



Belmont Contributory Retirement System

**Governmental Accounting Standards Board
(GASB) Statements No. 67 and 68
Accounting Valuation Report
as of December 31, 2017**

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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September 12, 2018

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

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 Accounting Valuation as of December 31, 2017 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. Except as otherwise noted, please refer to the Belmont Contributory Retirement System Actuarial Valuation Report as of January 1, 2018, dated September 12, 2018, 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 the 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.

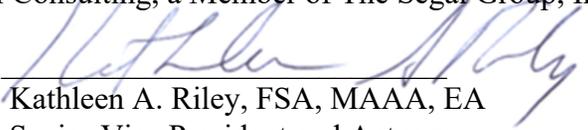
The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic 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 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. Further, in my opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Belmont Contributory Retirement System.

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

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

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

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Section 1: Actuarial Valuation Summary

Purpose

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 as of December 31, 2017. This report is based on the Belmont Contributory Retirement System Actuarial Valuation and Review as of January 1, 2018, 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, 2017;
- The assets of the System as of December 31, 2017;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues

The following key findings were the result of this actuarial 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 decreased from \$75.3 million as of December 31, 2016 to \$74.1 million as of December 31, 2017 and the Plan's Fiduciary Net Position as a percent of the TPL increased from 55.97% to 59.53%.
- The NPL measured as of December 31, 2017 and December 31, 2016 was determined based upon the results of the actuarial valuations as of January 1, 2018 and January 1, 2016, respectively.
- The discount rates used to measure the TPL and NPL as of December 31, 2017 and December 31, 2016 were 7.40% and 7.50%, respectively.

Important Information about Actuarial Valuations

In order to prepare an actuarial valuation, Segal Consulting (“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. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation 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 Belmont 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 Belmont Contributory Retirement System. The Belmont Contributory Retirement System uses an “actuarial value of assets” that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial Assumptions:	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

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

- The valuation is prepared at the request of the Belmont Contributory Retirement System to assist the Board and the member units in preparing items related to the pension plan in their financial reports. 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.
- Sections of this report may include actuarial results that are not rounded, but that does not imply precision.
- If the Belmont Contributory Retirement System 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 Board should look to their other advisors for expertise in these areas.

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



Section 2: GASB Information

Exhibit 1 – Net Pension Liability

	December 31, 2017	December 31, 2016
Components of the Net Pension Liability		
Total Pension Liability	\$183,043,747	\$171,077,164
Plan Fiduciary Net Position	108,963,549	95,758,427
Net Pension Liability	74,080,198	75,318,737
Plan Fiduciary Net Position as a percentage of the Total Pension Liability*	59.53%	55.97%

* 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 total pension liability as of December 31, 2017 was measured by an actuarial valuation as of December 31, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

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
Net Investment Return:	7.40% (previously, 7.50%), net of pension plan investment expense, including inflation
Cost of Living Adjustment:	3% of first \$13,000 (previously, \$12,000)
Mortality Rates:	<p><i>Pre-Retirement:</i> RP-2014 Blue Collar Employee Mortality Table set forward one year for female participants projected generationally with Scale MP-2017 (previously, RP-2000 Employee Mortality Table projected generationally from 2009 with Scale BB2D)</p> <p><i>Healthy Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year for female participants projected generationally with Scale MP-2017 (previously, RP-2000 Healthy Annuitant Mortality Table projected generationally from 2009 with Scale BB2D)</p> <p><i>Disabled Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year projected generationally with Scale MP-2017 (previously, RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D)</p>

Target Asset Allocation

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 and subtracting expected investment expenses and a risk margin. 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	28.00%	6.15%
International developed markets equity	10.00%	7.11%
International emerging markets equity	5.00%	9.41%
Core fixed income	10.00%	1.68%
High-yield fixed income	11.00%	4.13%
Real estate	12.00%	4.90%
Commodities	10.00%	4.71%
Hedge fund, GTAA, Risk parity	7.00%	3.94%
Private equity	<u>7.00%</u>	10.28%
Total	100.00%	

Note: Some asset classes included in the pension plan's target asset allocation have been combined.

Discount rate. The discount rates used to measure the Total Pension Liability (TPL) were 7.40% and 7.50% as of December 31, 2017 and December 31, 2016, respectively. 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, 2017 and December 31, 2016.

