

Town of Wellesley Contributory Retirement System

**Governmental Accounting Standards Board
Statements No. 67 and 68 (GASB 67 and 68)
Accounting Valuation as of December 31, 2022**



This report has been prepared at the request of the Town of Wellesley Contributory Retirement Board to assist the Board and the member units in preparing their financial reports for their liabilities associated with the Town of Wellesley Contributory Retirement System. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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August 7, 2023

Retirement Board
Town of Wellesley Contributory Retirement System
Town Hall
525 Washington Street
Wellesley, MA 02482

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67 and 68) Accounting Valuation as of December 31, 2022 for the Town of Wellesley Contributory Retirement System. It contains various information that will need to be disclosed in order to comply with GASB 67 and 68. This report excludes the increase in the COLA percentage from 3% to 5% effective July 1, 2022 and the increases in the COLA base effective July 1, 2023 and later because these increases had not been approved as of the measurement date.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the Board and member units in preparing their financial reports for their liabilities associated with the Retirement System pension plan. The census and financial information on which our calculations were based were provided by the staff of the Retirement System. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. 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; and changes in plan provisions or applicable law.

The actuarial calculations were completed under my supervision. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in the actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In my opinion, the assumptions are reasonable and take into account the experience of the Town of Wellesley Contributory Retirement System and reasonable expectations.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal

A handwritten signature in blue ink, appearing to read "Kathleen A. Riley", is written over a horizontal line.

Kathleen A. Riley, FSA, MAAA, EA
Senior Vice President and Chief Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67 and 68) as of December 31, 2022. This report is based on financial information as of December 31, 2022 and the Actuarial Valuation and Review as of January 1, 2023, which reflects:

- The benefit provisions of Massachusetts General Law Chapter 32;
- The characteristics of covered active participants, inactive participants, and retired participants and beneficiaries as of December 31, 2022, provided by the staff of the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Highlights of the valuation

1. The Net Pension Liability (NPL) measured as of December 31, 2022 and December 31, 2021 was determined based upon the results of actuarial valuations as of January 1, 2023 and January 1, 2021, respectively.
2. The NPL is equal to the difference between the Total Pension Liability (TPL) and the Plan Fiduciary Net Position (FNP). The Plan Fiduciary Net Position is equal to the market value of assets, and, therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAL) on a market value basis. The NPL increased from \$6,735,674 as of December 31, 2021 to \$45,316,411 as of December 31, 2022 and the Plan Fiduciary Net Position as a percent of the TPL decreased from 97.73% to 84.99%.
3. The discount rate used to measure the TPL and NPL was 6.00% as of December 31, 2022 and December 31, 2021.

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by the Town of Wellesley Contributory Retirement System. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the market value of assets as of the valuation date, as provided by the Town of Wellesley Contributory Retirement System.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.
Actuarial models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared at the request of the Retirement Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.

An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

Actuarial results in this report are not rounded, but that does not imply precision.

If the Retirement Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Retirement Board should look to their other advisors for expertise in these areas.

As Segal has no discretionary authority with respect to the management or assets of the Retirement System, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Retirement System.

Section 2: GASB Information

General information about the pension plan

Plan membership. At December 31, 2022, pension plan membership consisted of the following:

Retired participants or beneficiaries currently receiving benefits	436
Inactive participants with a vested right to a deferred or immediate benefit	40
Inactive participants entitled to a refund of employee contributions	392
Active members	<u>656</u>
Total	1,524

Section 2: GASB Information

Exhibit 1 – Net Pension Liability

Reporting date for employer under GASB 68	June 30, 2023	June 30, 2022
Measurement date	December 31, 2022	December 31, 2021
Components of the Net Pension Liability		
Total Pension Liability	\$301,921,143	\$296,789,063
Plan Fiduciary Net Position	256,604,732	290,053,389
Net Pension Liability	45,316,411	6,735,674
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	84.99%	97.73%

Actuarial assumptions. The TPL as of December 31, 2022, which was determined based on the results of an actuarial valuation as of January 1, 2023, used the following actuarial assumptions, applied to all periods included in the measurement:

Wage inflation	2.75%
Salary increases	Based on years of service, ranging from 7.00% decreasing to 3.50% after 11 years of service for Group 1 and 2 employees, and ranging from 8.00% decreasing to 4.00% after 11 years for Group 4 employees
Net investment rate of return	6.00%
Cost of living adjustment	2.75% of first \$18,000
Mortality	<p><i>Pre-Retirement:</i> RP-2014 Blue Collar Employee Mortality Table set forward one year for females projected generationally with Scale MP-2021 (previously, MP-2016)</p> <p><i>Healthy Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year for females projected generationally with Scale MP-2021 (previously, MP-2016)</p> <p><i>Disabled Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year and projected generationally with Scale MP-2021 (previously, MP-2016)</p>

Detailed information regarding all actuarial assumptions can be found in Section 3.

