0	10.8
2018	24,511	0.1%		1,205,121	2.2%		49,167	2.0%	49.1	11.0
2017	24,478	-0.2%		1,179,518	3.8%		48,187	4.0%	49.2	11.1
2016	24,520	0.9%		1,136,451	0.8%		46,348	-0.1%	49.2	11.2
2015	24,298	-1.0%		1,127,766	3.6%		46,414	4.7%	49.2	11.2
2014	24,545	-1.1%		1,088,508	0.9%		44,347	1.9%	49.2	11.2
2013	24,809	0.3%		1,079,245	0.2%		43,502	0.0%		
2012	24,747	-3.1%		1,076,831	-3.3%		43,514	-0.2%		
2011	25,539	-1.7%		1,113,867	1.9%		43,614	3.7%		
2010	25,987	-1.4%		1,093,147	1.3%		42,065	2.7%		
2009	26,352	-0.6%		1,079,157	6.8%		40,952	7.5%		
2008	26,507	0.1%		1,010,032	7.2%		38,104	7.1%		
2007	26,474	0.2%		942,319	7.2%		35,594	6.9%		
2005	26,414	0.2%		879,419	10.2%		33,294	10.0%		
2003	26,371	8.0%		798,241	18.0%		30,270	9.2%		
2001	24,413	8.4%		676,536	15.0%		27,712	6.1%		
1999	22,519	5.7%		588,290	9.8%		26,124	3.9%		
1997	21,307	2.8%		535,936	1.6%		25,153	-1.3%		

Teachers

	Active M	embers		Valuation Pa	aluation Payroll			Salary		
Fiscal		Percent	A	mount in	Percent			Percent	Average	Average
Year	Number	Change	\$	Thousands	Change	\$	Amount	Change	Age	Service
2023	18,141	0.1%	\$	1,260,240	2.7%	\$	69,469	3.2%	45.5	13.0
2022	18,217	0.5%		1,226,570	2.4%		67,331	1.9%	45.5	13.1
2021	18,131	1.2%		1,198,236	3.2%		66,088	2.0%	45.6	13.2
2020	17,917	1.1%		1,160,884	2.2%		64,792	1.2%	45.8	13.3
2019	17,730	-0.1%		1,135,607	1.7%		64,050	1.9%	46.0	13.4
2018	17,752	0.8%		1,116,218	4.0%		62,878	3.2%	46.0	13.4
2017	17,617	-0.9%		1,073,447	0.7%		60,932	1.7%	46.1	13.5
2016	17,784	0.3%		1,065,621	1.4%		59,920	1.1%	46.2	13.5
2015	17,732	-1.4%		1,050,447	1.6%		59,240	3.1%	46.3	13.4
2014	17,986	-0.5%		1,033,867	-0.6%		57,482	0.0%	46.3	13.4
2013	18,084	-0.4%		1,039,933	0.3%		57,506	0.7%		
2012	18,161	-1.7%		1,036,605	0.0%		57,079	1.7%		
2011	18,466	-0.7%		1,036,376	1.5%		56,123	2.3%		
2010	18,603	-0.6%		1,020,745	1.7%		54,870	2.3%		
2009	18,709	1.1%		1,003,514	4.9%		53,638	3.7%		
2008	18,509	0.2%		957,068	3.8%		51,708	3.6%		
2007	18,477	0.0%		922,308	8.3%		49,917	8.3%		
2005	18,474	-1.3%		851,664	6.5%		46,101	7.9%		
2003	18,710	5.6%		799,544	14.2%		42,734	8.1%		
2001	17,718	10.5%		700,361	14.9%		39,528	4.0%		
1999	16,034	6.5%		609,275	9.9%		37,999	3.3%		
1997	15,062	4.5%		554,208	7.7%		36,795	3.1%		



Historical Active Member Data

Police

	Active M	embers	١	aluation Pa	luation Payroll		Average S	alary		
Fiscal		Percent	A	nount in	Percent			Percent	Average	Average
Year	Number	Change	<u>\$</u> T	housands	Change	\$ /	Amount	Change	Age	Service
2023	4,042	-3.4%	\$	349,469	3.9%	\$	86,460	5.4%	38.3	10.3
2022	4,103	-1.9%		336,500	2.8%		82,013	4.8%	38.3	10.3
2021	4,184	-1.7%		327,342	1.3%		78,237	3.1%	38.8	10.6
2020	4,256	0.9%		322,994	3.2%		75,891	2.2%	39.0	10.8
2019	4,216	0.5%		313,016	3.6%		74,245	3.1%	38.9	10.8
2018	4,197	1.1%		302,199	3.8%		72,004	2.7%	38.9	10.8
2017	4,151	0.3%		291,004	3.7%		70,104	3.4%	39.1	11.0
2016	4,139	-0.8%		280,577	0.4%		67,789	1.2%	39.2	11.0
2015	4,174	0.2%		279,555	3.3%		66,975	3.1%	39.2	10.9
2014	4,166	-0.5%		270,497	1.4%		64,930	1.9%	39.3	11.1
2013	4,187	1.7%		266,775	1.9%		63,715	0.2%		
2012	4,118	-0.3%		261,865	0.9%		63,590	1.2%		
2011	4,130	-2.4%		259,509	0.4%		62,835	2.9%		
2010	4,231	-2.0%		258,472	0.2%		61,090	2.3%		
2009	4,318	-0.3%		257,934	5.6%		59,735	5.9%		
2008	4,332	1.6%		244,314	4.7%		56,398	3.0%		
2007	4,263	-6.8%		233,348	5.4%		54,738	13.0%		
2005	4,573	6.2%		221,456	13.0%		48,427	6.4%		
2003	4,305	4.4%		196,022	14.3%		45,534	9.5%		
2001	4,124	14.6%		171,489	24.3%		41,583	8.5%		
1999	3,600	6.1%		137,981	10.7%		38,328	4.3%		
1997	3,393	4.3%		124,669	8.4%		36,743	4.0%		

