Belmont Contributory Retirement System

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

This report has been prepared at the request of the Belmont Contributory Retirement Board to assist the Board and the member units in preparing their financial report for their liabilities associated with the Belmont Contributory Retirement System. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Belmont Contributory Retirement 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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116 Huntington Ave., Suite 901 Boston, MA 02116-5749 segalco.com T 617.424.7300

July 5, 2023

Retirement Board Belmont Contributory Retirement System 455 Concord Avenue Belmont, MA 02478-0900

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67/68) Accounting Valuation based on a December 31, 2022 for the Belmont Contributory Retirement System, a cost-sharing multiple employer defined benefit pension plan. It contains the actuarial 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 because the Board had not approved the increase as of the measurement date. Please refer to the Belmont Contributory Retirement System Actuarial Valuation and Review as of January 1, 2022, dated December 5, 2022 for the data, assumptions, and plan of benefits underlying these calculations.

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 report for their liabilities associated with the Belmont Contributory Retirement System pension plan. The census and financial information on which our calculations were based were provided by the staff of the Belmont Contributory 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 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 Belmont Contributory Retirement System and reasonable expectations.

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

Sincerely,

Segal

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 67/68) as of December 31, 2022. This report is based on financial information as of December 31, 2022 and the Belmont Contributory Retirement System Actuarial Valuation and Review as of January 1, 2022, which reflects:

- The benefit provisions of Massachusetts General Law Chapter 32;
- The characteristics of covered active members, inactive participants, and retired members and beneficiaries as of January 1, 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

 The Net Pension Liability (NPL) is equal to the difference between the Total Pension Liability (TPL) and the Plan's Fiduciary Net Position. 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 (UAAL) on a market value basis. The NPL increased from \$48.0 million as of December 31, 2021 to \$67.1 million as of December 31, 2022 and the Plan's Fiduciary Net Position as a percent of the TPL decreased from 77.11% to 69.03%.

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- 2. The NPL was measured as of December 31, 2022 and December 31, 2021 was determined based upon the results of an actuarial valuation as of January 1, 2022.
- 3. The discount rate used to measure the TPL and NPL was 7.00% as of December 31, 2022 and December 31, 2021.
- 4. The market value of assets reported in the Annual Statement have been adjusted to reflect receivable contributions.

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 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 plus receivable contributions, as provided by the 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.
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.



General information about the pension plan

Plan Description

Plan membership. At December 31, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	357
Inactive participants with a vested right to a deferred or immediate benefit	16
Inactive participants entitled to a refund of employee contriubtions	311
Active members	<u>460</u>
Total	1,144



Net pension liability

Components of the Net Pension Liability	December 31, 2022	December 31, 2021
Total Pension Liability	\$216,790,861	\$209,885,380
Plan Fiduciary Net Position	149,647,926	161,844,218
Net Pension Liability	67,142,935	48,041,162
Plan Fiduciary Net Position as a percentage of the Total Pension Liability*	69.03%	77.11%

* These funded percentages are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.

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

Wage Inflation	3.00%
Salary increases	Varies by length of service with ultimate rates of 3.75% for Groups 1 and 2 and 4.25% for Group 4
Investment rate of return	7.00%
Cost of Living Adjustment	3% of first \$13,000
Mortality	Pre-Retirement: RP-2014 Blue Collar Employee Mortality Table set forward one year for female participants and projected generationally with Scale MP- 2021
	Healthy Retiree: RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year for female participants and projected generationally with Scale MP-2021
	Disabled Retiree: RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year and projected generationally with Scale MP-2021



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, 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	23.00%	6.59%
International developed markets equity	13.00%	6.87%
International emerging markets equity	7.00%	8.30%
Core fixed income	16.00%	1.53%
Private Credit	5.00%	6.01%
Real estate	12.00%	3.44%
Commodities	10.00%	4.01%
Hedge fund, GTAA, Risk parity	7.00%	3.06%
Private equity	<u>7.00%</u>	9.49%
Total	100.00%	

Notes:

Some asset classes included in the plan's target asset allocation have been combined. The Commodities asset class is used for PIMCO All Asset.