Section 2: GASB Information

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and adding expected inflation. The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	20.50%	6.59%
International developed markets equity	12.00%	6.87%
International emerging markets equity	4.50%	8.30%
Core fixed income	15.00%	1.53%
High-yield fixed income	8.00%	3.54%
Real estate	10.00%	3.44%
Timber	4.00%	4.01%
Hedge fund, GTAA, Risk parity	10.00%	3.06%
Private equity	<u>16.00%</u>	9.49%
Total	100.00%	

Discount rate. The discount rate used to measure the Total Pension Liability (TPL) was 6.00% as of December 31, 2022 and December 31, 2021. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position (FNP) was projected to be available to make all projected future benefit payments for 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 TPL as of both December 31, 2022 and December 31, 2021.

Section 2: GASB Information

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability (NPL) of the Retirement System as of December 31, 2022 calculated using the discount rate of 6.00%, as well as what the Retirement System's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.00%) or 1-percentage-point higher (7.00%) than the current rate.

Net Pension Liability	1% Decrease (5.00%)	Current Discount Rate (6.00%)	1% Increase (7.00%)
Net Pension Liability as of December 31, 2022	\$82,358,228	\$45,316,411	\$14,363,506

Section 2: GASB Information

Exhibit 2 – Schedule of changes in Net Pension Liability – Last two fiscal years

Reporting date for employer under GASB 68 Measurement date	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Total Pension Liability		
Service cost	\$8,078,091	\$7,620,841
Interest	17,837,029	17,198,697
Change of benefit terms	0	0
Differences between expected and actual experience	-1,060,404	0
Changes of assumptions	-4,555,975	0
Benefit payments, including refunds of member contributions	-15,166,661	-14,109,168
Net change in Total Pension Liability	\$5,132,080	\$10,710,370
Total Pension Liability – beginning	<u>296,789,063</u>	<u>286,078,693</u>
Total Pension Liability – ending	\$301,921,143	\$296,789,063
Plan Fiduciary Net Position		
Contributions – employer	\$10,054,016	\$9,782,457
Contributions – employee	4,353,513	4,209,989
Net investment income	-32,427,188	47,481,121
Benefit payments, including refunds of member contributions	-15,166,661	-14,109,168
Administrative expense	-262,337	-284,740
Other	0	0
Net change in Plan Fiduciary Net Position	-\$33,448,657	\$47,079,659
Plan Fiduciary Net Position – beginning	<u>290,053,389</u>	<u>242,973,730</u>
Plan Fiduciary Net Position – ending	\$256,604,732	\$290,053,389
Net Pension Liability – ending	\$45,316,411	\$6,735,674
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	84.99%	97.73%
Covered payroll ¹	\$42,803,291	\$42,492,899
Plan Net Pension Liability as percentage of covered payroll	105.87%	15.85%

¹ Covered payroll for 2022 and 2021 as estimated in the January 1, 2023 and January 1, 2021 actuarial valuations, respectively.

Section 2: GASB Information

Notes to Fiduciary Schedule:

Changes in actuarial assumptions	Effective January 1, 2022: <ul style="list-style-type: none">• None.
	Effective January 1, 2023: <ul style="list-style-type: none">• The mortality improvement scale was updated from MP-2016 to MP-2021.
Changes in plan provisions	None

Section 2: GASB Information

Exhibit 3 – Schedule of employer contributions

Year Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2014	\$7,040,036	\$7,070,467	-\$30,431	\$35,228,283	20.07%
2015	7,285,897	7,304,832	-18,935	35,959,727	20.31%
2016	7,562,273	7,562,273	- -	36,836,364	20.53%
2017	7,835,775	7,874,297	-38,522	38,226,711	20.60%
2018	8,349,999	8,371,229	-21,230	39,169,350	21.37%
2019	8,851,507	8,868,984	-17,477	40,682,134	21.80%
2020	9,438,070	9,454,478	-16,408	40,939,192	23.09%
2021	9,756,209	9,782,457	-26,248	42,492,899	23.02%
2022	10,034,958	10,054,016	-19,058	42,803,291	23.49%

See accompanying notes to this schedule on next page.