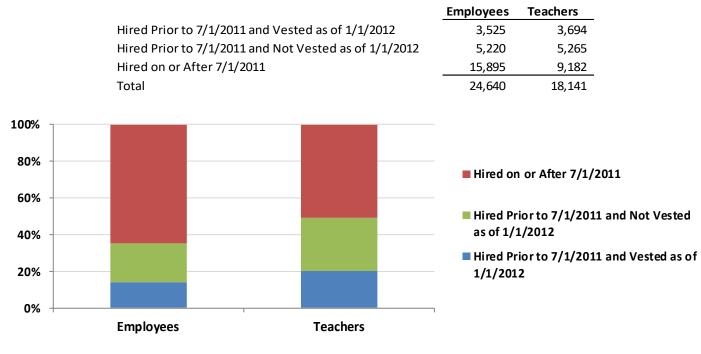
Fire

	Active M	embers	v	aluation Pa	ayroll	Average S	Salary		
Fiscal		Percent	An	nount in	Percent		Percent	Average	Average
Year	Number	Change	\$ T	housands	Change	\$ Amount	Change	Age	Service
2023	1,766	3.3%	\$	155,893	6.0%	\$ 88,275	3.4%	40.4	12.1
2022	1,723	0.8%		147,032	0.4%	85,335	-0.4%	40.8	12.5
2021	1,709	0.3%		146,464	7.5%	85,702	7.2%	41.1	12.8
2020	1,704	0.9%		136,234	3.6%	79,949	2.7%	41.3	13.1
2019	1,688	1.6%		131,453	2.1%	77,875	0.5%	41.3	13.1
2018	1,661	1.3%		128,697	4.1%	77,481	2.8%	41.4	13.2
2017	1,640	0.9%		123,643	4.1%	75,392	3.2%	41.3	13.2
2016	1,626	1.1%		118,754	1.3%	73,034	0.1%	41.4	13.2
2015	1,608	-0.1%		117,263	1.9%	72,925	2.1%	41.3	13.2
2014	1,610	0.1%		115,027	-0.7%	71,445	-0.8%	41.5	13.3
2013	1,608	0.6%		115,788	3.0%	72,007	2.4%		
2012	1,599	-0.2%		112,456	4.1%	70,329	4.4%		
2011	1,603	-2.6%		108,028	-0.9%	67,391	1.7%		
2010	1,646	-0.4%		109,020	1.2%	66,233	1.7%		
2009	1,653	0.8%		107,682	11.1%	65,144	10.2%		
2008	1,640	3.3%		96,907	-0.5%	59,090	-3.6%		
2007	1,588	-0.7%		97,365	7.0%	61,313	7.7%		
2005	1,599	4.9%		91,029	15.1%	56,929	9.7%		
2003	1,524	6.4%		79,072	17.2%	51,885	10.2%		
2001	1,433	7.0%		67,485	16.2%	47,094	8.6%		
1999	1,339	3.9%		58,081	10.6%	43,376	6.5%		
1997	1,289	0.0%		52,500	4.7%	40,729	4.7%		



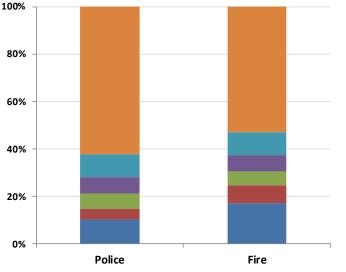
Active Member Counts by Tier Group

Group I



Group II

	Police	Fire
Hired Prior to 7/1/2011 and Vested as of 1/1/2012	417	300
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 8 and 10 Years	181	139
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 6 and 8 Years	259	99
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 4 and 6 Years	281	125
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Less Than 4 Years	387	171
Hired on or After 7/1/2011	2,517	932
Total	4,042	1,766



Hired on or	After 7/1/2011
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Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Less Than 4 Years

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- Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 4 and 6 Years
- Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 6 and 8 Years
- Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 8 and 10 Years
- Hired Prior to 7/1/2011 and Vested as of 1/1/2012