Discount rate. The discount rate used to measure the TPL was 7.00% 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. 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.

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Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability of the Belmont Contributory Retirement System as of December 31, 2022, calculated using the discount rate of 7.00%, as well as what the Belmont Contributory Retirement System's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate. The determination of the NPL by employer is shown in Section 3.

	Current		
Net Pension Liability	1% Decrease (6.00%)	Discount Rate (7.00%)	1% Increase (8.00%)
Belmont Contributory Retirement System's net pension liability as of December 31, 2022	\$90,443,083	\$67,142,935	\$47,523,503



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

	December 31, 2022	December 31, 2021
Total Pension Liability		
Service cost	\$4,933,263	\$5,070,223
Interest	14,595,490	14,753,149
Change of benefit terms	0	0
Differences between expected and actual experience	0	-6,325,237
Changes of assumptions	0	1,464,364
Benefit payments, including refunds of member contributions	<u>-12,623,272</u>	<u>-12,689,282</u>
Net change in Total Pension Liability	\$6,905,481	\$2,273,217
Total Pension Liability – beginning	<u>209,885,380</u>	<u>207,612,163</u>
Total Pension Liability – ending	\$216,790,861	\$209,885,380
Plan Fiduciary Net Position		
Contributions – employer	\$11,765,178	\$11,263,933
Contributions – employee	3,053,327	2,881,865
Net investment income	-14,021,937	22,732,996
Benefit payments, including refunds of member contributions	-12,623,272	-12,689,282
Administrative expense	<u>-369,588</u>	<u>-335,823</u>
Net change in Plan Fiduciary Net Position	-\$12,196,292	\$23,853,689
Plan Fiduciary Net Position – beginning	<u>161,844,218</u>	<u>137,990,529</u>
Plan Fiduciary Net Position – ending	\$149,647,926	\$161,844,218
Net Pension Liability – ending	\$67,142,935	\$48,041,162
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	69.03%	77.11%
Covered payroll ¹	\$29,750,684	\$28,593,922
Plan Net Pension Liability as percentage of covered payroll	225.69%	168.01%

¹ Covered employee payroll for 2022 and 2021 as estimated in the January 1, 2022 valuation.

Notes to schedule:

Changes in Actuarial Assumptions:	 Effective January 1, 2022: The investment return assumption was lowered fromm 7.15% to 7.00% The mortality projection scale was updated from scale MP-2017 to MP-2021 Effective January 1, 2023: None
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Changes in Plan Provisions:	None

Deferred outflows of resources and deferred inflows of resources – Total for all employers

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	\$1,679,523	\$2,413,829
Changes of assumptions	1,873,833	3,161,920
Net difference between projected and actual earnings on pension plan investments	9,237,187	0
Difference between expected and actual experience in the Total Pension Liability	<u>132,570</u>	<u>265,140</u>
Total Deferred Outflows of Resources	\$12,923,113	\$5,840,889
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions	\$1,679,523	\$2,413,829
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	0	13,966,527
Difference between expected and actual experience in the Total Pension Liability	<u>3,795,141</u>	<u>5,060,188</u>
Total Deferred Inflows of Resources	\$5,474,664	\$21,440,544
Deferred outflows of resources and deferred inflows of resources related to pension will be recogni	zed as follows:	
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	-\$2,716,160
2024	\$86,361	-4,996,625
2025	733,612	-4,349,374
2026	1,545,490	-3,537,496
2027	5,082,986	0
Thereafter	0	0

Note: Average expected remaining service life is 4 years as of December 31, 2022 and 5 years as of December 31, 2021.