Section 2: GASB Information

Notes to Schedule:

Methods and assumptions used to establish “actuarially determined contribution”:

Valuation date	Actuarially determined contribution for year ended December 31, 2022 was determined with the January 1, 2021 actuarial valuation.
Actuarial cost method	Entry Age Actuarial Cost Method
Amortization method	3.0% increasing payments on the remaining unfunded liability
Remaining amortization period	As of July 1, 2022, 9 years for the remaining unfunded liability
Asset valuation method	The difference between the expected return and the actual investment return on a market value basis is recognized over a five-year period with a fresh start as of January 1, 2021. Asset value is adjusted as necessary to be within 20% of the market value
Actuarial assumptions:	
Net investment rate of return	6.00%
Wage inflation	2.75%
Salary increases	Based on years of service, ranging from 7.00% decreasing to 3.50% after 11 years of service for Group 1 and 2 employees, and ranging from 8.00% decreasing to 4.00% after 11 years for Group 4 employees.
Cost of living adjustments	2.75% of first \$18,000 of retirement allowance
Mortality	<p><i>Pre-Retirement:</i> RP-2014 Blue Collar Employee Mortality Table set forward one year for females projected generationally with Scale MP-2016</p> <p><i>Healthy Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year for females projected generationally with Scale MP-2016</p> <p><i>Disabled Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year and projected generationally with Scale MP-2016</p>
Other assumptions	Same as those used in the January 1, 2021 funding actuarial valuation.

Section 2: GASB Information

Exhibit 4 – Pension expense

Reporting date for employer under GASB 68	June 30, 2023	June 30, 2022
Measurement date	December 31, 2022	December 31, 2021
Components of pension expense		
Service cost	\$8,078,091	\$7,620,841
Interest	17,837,029	17,198,697
Current-period benefit changes	--	--
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	-176,734	--
Expensed portion of current-period changes of assumptions	-759,330	--
Member contributions	-4,353,513	-4,209,989
Projected earnings on pension plan investments	-17,372,559	-14,566,380
Expensed portion of current-period differences between actual and projected earnings on pension plan investments	9,959,951	-6,582,949
Administrative expense	262,337	284,740
Recognition of beginning of year deferred outflows of resources as pension expense	7,422,512	7,774,679
Recognition of beginning of year deferred inflows of resources as pension expense	-13,159,886	-10,562,978
Pension expense	\$7,737,898	-\$3,043,339

Section 2: GASB Information

Deferred outflows of resources and deferred inflows of resources

Reporting date for employer under GASB 68	June 30, 2023	June 30, 2022
Measurement date	December 31, 2022	December 31, 2021
Deferred outflows of resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,216,026	\$1,198,472
Changes of assumptions	10,392,207	13,856,276
Net difference between projected and actual earnings on pension plan investments	12,057,973	0
Difference between expected and actual experience in the Total Pension Liability	<u>536,514</u>	<u>1,042,328</u>
Total deferred outflows of resources	\$24,202,720	\$16,097,076
Deferred inflows of resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,216,026	\$1,198,472
Changes of assumptions	3,796,645	0
Net difference between projected and actual earnings on pension plan investments	0	36,688,144
Difference between expected and actual experience in the Total Pension Liability	<u>3,286,466</u>	<u>3,203,728</u>
Total deferred inflows of resources	\$8,299,137	\$41,090,344
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting date for employer under GASB 68 year ended June 30:		
2023	N/A	-\$5,737,373
2024	-\$166,117	-9,190,002
2025	2,877,803	-6,146,082
2026	5,104,074	-3,919,811
2027	9,023,886	0
2028	-936,063	0
Thereafter	0	0

Note: Average expected remaining service is 6 years as of January 1, 2022 (the beginning of the measurement period ending December 31, 2022).

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 2: GASB Information

Exhibit 5 – Determination of proportionate share

Employer Name	Share of NPL as of December 31, 2021	Percent of NPL as of December 31, 2021	Share of NPL as of December 31, 2022	Percent of NPL as of December 31, 2022
Housing	\$56,907	0.844858%	\$375,896	0.829491%
Water ¹	193,605	2.874331%	1,764,390	3.893491%
Sewer ¹	57,881	0.859315%	527,777	1.164649%
Light	632,593	9.391685%	4,443,229	9.804900%
School	1,185,199	17.595845%	7,988,411	17.628076%
Town of Wellesley	4,609,489	68.433966%	30,216,708	66.679393%
Grand totals:	\$6,735,674	100.000000%	\$45,316,411	100.000000%

Note: NPL allocations for December 31, 2021 and December 31, 2022 are based on the allocation of the unfunded liability by employer as determined with the January 1, 2021 and January 1, 2023 actuarial valuations, respectively.

¹ The FY 2022 allocations to Water were prorated between Water and Sewer based on their Total Pension Liability as of January 1, 2023.