Summary of Membership Data by Category

	June 30																
		2023		2022		2021		2020		2019		2018	2017	 2016	 2015		2014
Active Members																	
Number		48,589		48,687		48,582		48,479		48,288		48,121	47,886	48,069	47,812		48,307
Average age (years)		46.3		46.3		46.5		46.7		46.7		46.8	46.9	46.9	47.0		47.1
Average service* (years)		11.3		11.4		11.7		11.8		11.9		12.0	12.1	12.1	12.2		12.1
Average salary	\$	65,408	\$	63,212	\$	61,195	\$	59,711	\$	58,503	\$	57,194	\$ 55,708	\$ 54,118	\$ 53,857	\$	51,916
Total payroll supplied, annualized	\$	3,178,096,144	\$	3,077,583,995	\$	2,972,968,504	\$	2,894,708,279	\$	2,825,006,022	\$	2,752,235,069	\$ 2,667,611,532	\$ 2,601,403,606	\$ 2,575,031,210	\$ 2	2,507,898,809
Vested Inactive Members																	
Number		3,266		2,990		2,730		2,661		2,552		2,420	2,281	1,785	1,999		1,297
Average age (years)		52.2		52.3		52.3		52.2		52.1		52.2	51.8	52.1	51.7		52.3
Non-Vested Inactive Members																	
Number		18,826		16,717		14,946		13,760		12,530		11,454	10,477	9,528	8,690		8,102
Service Retirees																	
Number		38,186		37,151		35,896		34,683		33,573		32,385	31,186	28,403	27,114		26,958
Average age (years)		71.4		71.1		71.4		71.1		70.8		70.0	70.0	70.0	69.0		69.0
Total annual benefits	\$	870,908,795	\$	834,215,845	\$	785,424,661	\$	742,125,367	\$	708,597,132	\$	673,359,556	\$ 639,679,378	\$ 608,332,888	\$ 570,043,185	\$	537,980,513
Average annual benefit	\$	22,807	\$	22,455	\$	21,881	\$	21,397	\$	21,106	\$	20,792	\$ 20,512	\$ 21,418	\$ 21,024	\$	19,956
Disability Retirees																	
Number		1,669		1,660		1,641		1,637		1,627		1,616	1,600	1,600	1,586		1,561
Average age (years)		65.0		64.9		65.2		65.0		64.5		64.2	64.0	63.7	63.4		62.0
Total annual benefits	\$	37,280,563		35,830,123		34,495,906		33,711,570		33,041,012		32,273,693	31,739,977	31,124,304	30,483,173		30,088,288
Average annual benefit	\$	22,337	\$	21,584	\$	21,021	\$	20,594	\$	20,308	\$	19,971	\$ 19,837	\$ 19,453	\$ 19,220	\$	19,275
Beneficiaries																	
Number		3,748		3,604		3,437		3,292		3,152		3,011	2,908	2,773	2,650		2,535
Average age (years)		75.0		74.8		75.1		74.9		74.5		74.2	73.9	73.9	73.6		73.4
Total annual benefits	\$	60,579,985		57,250,840		53,064,561		49,706,039		46,998,152		43,797,864	41,692,950	38,818,283	36,495,210		34,600,022
Average annual benefit	\$	16,163	\$	15,885	\$	15,439	\$	15,099	\$	14,911	\$	14,546	\$ 14,337	\$ 13,999	\$ 13,772	\$	13,649
Total Covered Lives		114,284		110,809		107,232		104,512		101,722		99,007	96,338	92,158	89,851		88,760

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.



Other Schedules of Interest

Schedule of Average Pension Benefit Payment Amounts as of June 30, 2023

Employees																
Service		0 - 4 yrs.*		5 - 9 yrs.		10 - 14 yrs.	15 - 19 yrs.			20 - 24 yrs.		25 - 29 yrs.) or more yrs.		Total
Total annual benefit	\$	5,860,350	\$	11,061,619	\$	39,078,939	\$	43,522,741	\$	55,682,775	\$	49,423,377	\$	121,805,932	\$	326,435,733
Average annual benefit	\$	4,162	\$	5,944	\$	7,972	\$	11,940	\$	15,909	\$	22,044	\$	32,534	\$	15,324
Average monthly benefit	\$	347	\$	495	\$	664	\$	995	\$	1,326	\$	1,837	\$	2,711	\$	1,277
Average final compensation	\$	51,091	\$	46,694	\$	44,304	\$	50,555	\$	55 <i>,</i> 307	\$	63,603	\$	71,609	\$	54,711
Number of retired members		1,408 *	k	1,861		4,902		3,645		3,500		2,242		3,744		21,302 **

* Includes 413 members who did not have service reported.