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 Belmont Contributory Retirement System as of December 31, 2017 calculated using the discount rate of 7.40%, 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 (6.40%) or 1-percentage-point higher (8.40%) than the current rate.

Net Pension Liability	1% Decrease (6.40%)	Current Discount Rate (7.40%)	1% Increase (8.40%)
Belmont Contributory Retirement System’s net pension liability as of December 31, 2017	\$93,877,829	\$74,080,198	\$57,443,705

Exhibit 2 – Schedule of Changes in Net Pension Liability – Last Two Fiscal Years

	December 31, 2017	December 31, 2016
Total Pension Liability		
Service cost	\$3,793,768	\$3,677,753
Interest	12,689,446	12,311,049
Change of benefit terms	770,006	0
Differences between expected and actual experience	2,782,900	0
Changes of assumptions	3,287,108	0
Benefit payments, including refunds of member contributions	<u>-11,356,645</u>	<u>-10,762,409</u>
Net change in Total Pension Liability	\$11,966,583	\$5,226,393
Total Pension Liability – beginning	<u>171,077,164</u>	<u>165,850,771</u>
Total Pension Liability – ending	\$183,043,747	\$171,077,164
Plan Fiduciary Net Position		
Contributions – employer	\$9,014,711	\$8,432,117
Contributions – employee	2,665,509	2,582,816
Net investment income	13,204,734	7,021,503
Benefit payments, including refunds of member contributions	<u>-11,356,645</u>	<u>-10,762,409</u>
Administrative expense	<u>-323,187</u>	<u>-321,612</u>
Net change in Plan Fiduciary Net Position	\$13,205,122	\$6,952,415
Plan Fiduciary Net Position – beginning	<u>95,758,427</u>	<u>88,806,012</u>
Plan Fiduciary Net Position – ending	\$108,963,549	\$95,758,427
Net Pension Liability – ending	\$74,080,198	\$75,318,737
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	59.53%	55.97%
Covered employee payroll ¹	\$26,395,332	\$26,016,467
Plan Net Pension Liability as percentage of covered employee payroll	280.66%	289.50%

¹ Covered employee payroll for 2017 and 2016 as estimated in the January 1, 2018 and January 1, 2016 funding valuation reports, respectively.

Notes to Schedule:

Changes in Actuarial Assumptions:

Effective January 1, 2016:

- The investment return assumption was lowered from 7.75% to 7.50%.
- The mortality assumption for employees was changed from the RP-2000 Employee Mortality Table projected 27 years using Scale AA to the RP-2000 Employee Mortality Table projected generationally using Scale BB2D from 2009.
- The mortality assumption for non-disabled retirees was changed from the RP-2000 Healthy Annuitant Mortality Table projected 19 years using Scale AA to the RP-2000 Healthy Annuitant Mortality Table projected generationally using Scale BB2D from 2009.
- The mortality assumption for disabled retirees was changed from the RP-2000 Healthy Annuitant Mortality Table set forward 3 years projected 19 years using Scale AA to the RP-2000 Healthy Annuitant Mortality Table projected generationally using Scale BB2D from 2015.
- The administrative expense assumption was increased from \$175,000, increasing 4.0% per year to \$290,000, increasing 3.0% per year.
- The allowance for net 3(8)(c) reimbursements was changed from \$200,000 for 2014, increasing 4.0% per year, to \$200,000 for 2016, increasing 3.0% per year.

Effective January 1, 2018:

- The investment return assumption was lowered from 7.50% to 7.40%.
- The mortality assumption for non-disabled participants was updated from the RP-2000 Employee and Healthy Annuitant Mortality Tables projected generationally from 2009 with Scale BB2D to the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables set forward one year for female participants projected generationally with Scale MP-2017.
- The mortality assumption for disabled participants was updated from the RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D to the RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year projected generationally with Scale MP-2017.

Changes in Plan Provisions:

Effective January 1, 2018:

- As permitted by Section 63 of Chapter 139 of the Acts of 2012, the Board has increased the Section 101 annual allowance from \$6,000 to \$12,000 as of July 1, 2018.
- As permitted by Section 19 of Chapter 188 of the Acts of 2010, the Cost of Living Adjustment base was increased from \$12,000 to \$13,000 as of July 1, 2019.
- As permitted by Section 30 of Chapter 176 of the Acts of 2011, the Board has adopted an increase to the Section 12 minimum annual allowance from \$3,000 to \$6,000.