Section 2: GASB Information

Exhibit 6 – Determination of proportionate share amounts by employer

Employer Name	2023 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	Discount Rate Sensitivity		
				1% Decrease (5.00%) (4)	Current Discount Rate (6.00%) (5)	1% Increase (7.00%) (6)
Housing	0.829491%	\$375,896	\$435,610	\$683,154	\$375,896	\$119,144
Water	3.893491%	1,764,390	1,436,087	3,206,610	1,764,390	559,242
Sewer	1.164649%	527,777	379,492	959,184	527,777	167,284
Light	9.804900%	4,443,229	2,811,604	8,075,142	4,443,229	1,408,327
School	17.628076%	7,988,411	11,792,517	14,518,171	7,988,411	2,532,010
Town of Wellesley	66.679393%	30,216,708	25,947,981	54,915,967	30,216,708	9,577,499
Grand totals:	100.000000%	\$45,316,411	\$42,803,291	\$82,358,228	\$45,316,411	\$14,363,506

Section 2: GASB Information

Exhibit 6 – Determination of proportionate share by employer

Employer Name	Schedule of Contributions				Pension Expense		
	Statutory Required Contribution	Contributions in Relation to the Statutory Required Contribution	Contribution Deficiency / (Excess)	Contributions as a Percentage of Covered Employee Payroll	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Housing	\$70,845	\$70,845	\$0	16.263401%	\$64,185	-\$8,639	\$55,546
Water	299,429	299,429	0	20.850338%	301,274	-127,225	174,049
Sewer	79,125	79,125	0	20.850242%	90,119	9,815	99,934
Light	987,095	987,095	0	35.107896%	758,693	69,187	827,880
School	1,853,096	1,872,154	-19,058	15.875780%	1,364,043	-88,866	1,275,177
Town of Wellesley	6,745,368	6,745,368	0	25.995734%	5,159,584	145,728	5,305,312
Grand totals:	\$10,034,958	\$10,054,016	-\$19,058	23.488885%	\$7,737,898	\$0	\$7,737,898

Section 2: GASB Information

Exhibit 6 – Determination of proportionate share by employer

Employer Name	Deferred Outflows of Resources					Deferred Inflows of Resources			
	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
Housing	\$4,450	\$100,020	\$86,202	\$14,817	\$205,489	\$27,261	\$31,493	\$31,596	\$90,350
Water	20,889	469,476	404,620	192,790	1,087,775	127,958	147,822	447,166	722,946
Sewer	6,249	140,433	121,033	49,095	316,810	38,276	44,218	0	82,494
Light	52,605	1,182,272	1,018,946	232,129	2,485,952	322,235	372,257	0	694,492
School	94,577	2,125,589	1,831,946	402,729	4,454,841	579,341	669,275	220,688	1,469,304
Town of Wellesley	357,744	8,040,183	6,929,460	324,466	15,651,853	2,191,395	2,531,580	516,576	5,239,551
Grand totals:	\$536,514	\$12,057,973	\$10,392,207	\$1,216,026	\$24,202,720	\$3,286,466	\$3,796,645	\$1,216,026	\$8,299,137

Section 2: GASB Information

Exhibit 6 – Determination of proportionate share by employer

Employer Name	Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended June 30)					
	2024 (23)	2025 (24)	2026 (25)	2027 (26)	2028 (27)	Thereafter (28)
Housing	-\$9,000	\$23,074	\$42,080	\$69,655	-\$10,670	\$0
Water	-123,419	-124	98,498	387,761	2,112	0
Sewer	7,884	43,335	69,264	114,916	-1,083	0
Light	48,288	343,500	554,729	914,652	-69,710	0
School	-127,725	629,547	1,007,443	1,622,939	-146,668	0
Town of Wellesley	37,855	1,838,471	3,332,060	5,913,963	-710,044	0
Grand totals:	-\$166,117	\$2,877,803	\$5,104,074	\$9,023,886	-\$936,063	\$0

Section 3: Actuarial Assumptions and Methods

Exhibit I: Actuarial Assumptions, Actuarial Cost Method and Models

Net Investment Return:	6.0% The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes, as well as the Plan's target asset allocation.		
Salary Increases:	Years of Service	Groups 1 and 2	Group 4
	0	7.00%	8.00%
	1	6.50%	7.50%
	2	6.00%	7.00%
	3	5.50%	6.50%
	4	5.25%	6.00%
	5	5.00%	5.50%
	6	4.75%	5.25%
	7	4.50%	5.00%
	8	4.25%	4.75%
	9	4.00%	4.50%
	10	3.75%	4.25%
	11+	3.50%	4.00%
	Includes allowance for wage inflation of 2.75%. The salary scale assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment.		
Interest on Employee Contributions:	3.50%		
Cost of Living Adjustment (COLA):	2.75% increase on the first \$18,000 of retirement allowance.		

Section 3: Actuarial Assumptions and Methods

Administrative Expenses: \$275,000 for calendar 2023 increasing 2.75% per year (previously, \$275,000 for calendar 2021 increasing 2.75% per year)

The administrative expense assumption is based on information on expected expenses provided by the Retirement System.

Mortality Rates: *Pre-Retirement:* RP-2014 Blue Collar Employee Mortality Table set forward one year for females projected generationally with Scale MP-2021 (previously, MP-2016)

Healthy Retiree: RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year for females projected generationally with Scale MP-2021 (previously, MP-2016)

Disabled Retiree: RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year and projected generationally with Scale MP-2021 (previously, MP-2016)

The mortality tables reasonably reflect the projected mortality experience of the Plan as of the measurement date based on historical and current demographic data. As part of the analysis, a comparison was made between the actual number of retiree deaths and the projected number based on the prior years' assumptions over the five most recent valuations. The mortality tables were then adjusted to future years using generational projection to reflect future mortality improvement.