** Includes 5,380 members who did not have AFC reported.

			Теа	iche	ers					
Service	 0 - 4 yrs.*	5 - 9 yrs.	10 - 14 yrs.		15 - 19 yrs.	20 - 24 yrs.	25 - 29 yrs.	30) or more yrs.	Total
Total annual benefit	\$ 2,178,205	\$ 2,835,157	\$ 17,451,507	\$	31,190,422	\$ 60,714,909	\$ 63,260,554	\$	188,220,539	\$ 365,851,293
Average annual benefit	\$ 6,259	\$ 7,088	\$ 9,403	\$	14,831	\$ 19,598	\$ 24,644	\$	35,954	\$ 23,441
Average monthly benefit	\$ 522	\$ 591	\$ 784	\$	1,236	\$ 1,633	\$ 2,054	\$	2,996	\$ 1,953
Average final compensation	\$ 56,909	\$ 59,222	\$ 53,559	\$	63,511	\$ 69,111	\$ 72,893	\$	77,474	\$ 69,334
Number of retired members	348 *	400	1,856		2,103	3,098	2,567		5,235	15,607 **

* Includes 168 members who did not have service reported.

** Includes 4,346 members who did not have AFC reported.

				Pe	olice	e					
Service	 0 - 4 yrs.*	5 - 9 yrs.	:	10 - 14 yrs.		15 - 19 yrs.	20 - 24 yrs.	25 - 29 yrs.	30) or more yrs.	Total
Total annual benefit	\$ 6,579,644	\$ 3,790,546	\$	9,896,750	\$	13,941,190	\$ 81,984,705	\$ 49,198,508	\$	24,303,039	\$ 189,694,382
Average annual benefit	\$ 12,678	\$ 17,549	\$	20,075	\$	30,111	\$ 41,957	\$ 60,664	\$	78,906	\$ 39,818
Average monthly benefit	\$ 1,056	\$ 1,462	\$	1,673	\$	2,509	\$ 3,496	\$ 5,055	\$	6,575	\$ 3,318
Average final compensation	\$ 58,381	\$ 58,924	\$	58,555	\$	72,745	\$ 89,776	\$ 102,246	\$	111,724	\$ 86,204
Number of retired members	519 *	216		493		463	1,954	811		308	4,764 **

* Includes 365 members who did not have service reported.

** Includes 1,810 members who did not have AFC reported.

				F	ire						
Service	 0 - 4 yrs.*	5 - 9 yrs.	1	10 - 14 yrs.		15 - 19 yrs.	20 - 24 yrs.	25 - 29 yrs.	3	0 or more yrs.	Total
Total annual benefit	\$ 2,750,047	\$ 705,915	\$	2,493,379	\$	4,760,050	\$ 26,260,988	\$ 25,371,831	\$	24,445,725	\$ 86,787,935
Average annual benefit	\$ 15,450	\$ 18,100	\$	22,262	\$	30,127	\$ 37,786	\$ 55,276	\$	84,587	\$ 44,968
Average monthly benefit	\$ 1,287	\$ 1,508	\$	1,855	\$	2,511	\$ 3,149	\$ 4,606	\$	7,049	\$ 3,747
Average final compensation	\$ 63,622	\$ 64,648	\$	65,193	\$	79,308	\$ 87 <i>,</i> 356	\$ 97,657	\$	113,134	\$ 93,104
Number of retired members	178 *	39		112		158	695	459		289	1,930 **

* Includes 153 members who did not have service reported.

** Includes 865 members who did not have AFC reported.



Other Schedules of Interest Schedule of Retired and Vested Members by Type of Benefit

Employees

								June	30, 2023										
			Ţ	ype of R	etiren	nent**	¢						Option	Selected #	ŧ				
Amount of	Number of								No.										
Monthly Benefit	Retirees*	1	2	3	4	5	6	7	Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - \$500	5,228	4,332	39	2	14	-	578	263	3,231	81	389	148	772	316	16	12	-	-	263
501 - 1,000	6,348	4,768	256	86	14	2	516	706	3,589	74	499	150	937	364	23	6	-	-	706
1,001 - 1,500	4,106	3,130	100	210	17	3	263	383	2,152	51	411	105	712	274	14	4	-	-	383
1,501 - 2,000	2,475	2,010	30	102	4	4	158	167	1,267	23	264	97	459	182	11	5	-	-	167
2,001 - 2,500	1,604	1,361	15	44	-	2	105	77	753	15	218	71	326	135	4	5	-	-	77
2,501 - 3,000	1,083	971	7	13	2	1	57	32	477	16	165	50	236	104	2	1	-	-	32
3,001 - 3,500	737	677	-	10	3	-	25	22	310	5	129	50	150	69	1	1	-	-	22
3,501 - 4,000	518	485	2	1	-	-	23	7	213	5	99	34	108	48	2	2	-	-	7
Over 4,000	871	821	2	3	4	-	30	11	372	10	151	68	159	94	5	1	-	-	11
Totals	22,970	18,555	451	471	58	12	1,755	1,668	12,364	280	2,325	773	3,859	1,586	78	37	-	-	1,668