Exhibit 3 – Schedule of Contributions – Last Four Fiscal Years

Year Ended December 31	Actuarially Determined Contributions ¹	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered Employee 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%

Notes to Schedule:

Valuation date:	Actuarial Determined Contribution for 2017 was determined with the January 1, 2016 actuarial valuation.
Actuarial cost method:	Entry Age Normal Cost Method
Amortization method:	Level payments on the 2002 ERI liability, payments increasing 4.5% per year for the 2003 ERI liability, and remaining liability amortized so that total payment increases by 6.97% in fiscal 2018 and fiscal 2019 and 4.45% thereafter.
Remaining amortization period:	As of July 1, 2016, 2 years for the 2002 ERI liability, 9 years for the 2003 ERI liability and 13 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	7.50% (previously, 7.75%)
• Discount rate	7.50% (previously, 7.75%)
• Inflation rate	3.00% (previously, 4.00%)
• 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% of first \$12,000
Plan membership:	
• Retired participants and beneficiaries receiving benefits	348
• Inactive participants entitled to a return of their employee contributions	219
• Inactive participants with a vested right to a deferred or immediate benefit	11
• Active participants	460
• Total	1,038

¹ The Actuarially Determined Contribution for 2017 is based on the January 1, 2016 actuarial valuation. The Actuarially Determined Contributions for 2016 and 2015 are based on the results of the January 1, 2014 actuarial valuation. The Actuarially Determined Contribution for 2014 is based on the results of the January 1, 2012 actuarial valuation.

Exhibit 4 – Pension Expense

Reporting Date for Employer under GASB 68	June 30, 2018	June 30, 2017
Measurement Date for Employer under GASB 68	December 31, 2017	December 31, 2016
Components of Pension Expense		
Service cost	\$3,793,768	\$3,677,753
Interest on the Total Pension Liability	12,689,446	12,311,049
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Expensed portion of current-period benefit changes	770,006	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	556,580	0
Expensed portion of current-period changes of assumptions or other inputs	657,422	0
Member contributions	-2,665,509	-2,582,816
Projected earnings on plan investments	-7,181,897	-6,657,860
Expensed portion of current-period differences between actual and projected earnings on plan investments	-1,204,567	-72,729
Administrative expense	323,187	321,612
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	2,681,340	2,681,340
Recognition of beginning of year deferred inflows of resources as pension expense	-534,502	-461,773
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$9,885,274	\$9,216,576

Deferred Outflows of Resources and Deferred Inflows of Resources

Reporting Date for Employer under GASB 68	June 30, 2018	June 30, 2017
Measurement Date for Employer under GASB 68	December 31, 2017	December 31, 2016
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,263,811	\$734,180
Changes of assumptions or other inputs	5,303,212	4,010,289
Net difference between projected and actual earnings on pension plan investments	0	3,572,245
Difference between expected and actual experience in the Total Pension Liability	<u>2,226,320</u>	<u>0</u>
Total Deferred Outflows of Resources	\$8,793,343	\$8,316,714
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,263,811	\$734,180
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	2,517,873	0
Difference between expected and actual experience in the Total Pension Liability	<u>923,548</u>	<u>1,385,321</u>
Total Deferred Inflows of Resources	4,705,232	2,119,501
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:		
2018	N/A	\$2,146,838
2019	\$2,156,271	2,146,836
2020	1,985,701	1,976,266
2021	-63,292	-72,727
2022	9,431	0
2023	0	0
Thereafter	0	0

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

Exhibit 5 – Determination of Proportionate Share

Employer Name	FY 2017 Total Appropriation	Percent of FY 2017 Total Appropriation	Share of NPL as of January 1, 2017	FY 2018 Total Appropriation	Percent of FY 2018 Total Appropriation	Share of NPL as of January 1, 2018
Town of Belmont	\$2,838,565	33.683415%	\$25,369,922	\$2,911,167	32.293515%	\$23,923,099
Belmont Housing Authority	145,222	1.723256%	1,297,934	156,398	1.734920%	1,285,233
Light Department	723,497	8.585271%	6,466,318	848,861	9.416397%	6,975,686
Water Department	221,822	2.632218%	1,982,554	257,987	2.861844%	2,120,060
School Department	1,753,532	20.808030%	15,672,345	1,905,314	21.135608%	15,657,300
Police and Fire Departments	2,744,551	32.567811%	24,529,664	2,934,984	32.557716%	24,118,820
Grand Totals:	\$8,427,189	100.000000%	\$75,318,737	\$9,014,711	100.000000%	\$74,080,198