Termination Rates before Retirement:

Age	Groups 1 and 2 – Rate per year (%)		
	Mortality		
	Male	Female	Disability
20	0.05	0.02	0.01
25	0.06	0.02	0.02
30	0.06	0.02	0.03
35	0.07	0.03	0.05
40	0.08	0.05	0.10
45	0.13	0.08	0.15
50	0.22	0.14	0.19
55	0.36	0.20	0.24
60	0.61	0.30	0.28

Notes:

Mortality rates do not reflect generational projection.

55% of the disability rates shown represent accidental disability.

40% of the accidental disabilities will die from the same cause as the disability.

55% of the death rates shown represent accidental death.

Section 3: Actuarial Assumptions and Methods

Group 4 – Rate per year (%)			
Age	Mortality		Disability
	Male	Female	
20	0.05	0.02	0.10
25	0.06	0.02	0.20
30	0.06	0.02	0.30
35	0.07	0.03	0.30
40	0.08	0.05	0.30
45	0.13	0.08	1.00
50	0.22	0.14	1.25
55	0.36	0.20	1.20
60	0.61	0.30	0.85

Notes:

Mortality rates do not reflect generational projection.

90% of the disability rates shown represent accidental disability.

40% of the accidental disabilities will die from the same cause as the disability.

90% of the death rates shown represent accidental death.

The disability rates were based on historical and current demographic data, adjusted to reflect economic conditions of the area and estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations and disability retirements and the projected number based on the prior years' assumptions over the five most recent valuations.

Section 3: Actuarial Assumptions and Methods

Withdrawal Rates:

Rate per year (%)			
Years of Service	Groups 1 and 2	Years of Service	Group 4
0	15.0	0 – 10	1.5
1	12.0	11+	0.0
2	10.0		
3	9.0		
4	8.0		
5	7.6		
6	7.5		
7	6.7		
8	6.3		
9	5.9		
10	5.4		
11	5.0		
12	4.6		
13	4.1		
14	3.7		
15	3.3		
16 – 20	2.0		
21 – 29	1.0		
30+	0.0		

The termination rates were based on historical and current demographic data, adjusted to reflect economic conditions of the area and estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations and the projected number based on the prior years' assumptions over the five most recent valuations.

Section 3: Actuarial Assumptions and Methods

Retirement Rates:

Age	Rate per year (%)		
	Groups 1 and 2		Group 4
	Male	Female	
50 – 54	--	--	2.0
55	1.00	2.750	10.0
56 – 57	1.25	3.250	5.0
58	2.50	3.250	5.0
59	3.25	3.250	15.0
60	9.00 ¹	3.750 ¹	20.0
61	15.00	9.750	20.0
62	22.50	11.250	25.0
63	18.75	9.375	25.0
64	16.50	13.500	30.0
65	40.00	15.000	100.0
66 – 67	25.00	20.000	100.0
68	30.00	25.000	100.0
69	30.00	20.000	100.0
70	100.00	100.000	100.0

The retirement rates were based on historical and current demographic data, adjusted to reflect economic conditions of the area and estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements by age and the projected number based on the prior years' assumptions over the five most recent valuations.

Retirement Age for Inactive Vested Participants:

Age 60 for Groups 1 and 2 and age 50 for Group 4.

The retirement age for inactive vested participants was based on historical and current demographic data, adjusted to reflect economic conditions of the area and estimated future experience and professional judgment.

Unknown Data for Participants:

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

¹ Because members of Group 1 and 2 hired on or after April 2, 2012 cannot retire before age 60, the rates at age 60 are increased 50% (to 13.50% for males and 5.625% for females; previously 9.00% and 3.75%, respectively)

Section 3: Actuarial Assumptions and Methods

Family Composition:	80% of participants are assumed to be married. None are assumed to have dependent children. Females are assumed to be three years younger than their male spouses.
Benefit Election:	All participants are assumed to elect Option A. The benefit election reflects the fact that all benefit options are actuarially equivalent.
2020 Salary:	2022 salary equal to salaries provided in the data except for employees hired in 2022 for whom salaries were annualized.
Total Service:	Total creditable service reported in the data.
Net 3(8)(c) Liability:	No liability is valued for benefits paid to or received from other municipal systems.
Actuarial Value of Assets:	Market value of assets as reported in the System's Annual Statement less unrecognized return in each of the last five years with a fresh start as of January 1, 2021. Unrecognized return is equal to the difference between the actual market value return and the expected market value return and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at date of hire. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary. Normal Cost is determined using the plan of benefits applicable to each participant.
Actuarial Models:	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.
Justification for Change in Actuarial Assumptions:	<p>Based on past experience and future expectations, the following actuarial assumptions were changed with this valuation:</p> <ul style="list-style-type: none">• The mortality improvement scale was updated from MP-2016 to MP-2021.• The administrative expense assumption was reset to \$275,000 for calendar 2023, increasing 2.75% per year, based on information on expenses provided by the staff of the Retirement System.