Teachers

								June	30, 2023										
			Ту	ype of F	letiren	nent**							Option	Selected	#				
Amount of	Number of								No.										
Monthly Benefit	Retirees*	1	2	3	4	5	6	7	Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - \$500	1,443	1,267	1	-	3	-	109	63	740	18	115	43	351	104	3	6	-	-	63
501 - 1,000	2,461	1,763	30	-	4	-	176	488	1,260	27	167	42	380	89	7	1	-	-	488
1,001 - 1,500	2,499	1,901	73	3	8	-	135	379	1,182	34	226	58	471	135	6	8	-	-	379
1,501 - 2,000	2,472	2,047	34	4	11	-	147	229	1,138	39	205	65	569	210	6	11	-	-	229
2,001 - 2,500	2,403	2,158	20	12	2	1	119	91	1,081	35	245	86	600	246	9	10	-	-	91
2,501 - 3,000	1,897	1,742	10	5	1	-	84	55	811	36	172	63	520	230	5	5	-	-	55
3,001 - 3,500	1,591	1,479	3	2	-	-	75	32	705	17	157	64	445	159	6	6	-	-	32
3,501 - 4,000	1,027	967	-	-	2	-	39	19	445	14	135	35	258	120	-	1	-	-	19
Over 4,000	1,178	1,137	-	1	1	-	31	8	578	13	156	51	243	129	-	-	-	-	8
Totals	16,971	14,461	171	27	32	1	915	1,364	7,940	233	1,578	507	3,837	1,422	42	48	-	-	1,364

See Page 129 for footnotes.



Other Schedules of Interest Schedule of Retired and Vested Members by Type of Benefit

Police

								Ju	ne 30, 202	23									
			Τ	ype of I	Retirer	nent**	:						Option	n Selected	#				
Amount of	Number of								No.										
Monthly Benefit	Retirants*	1	2	3	4	5	6	7	Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - \$500	269	195	1	-	-	-	45	28	172	2	10	16	19	22	-	-	-	-	28
501 - 1,000	381	211	9	1	2	-	147	11	287	5	13	9	20	33	1	2	-	-	11
1,001 - 1,500	484	222	23	2	2	1	185	49	328	7	20	21	20	39	-	-	-	-	49
1,501 - 2,000	387	208	19	24	2	-	99	35	239	9	10	20	14	60	-	-	-	-	35
2,001 - 2,500	440	297	11	51	1	1	53	26	223	16	15	55	13	90	-	2	-	-	26
2,501 - 3,000	475	329	7	85	-	-	38	16	206	18	18	75	19	122	1	-	-	-	16
3,001 - 3,500	453	372	1	45	1	3	23	8	175	12	9	102	9	137	-	1	-	-	8
3,501 - 4,000	398	333	3	47	2	-	9	4	139	7	6	85	10	147	-	-	-	-	4
Over 4,000	1,662	1,542	2	86	3	2	19	8	503	19	25	440	23	640	4	-	-	-	8
Totals	4,949	3,709	76	341	13	7	618	185	2,272	95	126	823	147	1,290	6	5	-	-	185

Fire

								Ju	ne 30, 202	23									
			Υ	ype of I	Retirer	nent**	:						Optior	Selected	#				
Amount of	Number of								No.										
Monthly Benefit	Retirants*	1	2	3	4	5	6	7	Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - \$500	64	33	-	-	-	1	22	8	48	-	1	-	2	5	-	-	-	-	8
501 - 1,000	99	43	2	-	-	-	52	2	92	-	1	-	1	3	-	-	-	-	2
1,001 - 1,500	178	62	8	2	1	3	90	12	140	4	5	6	6	4	1	-	-	-	12
1,501 - 2,000	173	68	5	5	-	1	86	8	135	3	5	7	8	7	-	-	-	-	8
2,001 - 2,500	156	92	8	9	1	2	35	9	83	6	6	15	7	29	1	-	-	-	9
2,501 - 3,000	174	125	3	21	-	1	20	4	69	7	3	32	9	50	-	-	-	-	4
3,001 - 3,500	179	146	-	22	-	2	5	4	57	7	5	41	3	62	-	-	-	-	4
3,501 - 4,000	157	138	-	16	-	1	1	1	50	3	3	27	3	70	-	-	-	-	1
Over 4,000	799	754	2	29	2	1	10	1	238	14	3	207	8	327	-	1	-	-	1
Totals	1,979	1,461	28	104	4	12	321	49	912	44	32	335	47	557	2	1	-	-	49

See Page 129 for footnotes.



** Type of Retirement

1-Service & early retirement
2-Ordinary disability retirement
3-Accidental disability retirement
4-Ordinary death in active service
5-Accidental death in active service
6-Beneficiaries of deceased members who retired on a service or disability allowance
7-Vested member with future benefit

Option Selected

No option - Straight life Option 1 - Cash refund Option 2 - 100% Joint & Survivorship Option 3 - 50% Joint & Survivorship Option 4 - 100% Pop-Up Option 5 - 50% Pop-Up Option 6 - Other % Joint & Survivorship Option 7 - Other % Pop-Up Option 8 - Fixed amount to Beneficiaries Option 9 - Widow's benefit (accidental disability) 50%

* Including Vested members with a future benefit.