Pension expense – Total for all employers

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	\$4,933,263	\$5,070,223
Interest	14,595,490	14,753,149
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	0	-1,265,049
Expensed portion of current-period changes of assumptions	0	292,872
Member contributions	-3,053,327	-2,881,865
Projected earnings on pension plan investments	-11,392,993	-9,906,388
Expensed portion of current-period differences between actual and projected earnings on plan investments	5,082,986	-2,565,320
Administrative expense	369,588	335,823
Recognition of beginning of year deferred outflows of resources as pension expense	3,701,122	4,622,249
Recognition of beginning of year deferred inflows of resources as pension expense	<u>-6,417,282</u>	<u>-3,791,482</u>
Pension Expense	\$7,818,847	\$4,664,212



Schedule of 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	\$7,364,523	\$7,364,523	\$0	\$25,142,886	29.29%
2015	7,877,960	7,877,960	0	25,031,508	31.47%
2016	8,427,189	8,432,117	-4,928	26,016,467	32.41%
2017	9,014,711	9,014,711	0	26,395,332	34.15%
2018	9,643,193	9,643,193	0	27,455,996	35.12%
2019	10,197,676	10,197,676	0	29,659,289	34.38%
2020	10,784,043	10,784,043	0	30,859,703	34.95%
2021	11,263,933	11,263,933	0	28,593,922	39.39%
2022	11,765,178	11,765,178	0	29,750,684	39.55%

See accompanying notes to this schedule on next page.



Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution":

-	-
Valuation date	Actuarial determined contribution for year ended December 31, 2022 is determined with the January 1, 2020 actuarial valuation.
Actuarial Cost Method	Entry Age Normal Cost Method
Amortization method	Payments increasing 4.50% for the 2003 ERI liability and remaining liability amortized so that the total payment increases 4.45% per year.
Remaining amortization period	As of July 1, 2020, 5 years for the 2003 ERI liability and 11 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. Asset value is adjusted as necessary to be within 20% of the market value.
Actuarial assumptions:	
Investment rate of return	7.15%
Wage Inflation rate	3.00%
Projected salary increases	Varies by length of service with ultimate rates of 3.75% for Groups 1 and 2 and 4.25% for Group 4
Cost of living adjustments	3% for first \$13,000
Other assumptions	Same as those used in the January 1, 2020 funding actuarial valuation.



Exhibit A: Determination of Proportionate Share

Employer	FY 2022 Total Appropriation	Percent of FY 2022 Total Appropriation	Share of NPL as of January 1, 2022	FY 2023 Total Appropriation	Percent of FY 2023 Total Appropriation	Share of NPL as of January 1, 2023
Town of Belmont	\$3,464,885	30.760881%	\$14,777,885	\$3,619,103	30.761141%	\$20,653,934
Belmont Housing Authority	155,034	1.376375%	661,227	161,934	1.376384%	924,144
Light Department	1,198,009	10.635797%	5,109,560	1,251,316	10.635759%	7,141,161
Water Department	248,832	2.209104%	1,061,279	259,904	2.209095%	1,483,251
School Department	2,667,309	23.680086%	11,376,188	2,785,993	23.679990%	15,899,440
Police and Fire Departments	3,529,864	31.337757%	15,055,023	3,686,928	31.337630%	21,041,005
Total for all Employers	\$11,263,933	100.000000%	\$48,041,162	\$11,765,178	100.000000%	\$67,142,935



Exhibit B: Determination of Proportionate Share Amounts by Employer

				Discount Rate Sensitivity			
Employer Name	2023 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	1% Decrease (6.00%) (4)	Current Discount Rate (7.00%) (5)	1% Increase (8.00%) (6)	
Town of Belmont	30.761141%	\$20,653,934	\$8,249,716	\$27,821,324	\$20,653,934	\$14,618,772	
Belmont Housing Authority	1.376384%	924,144	279,975	1,244,844	924,144	654,106	
Light Department	10.635759%	7,141,161	3,399,032	9,619,309	7,141,161	5,054,485	
Water Department	2.209095%	1,483,251	710,474	1,997,974	1,483,251	1,049,839	
School Department	23.679990%	15,899,440	7,181,717	21,416,913	15,899,440	11,253,561	
Police and Fire Departments	31.337630%	21,041,005	9,929,770	28,342,719	21,041,005	14,892,740	
Grand Totals	100.00000%	\$67,142,935	\$29,750,684	\$90,443,083	\$67,142,935	\$47,523,503	