Section 3: Actuarial Assumptions and Methods

Exhibit II: Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	January 1 through December 31																																																				
Plan Status:	Ongoing																																																				
Retirement Benefits:	<p>Employees covered by the Contributory Retirement Law are classified into one of four groups depending on job classification. Group 1 comprises most positions in state and local government. It is the general category of public employees. Group 4 comprises mainly police and firefighters. Group 2 is for other specified hazardous occupations. (Officers and inspectors of the State Police are classified as Group 3.)</p> <p>For employees hired prior to April 2, 2012, the annual amount of the retirement allowance is based on the member's final three-year average salary multiplied by the number of years and full months of creditable service at the time of retirement and multiplied by a percentage according to the following table based on the age of the member at retirement:</p> <table><tr><th colspan="4">Age Last Birthday at Date of Retirement</th></tr><tr><th>Percent</th><th>Group 1</th><th>Group 2</th><th>Group 4</th></tr><tr><td>2.5</td><td>65 or over</td><td>60 or over</td><td>55 or over</td></tr><tr><td>2.4</td><td>64</td><td>59</td><td>54</td></tr><tr><td>2.3</td><td>63</td><td>58</td><td>53</td></tr><tr><td>2.2</td><td>62</td><td>57</td><td>52</td></tr><tr><td>2.1</td><td>61</td><td>56</td><td>51</td></tr><tr><td>2.0</td><td>60</td><td>55</td><td>50</td></tr><tr><td>1.9</td><td>59</td><td>--</td><td>49</td></tr><tr><td>1.8</td><td>58</td><td>--</td><td>48</td></tr><tr><td>1.7</td><td>57</td><td>--</td><td>47</td></tr><tr><td>1.6</td><td>56</td><td>--</td><td>46</td></tr><tr><td>1.5</td><td>55</td><td>--</td><td>45</td></tr></table> <p>A member's final three-year average salary is defined as the greater of the highest consecutive three-year average annual rate of regular compensation and the average annual rate of regular compensation received during the last three years of creditable service prior to retirement.</p>	Age Last Birthday at Date of Retirement				Percent	Group 1	Group 2	Group 4	2.5	65 or over	60 or over	55 or over	2.4	64	59	54	2.3	63	58	53	2.2	62	57	52	2.1	61	56	51	2.0	60	55	50	1.9	59	--	49	1.8	58	--	48	1.7	57	--	47	1.6	56	--	46	1.5	55	--	45
Age Last Birthday at Date of Retirement																																																					
Percent	Group 1	Group 2	Group 4																																																		
2.5	65 or over	60 or over	55 or over																																																		
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2.0	60	55	50																																																		
1.9	59	--	49																																																		
1.8	58	--	48																																																		
1.7	57	--	47																																																		
1.6	56	--	46																																																		
1.5	55	--	45																																																		

Section 3: Actuarial Assumptions and Methods

For employees hired on April 2, 2012 or later, the annual amount of the retirement allowance is based on the member's final five-year average salary multiplied by the number of years and full months of creditable service at the time of retirement and multiplied by a percentage according to the following tables based on the age and years of creditable service of the member at retirement:

**For members with less than 30 years of creditable service:
Age Last Birthday at Date of Retirement**

Percent	Group 1	Group 2	Group 4
2.50	67 or over	62 or over	57 or over
2.35	66	61	56
2.20	65	60	55
2.05	64	59	54
1.90	63	58	53
1.75	62	57	52
1.60	61	56	51
1.45	60	55	50

**For members with 30 years of creditable service or greater:
Age Last Birthday at Date of Retirement**

Percent	Group 1	Group 2	Group 4
2.500	67 or over	62 or over	57 or over
2.375	66	61	56
2.250	65	60	55
2.125	64	59	54
2.000	63	58	53
1.875	62	57	52
1.750	61	56	51
1.625	60	55	50

A member's final five-year average salary is defined as the greater of the highest consecutive five-year average annual rate of regular compensation and the average annual rate of regular compensation received during the last five years of creditable service prior to retirement.

Section 3: Actuarial Assumptions and Methods

For employees who became members after January 1, 2011, regular compensation is limited to 64% of the federal limit found in 26 U.S.C. 401(a)(17). In addition, regular compensation for members who retire after April 2, 2012 will be limited to prohibit “spiking” of a member’s salary to increase the retirement benefit.