& Elections for Vested members are made at the time of commencement.



Other Schedules of Interest Historical Membership Data - Retiree

MPLOYEES	(agg	regate compensa	ition and	annual allowan	ce dollar	s in thousands)		
ETIRED MEM	BERSHIP DA	ATA						
	Ado	ded to Rolls	Remov	ed from Rolls	Rolls	End of Year	% Increase	Average
Fiscal		Annual		Annual		Annual	in Annual	Annual
Year	No.**	Allowances*	No.**	Allowances*	No.**	Allowances*	Allowances	Allowance
2023	1,219	\$ 23,313	668	\$ 8,254	21,302	\$ 326,436	4.84%	\$ 15,324
2022	1,420	27,960	715	8,699	20,751	311,377	6.59%	15,00
2021	1,240	23,179	628	7,217	20,046	292,116	5.78%	14,57
2020	1,208	20,619	598	7,641	19,434	276,154	4.93%	14,21
2019	1,271	21,869	640	7,801	18,824	263,176	5.65%	13,98
2018	1,133	19,288	513	6,556	18,193	249,109	5.39%	13,69
2017 +	1,950	22,224	519	8,977	17,573	236,377	5.94%	13,45
2016	1,134	19,332	475	4,636	16,142	223,130	7.05%	13,82
2015	1,504	21,357	1335	10,968	15,483	208,434	5.25%	13,46
2014	1,094	15,784	492	5,431	15,314	198,045	5.52%	12,93
2013	1,110	16,335	539	6,699	14,712	187,692	5.41%	12,75
2012	1,111	14,711	457	4,890	14,141	178,056	5.84%	12,59
2011	1,113	16,521	428	4,578	13,487	168,235	7.64%	12,47
2010	1,070	18,300	460	4,624	12,802	156,292	9.59%	12,20
2009	934	14,703	322	3,864	12,192	142,616	8.23%	11,69
2008	1,083	17,897	362	4,199	11,580	131,777	11.60%	11,38
2007	1,465	22,691	579	5,471	10,859	118,079	17.07%	10,87
2005	1,620	19,183	739	5,972	9,973	100,859	18.56%	10,11
2003	1,258	13,588	572	4,029	9,092	85,067	18.11%	9,35

TEACHERS

(aggregate compensation and annual allowance dollars in thousands)

RETIRED MEMBERSHIP DATA

	Ado	ded to Rolls	Remov	ed from Rolls	Rolls	End of Year	% Increase	Average
Fiscal		Annual		Annual		Annual	in Annual	Annual
Year	No.**	Allowances*	No.**	Allowances*	No.**	Allowances*	Allowances	Allowances
2023	786	\$ 21,578	333	\$ 6,894	15,607	\$ 365,851	4.18%	\$ 23,441
2022	815	24,908	346	7,540	15,154	351,167	5.20%	23,173
2021	754	20,941	267	6,110	14,685	333,799	4.65%	22,731
2020	718	19,654	260	6,213	14,198	318,968	4.40%	22,466
2019	774	20,617	257	6,371	13,740	305,527	4.89%	22,236
2018	766	20,526	239	6,075	13,223	291,281	5.22%	22,028
2017+	1,523	21,713	237	8,847	12,696	276,830	4.87%	21,804
2016	760	19,954	209	5,325	11,410	263,964	5.87%	23,134
2015	840	21,563	946	6,891	10,859	249,335	6.25%	22,961
2014	744	17,222	186	4,802	10,965	234,663	5.59%	21,401
2013	698	15,844	247	5,860	10,407	222,243	4.70%	21,355
2012	712	16,420	183	5,150	9,956	212,259	5.61%	21,320
2011	504	10,402	164	3,644	9,427	200,989	3.48%	21,321
2010	849	22,231	269	5,199	9,087	194,231	9.61%	21,375
2009	1,001	26,668	148	3,214	8,507	177,199	15.26%	20,830
2008	891	23,743	165	4,238	7,654	153,745	14.53%	20,087
2007	1,254	29,350	230	4,004	6,928	134,240	23.28%	19,376
2005	1,121	21,842	344	4,591	5,904	108,894	24.34%	18,444
2003	848	15,910	239	2,735	5,127	87,580	26.86%	17,082

 \ast Includes additional COLA allowances. The benefit amounts shown are the monthly

benefits as of the valuation date annualized and are not the actual benefits paid during the fiscal year.

** Includes beneficiaries in receipt but excludes deferred vested terminations.

 June 30, 2015 data included a reclassification of members with split benefits resulting in an artificially high number of new additions to the rolls.