	Schedule of Contributions					Pension Expense	
Employer Name	Statutory Required Contribution (7)	Contributions In Relation to the Statutory Required Contribution (8)	Contribution Deficiency/ (Excess) (9)	Contributions as a Percentage of Covered Employee Payroll (10)	Proportionate Share of Plan Pension Expense (11)	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions (12)	Total Employer Pension Expense (13)
Town of Belmont	\$3,619,103	\$3,619,103	\$0	43.8694%	\$2,405,167	-\$215,513	\$2,189,654
Belmont Housing Authority	161,934	161,934	0	57.8387%	107,617	-51,095	56,522
Light Department	1,251,316	1,251,316	0	36.8139%	831,594	173,658	1,005,252
Water Department	259,904	259,904	0	36.5818%	172,726	-94,202	78,524
School Department	2,785,993	2,785,993	0	38.7929%	1,851,502	356,715	2,208,217
Police and Fire Departments	3,686,928	3,686,928	0	37.1300%	2,450,241	-169,563	2,280,678
Grand Totals	\$11,765,178	\$11,765,178	\$0	39.5500%	\$7,818,847	\$0	\$7,818,847



		Deferred Outflow	/s of Resources	i	Deferred Inflows of Resources				
Employer Name	Differences Between Expected and Actual Experience (14)	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments (15)	Changes of Assumptions (16)	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions (17)	Total Deferred Outflows of Resources (18)	Differences Between Expected and Actual Experience (19)	Changes of Assumptions (20)	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions (21)	Total Deferred Inflows of Resources (22)
Town of Belmont	\$40,779	\$2,841,464	\$576,413	\$123	\$3,458,779	\$1,167,429	\$0	\$656,071	1,823,500
Belmont Housing Authority	1,825	127,139	25,791	78,429	233,184	52,236	0	41,945	94,181
Light Department	14,100	982,445	199,296	276,685	1,472,526	403,642	0	18	403,660
Water Department	2,929	204,058	41,395	83,226	331,608	83,838	0	123,079	206,917
School Department	31,393	2,187,365	443,723	1,148,186	3,810,667	898,689	0	34,406	933,095
Police and Fire Departments	41,544	2,894,716	587,215	92,874	3,616,349	1,189,307	0	824,004	2,013,311
Grand Totals	\$132,570	\$9,237,187	\$1,873,833	\$1,679,523	\$12,923,113	\$3,795,141	\$0	\$1,679,523	\$5,474,664

	Deferred Inflows/(O	utflows) Recognized	I in Future Pension E	xpense (Year Ende	ed June 30)
Employer Name	2024 (23)	2025 (24)	2026 (25)	2027 (26)	Thereafter (27)
Town of Belmont	-\$198,510	\$9,767	\$260,439	\$1,563,585	\$0
Belmont Housing Authority	-14,557	36,184	47,415	69,961	0
Light Department	179,162	131,446	217,644	540,614	0
Water Department	-93,415	43,956	61,861	112,288	0
School Department	368,906	556,536	748,479	1,203,651	0
Police and Fire Departments	<u>-155,225</u>	-44,277	209,652	1,592,887	<u>0</u>
Grand Totals	\$86,361	\$733,612	\$1,545,490	\$5,082,986	\$0



Definitions of certain terms as they are used in Statement 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).



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.



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 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:	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:
	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 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.



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 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.



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:	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:
	 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. 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 68.