For all employees, the maximum annual amount of the retirement allowance is 80 percent of the member’s final average salary. Any member who is a veteran also receives an additional yearly retirement allowance of \$15 per year of creditable service, not exceeding \$300. The veteran allowance is paid in addition to the 80 percent maximum.

Employee Contributions:

Date of Hire	Contribution Rate
Prior to January 1, 1975	5%
January 1, 1975 – December 31, 1983	7%
January 1, 1984 – June 30, 1996	8%
July 1, 1996 onward	9%

In addition, employees hired after December 31, 1978 contribute an additional 2 percent of salary in excess of \$30,000.

Employees hired after 1983 who voluntarily withdraw their contributions with less than 10 ten years of credited service receive 3% interest on their contributions.

Employees in Group 1 hired on or after April 2, 2012 with 30 years of creditable service or greater will pay a base contribution rate of 6%.

Retirement Benefits (Superannuation):

Members of Group 1, 2 or 4 hired prior to April 2, 2012 may retire upon the attainment of age 55. For retirement at ages below 55, twenty years of creditable service is required.

Members hired prior to April 2, 2012 who terminate before age 55 with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the System).

Members of Group 1 hired April 2, 2012 or later may retire upon the attainment of age 60. Members of Group 2 or 4 hired April 2, 2012 or later may retire upon the attainment of age 55. Members of Group 4 may retire upon attainment of age 50 with ten years of creditable service.

Members hired April 2, 2012 or later who terminate before age 55 (60 for members of Group 1) with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (60 for members of Group 1) provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the System.

Section 3: Actuarial Assumptions and Methods

Ordinary Disability Benefit:	A member who is unable to perform his or her job due to a non-occupational disability will receive a retirement allowance if he or she has ten or more years of creditable service and has not reached age 55. The annual amount of such allowance shall be determined as if the member retired for superannuation at age 55 (age 60 for Group 1 members hired on or after April 2, 2012), based on the amount of creditable service at the date of disability. For veterans, there is a minimum benefit of 50 percent of the member's most recent year's pay plus an annuity based on his or her own contributions.
Accidental Disability Benefit:	For a job-connected disability, the benefit is 72 percent of the member's most recent annual pay plus an annuity based on his or her own contributions, plus additional amounts for surviving children. Benefits are capped at 75 percent of annual rate of regular compensation for employees who become members after January 1, 1988.
Death Benefits:	<p>In general, the beneficiary of an employee who dies in active service will receive a refund of the employee's own contributions. Alternatively, if the employee were eligible to retire on the date of death, a spouse's benefit will be paid equal to the amount the employee would have received under Option C. The surviving spouse of a member who dies with two or more years of credited service has the option of a refund of the employee's contributions or a monthly benefit regardless of eligibility to retire, if they were married for at least one year. There is also a minimum widow's pension of \$250 per month, and there are additional amounts for surviving children.</p> <p>If an employee's death is job-connected, the spouse will receive 72 percent of the member's most recent annual pay, in addition to a refund of the member's accumulated deductions, plus additional amounts for surviving children. However, in accordance with Section 100 of Chapter 32, the surviving spouse of a police officer, firefighter or corrections officer is killed in the line of duty will be eligible to receive an annual benefit equal to the maximum salary held by the member at the time of death.</p> <p>Upon the death of a job-connected disability retiree who retired prior to November 7, 1996 and could not elect an Option C benefit, a surviving spouse will receive an allowance of \$6,000 per year if the member dies for a reason unrelated to cause of disability.</p>
"Heart And Lung Law" And Cancer Presumption:	Any case of hypertension or heart disease resulting in total or partial disability or death to a uniformed fireman, permanent member of a police department, or certain employees of a county correctional facility is presumed to have been suffered in the line of duty, unless the contrary is shown by competent evidence. Any case of disease of the lungs or respiratory tract resulting in total disability or death to a uniformed fireman is presumed to have been suffered in the line of duty, unless the contrary is shown by competent evidence. There is an additional presumption for uniformed firemen that certain types of cancer are job-related if onset occurs while actively employed or within five years of retirement.
Options:	Members may elect to receive a full retirement allowance payable for life under Option A. Under Option B a member may elect to receive a lower monthly allowance in exchange for a guarantee that at the time of death any contributions not expended for annuity payments will be refunded to the beneficiary. Option C allows the member to take a lesser retirement allowance in exchange for providing a survivor with two-thirds of the lesser amount. Option C pensioners will have benefits converted from a reduced to a full retirement if the beneficiary predeceases the retiree.