Exhibit 6 – Determination of Proportionate Share Amounts by Employer

Employer Name	2018 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	Discount Rate Sensitivity		
				1% Decrease (6.40%) (4)	Current Discount Rate (7.40%) (5)	1% Increase (8.40%) (6)
Town of Belmont	32.293515%	\$23,923,099	\$8,382,225	\$30,316,451	\$23,923,099	\$18,550,591
Belmont Housing Authority	1.734920%	1,285,233	305,694	1,628,705	1,285,233	996,603
Light Department	9.416397%	6,975,686	2,730,334	8,839,909	6,975,686	5,409,127
Water Department	2.861844%	2,120,060	535,541	2,686,637	2,120,060	1,643,949
School Department	21.135608%	15,657,300	5,578,868	19,841,650	15,657,300	12,141,076
Police and Fire Departments	32.557716%	24,118,820	8,862,670	30,564,477	24,118,820	18,702,359
Grand Totals:	100.000000%	\$74,080,198	\$26,395,332	\$93,877,829	\$74,080,198	\$57,443,705

Employer Name	Schedule of Contributions				Pension Expense		
	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	\$2,911,167	\$2,911,167	\$0	34.73%	\$3,192,302	-\$122,256	\$3,070,046
Belmont Housing Authority	156,398	156,398	0	51.16%	171,502	-29,593	141,909
Light Department	848,861	848,861	0	31.09%	930,837	74,834	1,005,671
Water Department	257,987	257,987	0	48.17%	282,901	-4,370	278,531
School Department	1,905,314	1,905,314	0	34.15%	2,089,313	214,149	2,303,462
Police and Fire Departments	2,934,984	2,934,984	0	33.12%	3,218,419	-132,764	3,085,655
Grand Totals:	\$9,014,711	\$9,014,711	\$0	34.15%	\$9,885,274	\$0	\$9,885,274

Employer Name	Deferred Outflows of Resources				Deferred Inflows of Resources				
	Differences Between Expected and Actual Experience (14)	Changes of Assumptions (15)	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions (16)	Total Deferred Outflows of Resources (17)	Differences Between Expected and Actual Experience (18)	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments (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	\$718,957	\$1,712,594	\$141,925	\$2,573,476	\$298,246	\$813,109	\$0	\$771,490	\$1,882,845
Belmont Housing Authority	38,625	92,006	6,450	137,081	16,023	43,683	0	62,159	121,865
Light Department	209,639	499,371	461,043	1,170,053	86,965	237,093	0	80,425	404,483
Water Department	63,714	151,770	127,594	343,078	26,431	72,058	0	72,886	171,375
School Department	470,546	1,120,866	519,319	2,110,731	195,197	532,168	0	615	727,980
Police and Fire Departments	724,839	1,726,605	7,480	2,458,924	300,686	819,762	0	276,236	1,396,684
Grand Totals:	\$2,226,320	\$5,303,212	\$1,263,811	\$8,793,343	\$923,548	\$2,517,873	\$0	\$1,263,811	\$4,705,232

Employer Name	Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended June 30)					
	2019 (23)	2020 (24)	2021 (25)	2022 (26)	2023 (27)	Thereafter (28)
Town of Belmont	\$574,078	\$518,554	-\$212,903	-\$189,098	\$0	\$0
Belmont Housing Authority	7,816	7,806	-2,182	1,776	0	0
Light Department	277,878	262,567	109,339	115,786	0	0
Water Department	57,341	52,292	30,056	32,014	0	0
School Department	669,891	632,702	32,879	47,279		
Police and Fire Departments	569,267	511,780	-20,481	1,674	0	0
Grand Totals:	\$2,156,271	\$1,985,701	-\$63,292	\$9,431	\$0	\$0

APPENDIX – GLOSSARY OF TERMS

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-Employee 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:	<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:	<p>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.</p>
Total Pension Liability (TPL):	<p>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.</p>