Other Schedules of Interest Historical Membership Data - Retiree

POLICE OFFICERS (aggregate compensation and annual allowance dollars in thousands)

RETIRED MEMBERSHIP DATA

	Ado	ded to Rolls	Remov	ed from Rolls	Rolls	End of Year	% Increase	Average
Fiscal		Annual		Annual		Annual	in Annual	Annual
Year	No.**	Allowances*	No.**	Allowances*	No.**	Allowances*	Allowances	Allowances
2023	223	\$ 10,546	103	\$ 2,847	4,764	\$ 189,694	4.23%	\$ 39,818
2022	332	16,013	115	3,094	4,644	181,995	7.64%	39,189
2021	287	13,480	87	2,311	4,427	169,076	7.07%	38,192
2020	209	8,967	64	1,720	4,227	157,907	4.81%	37,357
2019	230	9,739	71	1,595	4,082	150,660	5.71%	36,908
2018	201	7,976	64	1,390	3,923	142,516	4.85%	36,328
2017+	233	7,985	76	1,745	3,786	135,930	4.81%	35,903
2016	239	10,027	67	1,339	3,629	129,690	7.18%	35,737
2015	282	7,303	107	1,675	3,457	121,002	4.88%	35,002
2014	178	6,420	59	1,304	3,282	115,374	4.64%	35,154
2013	247	8,189	65	1,464	3,163	110,258	6.50%	34,859
2012	171	6,977	70	1,008	2,981	103,533	6.12%	34,731
2011	237	10,370	59	1,133	2,880	97,564	10.46%	33,876
2010	189	7,711	52	1,413	2,702	88,327	7.68%	32,689
2009	157	7,235	28	627	2,565	82,029	8.76%	31,980
2008	179	8,504	36	1,376	2,436	75,421	10.44%	30,963
2007	361	14,045	80	1,540	2,293	68,293	22.42%	29,78
2005	308	8,934	83	1,492	2,012	55,788	17.68%	27,72
2003	262	7,903	61	971	1,787	47,406	23.81%	26,52

FIREFIGHTERS	(aggregate com

RETIRED MEMBERSHIP DATA

(aggregate compensation and annual allowance dollars in thousands)

	Ado	ded to Rolls	Remov	ed from Rolls	Rolls	End of Year	% Increase	Average
Fiscal		Annual		Annual		Annual	in Annual	Annual
Year	No.**	Allowances*	No.**	Allowances*	No.**	Allowances*	Allowances	Allowances
2023	114	\$ 5,426	50	\$ 1,396	1,930	\$ 86,788	4.87%	\$ 44,968
2022	95	6,091	45	1,327	1,866	82,758	6.11%	44,350
2021	117	6,882	54	1,402	1,816	77,994	7.56%	42,948
2020	87	4,289	40	1,048	1,753	72,514	4.68%	41,365
2019	80	3,992	47	1,244	1,706	69,273	4.13%	40,606
2018	68	3,266	34	717	1,673	66,525	3.98%	39,764
2017+	88	3,697	44	1,213	1,639	63,976	4.04%	39,033
2016	75	4,177	31	936	1,595	61,492	5.56%	38,553
2015	105	4,546	47	882	1,551	58,251	6.71%	37,557
2014	89	2,774	43	1,139	1,493	54,587	3.09%	36,562
2013	98	3,497	27	715	1,447	52,952	5.55%	36,595
2012	79	3,105	39	495	1,376	50,170	5.49%	36,461
2011	111	5,051	29	696	1,336	47,560	10.08%	35,599
2010	53	2,490	36	766	1,254	43,205	4.16%	34,454
2009	60	2,628	23	644	1,237	41,481	5.02%	33,533
2008	63	3,456	31	1,110	1,200	39,497	6.31%	32,914
2007	131	7,404	24	1,066	1,168	37,151	20.57%	31,807
2005	128	4,393	66	1,290	1,061	30,813	15.83%	29,041
2003	142	4,747	49	1,067	999	26,602	30.26%	26,629

* Includes additional COLA allowances. The benefit amounts shown are the monthly benefits as of the valuation date annualized and are not the actual benefits paid during the fiscal year.

** Includes beneficiaries in receipt but excludes deferred vested terminations.

 June 30, 2015 data included a reclassification of members with split benefits resulting in an artificially high number of new additions to the rolls.



Other Schedules of Interest Schedule of Average Benefit Payment Amounts as of June 30, 2023