Section 3: Actuarial Assumptions and Methods

Post-Retirement Benefits:	The Retirement Board has adopted the provisions of Section 51 of Chapter 127 of the Acts of 1999, which provide that the Retirement Board may approve an annual COLA in excess of the Consumer Price Index but not to exceed a 3% COLA on the first \$18,000 of a retirement allowance. Cost of living increases granted prior to July 1, 1998 are reimbursed by the Commonwealth and not reflected in this report.
Changes in Plan Provisions:	Pursuant to Chapter 269 of the Acts of 2022, the Retirement Board approved a one-time increase in the COLA percentage from 3% to 5% effective July 1, 2022. In addition, the Retirement Board increased the COLA base from \$18,000 to \$19,000 effective July 1, 2023, to \$20,000 effective July 1, 2024 and to \$21,000 effective July 1, 2025. Because these changes were not approved by the Select Board and Town Meeting, respectively, as of the measurement date, they are not reflected in this valuation.

Appendix: Definition of terms

Definitions of certain terms as they are used in Statement No. 68. The terms may have different meanings in other contexts.

Active employees	Individuals employed at the end of the reporting or measurement period, as applicable.
Actual contributions	Cash contributions recognized as additions to a pension Plan Fiduciary Net Position.
Actuarial present value of projected benefit payments	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial valuation	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial valuation date	The date as of which an actuarial valuation is performed.
Actuarially determined contribution	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad hoc cost-of-living adjustments (Ad Hoc COLAs)	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad hoc postemployment benefit changes	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Agent employer	An employer whose employees are provided with pensions through an agent multiple-employer defined benefit pension plan.
Agent multiple-employer defined benefit pension plan (agent pension plan)	A multiple-employer defined benefit pension plan in which pension plan assets are pooled for investment purposes but separate accounts are maintained for each individual employer so that each employer's share of the pooled assets is legally available to pay the benefits of only its employees.
Allocated insurance contract	A contract with an insurance company under which related payments to the insurance company are currently used to purchase immediate or deferred annuities for individual employees. Also may be referred to as an annuity contract.
Automatic cost-of-living adjustments (Automatic COLAs)	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

Appendix: Definition of terms

Automatic postemployment benefit changes	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Closed period	A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.
Collective deferred outflows of resources and deferred inflows of resources related to pensions	Deferred outflows of resources and deferred inflows of resources related to pensions arising from certain changes in the collective Net Pension Liability.
Collective Net Pension Liability	The Net Pension Liability for benefits provided through (1) a cost-sharing pension plan or (2) a single-employer or agent pension plan in circumstances in which there is a special funding situation.
Collective pension expense	Pension expense arising from certain changes in the collective Net Pension Liability.
Contributions	Additions to a pension Plan Fiduciary Net Position for amounts from employers, non-employer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.
Cost-of-living adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-sharing employer	An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.
Cost-sharing multiple employer defined benefit pension plan (Cost-sharing pension plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered payroll	The payroll of employees that are provided with pensions through the pension plan.
Deferred retirement option program (DROP)	A program that permits an employee to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The employee continues to provide service to the employer and is paid for that service by the employer after the DROP entry date; however, the pensions that would have been paid to the employee (if the employee had retired and not entered the DROP) are credited to an individual employee account within the defined benefit pension plan until the end of the DROP period.
Defined benefit pension plans	Pension plans that are used to provide defined benefit pensions.

Appendix: Definition of terms

Defined benefit pensions	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement No. 68.)
Defined contribution pension plans	Pension plans that are used to provide defined contribution pensions.
Defined contribution pensions	Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount rate	<p>The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following:</p> <ol style="list-style-type: none"> 1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension Plan Fiduciary Net Position is projected (under the requirements of Statement No. 68) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.
Entry age actuarial cost method	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.
Inactive employees	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Measurement period	The period between the prior and the current measurement dates.
Multiple-employer defined benefit pension plan	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

Appendix: Definition of terms

Net Pension Liability (NPL)	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.
Non-employer contributing entities	Entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of Statement No. 68, employees are not considered non-employer contributing entities.
Other postemployment benefits	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension plans	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan members	Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment	The period after employment.
Postemployment benefit changes	Adjustments to the pension of an inactive employee.
Postemployment healthcare benefits	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected benefit payments	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public employee retirement system	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real rate of return	The rate of return on an investment after adjustment to eliminate inflation.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single employer	An employer whose employees are provided with pensions through a single-employer defined benefit pension plan.

Appendix: Definition of terms

Single-employer defined benefit pension plan (Single-employer pension plan)	A defined benefit pension plan that is used to provide pensions to employees of only one employer.
Special funding situations	<p>Circumstances in which a non-employer entity is legally responsible for making contributions directly to a pension plan that is used to provide pensions to the employees of another entity or entities and either of the following conditions exists:</p> <ol style="list-style-type: none">1. The amount of contributions for which the non-employer entity legally is responsible is not dependent upon one or more events or circumstances unrelated to the pensions.2. The non-employer entity is the only entity with a legal obligation to make contributions directly to a pension plan.
Termination benefits	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL)	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement No. 68.