Medical Benefits

						Stat	e Er	nployees							
Service	0) - 4 yrs.*	!	5 - 9 yrs.	1	0 - 14 yrs.	15	5 - 19 yrs.	2	20 - 24 yrs.	2	25 - 29 yrs.	30	or more yrs.	Total
Average annual benefit	\$	3,672	\$	4,001	\$	3,482	\$	3,464	\$	3,167	\$	3,379	\$	3,448	\$ 3,401
Average monthly benefit	\$	306	\$	333	\$	290	\$	289	\$	264	\$	282	\$	287	\$ 283
Annual Benefits	\$	242,356	\$	188,064	\$	191,517	\$	103,910	\$	953,301	\$	783,979	\$	1,700,089	\$ 4,163,216
Number of retired members		66		47		55		30		301		232		493	1,224
* Includes 6 members who did	not	have servic	e rep	orted.											
						Political Sul	bdiv	ision Emp	loye	es					
Service	0) - 4 yrs.*	!	5 - 9 yrs.	1	0 - 14 yrs.	15	5 - 19 yrs.	2	20 - 24 yrs.	2	25 - 29 yrs.	30	or more yrs.	Total
Average annual benefit	\$	2,948	\$	4,019	\$	4,246	\$	3,789	\$	3,933	\$	3,887	\$	4,444	\$ 4,054
Average monthly benefit	\$	246	\$	335	\$	354	\$	316	\$	328	\$	324	\$	370	\$ 338
Annual Benefits	\$	35,370	\$	28,130	\$	38,217	\$	11,368	\$	1,691,108	\$	847,465	\$	1,146,534	\$ 3,798,192
Number of retired members		12		7		9		3		430		218		258	937
* Includes 8 members who did	not	have servic	e rep	orted.											
							Теа	chers							
Service	0) - 4 yrs.*	!	5 - 9 yrs.	1	0 - 14 yrs.	15	5 - 19 yrs.	2	20 - 24 yrs.	2	25 - 29 yrs.	30	or more yrs.	Total
Average annual benefit	\$	2,833	\$	2,842	\$	3,969	\$	0	\$	4,148	\$	4,246	\$	4,650	\$ 4,445
Average monthly benefit	\$	236	\$	237	\$	331	\$	0	\$	346	\$	354	\$	387	\$ 370
Annual Benefits	\$	39,659	\$	11,368	\$	15,875	\$	0	\$	3,418,060	\$	3,363,219	\$	9,797,460	\$ 16,645,641
Number of retired members		14		4		4		0		824		792		2,107	3,745
* Includes 10 members who di	d not	t have serv	ice re	ported.											
						Ро	lice	and Fire							
Service	0) - 4 yrs.*	!	5 - 9 yrs.	1	0 - 14 yrs.	15	5 - 19 yrs.	2	20 - 24 yrs.	2	25 - 29 yrs.	30	or more yrs.	Total
Average annual benefit	\$	3,721	\$	3,948	\$	4,462	\$	4,563	\$	5,381	\$	5,787	\$	5,914	\$ 5,425

Average annual benefit	Ş	3,721	Ş	3,948	Ş	4,462	Ş	4,563	Ş	5,381	Ş	5,787	Ş	5,914	Ş	5,425
Average monthly benefit	\$	310	\$	329	\$	372	\$	380	\$	448	\$	482	\$	493	\$	452
Annual Benefits	\$	182,324	\$	228,970	\$	624,724	\$	780,321	\$	7,005,799	\$	4,485,228	\$	2,767,919	\$	16,075,285
Number of retired members		49		58		140		171		1,302		775		468		2,963

* Includes 15 members who did not have service reported.

Number counts include 18 retirees who are eligible for a deferred subsidy.



Other Schedules of Interest Schedule of Retired Members by Type of Benefits Medical Benefits

State Employees

June 30, 2023											
Monthly	No. of	1-Pe	rson	2-Pe	rson						
Benefit	Retirees	Pre-65	Post-65	Pre-65	Post-65						
\$1-\$500	1,198	37	1,115	0	46						
501-1,000	26	3	14	9	0						
1,001-1,500	0	0	0	0	0						
1,501-2,000	0	0	0	0	0						
Over 2,000	0	0	0	0	0						
Total	1,224	40	1,129	9	46						

Political Subdivision Employees

June 30, 2023											
Monthly	No. of	1-Pe	rson	2-Pe	rson						
Benefit	Retirees	Pre-65	Post-65	Pre-65	Post-65						
\$1-\$500	904	15	880	0	9						
501-1,000	33	1	11	0	21						
1,001-1,500	0	0	0	0	0						
1,501-2,000	0	0	0	0	0						
Over 2,000	0	0	0	0	0						
Total	937	16	891	0	30						



Other Schedules of Interest Schedule of Retired Members by Type of Benefits Medical Benefits

June 30, 2023											
Monthly No. of 1-Person 2-Person											
Benefit	Retirees	Pre-65	Post-65	Pre-65	Post-65						
\$1-\$500	3,452	21	3,350	0	81						
501-1,000	292	1	32	0	259						
1,001-1,500	1	0	0	0	1						
1,501-2,000	0	0	0	0	0						
Over 2,000	0	0	0	0	0						
Total	3,745	22	3,382	0	341						

Police and Fire

June 30, 2023											
Monthly	No. of	1-Pe	rson	2-Pe	rson						
Benefit	Retirees	Pre-65	Post-65	Pre-65	Post-65						
\$1-\$500	2,115	401	1,671	21	22						
501-1,000	836	33	229	551	23						
1,001-1,500	7	1	2	3	1						
1,501-2,000	5	0	0	5	0						
Over 2,000	0	0	0	0	0						
Total	2,963	435	1,902	580	46						

