

# Middlesex County Retirement System

**Governmental Accounting Standards Board  
(GASB) Statements No. 67 and 68  
Accounting Valuation Report**

as of December 31, 2020



This report has been prepared at the request of the Middlesex County Retirement Board to assist the Board and the member units in preparing their financial reports for their liabilities associated with the Middlesex County Retirement System. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Middlesex County 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.

**Segal**

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June 22, 2021

Retirement Board  
Middlesex County Retirement System  
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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, 2020 for the Middlesex County 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. Please refer to the Middlesex County Retirement System Actuarial Valuation Report as of January 1, 2020, dated July 27, 2020, 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 reports for their liabilities associated with the Middlesex County Retirement System. The census and financial information on which our calculations were based were provided by the staff of the Middlesex County 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 directed under the supervision of Bridget P. Orr, ASA, MAAA, EA. She is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of her knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in her opinion, the assumptions as approved by the Retirement Board are reasonably related to the experience of and the expectations for the Middlesex County Retirement System.

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 Actuary

  
\_\_\_\_\_  
Bridget P. Orr, ASA, MAAA, EA  
Consulting Actuary

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# Section 1: Actuarial Valuation Summary

## Purpose

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 as of December 31, 2020. This report is based on the Middlesex County Retirement System Actuarial Valuation and Review as of January 1, 2020, 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, 2019, 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.

## Significant issues

The following key findings were the result of this actuarial valuation:

1. 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 \$1.600 billion as of December 31, 2019 to \$1.531 billion as of December 31, 2020 and the Plan's Fiduciary Net Position as a percent of the TPL increased from 49.45% to 53.42%.
2. The NPL measured as of December 31, 2020 and December 31, 2019 was determined based upon the results of the actuarial valuation as of January 1, 2020.
3. The discount rate used to measure the TPL and NPL as of December 31, 2020 and December 31, 2019 was 7.30%.

## Section 1: Actuarial Valuation Summary

### Important information about actuarial valuations

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

<b>Plan of Benefits:</b>	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.
<b>Participant Data:</b>	An actuarial valuation for a plan is based on data provided to the actuary by the Middlesex County 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.
<b>Assets:</b>	The valuation is based on the market value of assets as of the valuation date, as provided by the Middlesex County Retirement System. The Middlesex County 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.
<b>Actuarial Assumptions:</b>	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.
<b>Models</b>	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 valuation is prepared at the request of the Middlesex County Retirement Board 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 Middlesex County 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 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 Middlesex County Retirement System, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Middlesex County Retirement System.

# Section 2: GASB Information

## General information about the pension plan

*Plan membership.* At December 31, 2019, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	5,862
Inactive participants entitled to a refund of employee contributions	3,082
Inactive participants with a vested right to a deferred or immediate benefit	381
Active members	<u>9,282</u>
Total	18,607



## Section 2: GASB Information

### Exhibit 1 – Net Pension Liability

	December 31, 2020	December 31, 2019
<b>Components of the Net Pension Liability</b>		
Total Pension Liability	\$3,287,231,456	\$3,165,584,276
Plan Fiduciary Net Position	1,756,138,330	1,565,528,261
Net Pension Liability	1,531,093,126	1,600,056,015
Plan Fiduciary Net Position as a percentage of the Total Pension Liability*	53.42%	49.45%

\* 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, 2020 was measured by an actuarial valuation as of January 1, 2020, using the following actuarial assumptions, applied to all periods included in the measurement:

<b>Salary Increases:</b>	Varies by length of service with ultimate rates of 4.00% for Group 1, 4.25% for Group 2 and 4.50% for Group 4
<b>Wage Inflation:</b>	3.25%
<b>Net Investment Return:</b>	7.30%
<b>Cost of Living Adjustment:</b>	3% of first \$16,000
<b>Mortality Rates:</b>	<p><i>Pre-Retirement:</i> RP-2014 Blue Collar Employee Mortality Table projected generationally with Scale MP-2017</p> <p><i>Healthy Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale MP-2017</p> <p><i>Disabled Retiree:</i> RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year projected generationally with Scale MP-2017</p>

## Section 2: GASB Information

### 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 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	22.00%	6.28%
International developed markets equity	12.00%	7.00%
International emerging markets equity	5.00%	8.82%
Core fixed income	15.00%	0.38%
High-yield fixed income	8.00%	2.97%
Real estate	10.00%	3.50%
Timber	4.00%	3.45%
Hedge fund, GTAA, Risk parity	10.00%	2.35%
Private equity	<u>14.00%</u>	10.11%
Total	100.00%	

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

*Discount rate.* The discount rate used to measure the Total Pension Liability (TPL) was 7.30% as of December 31, 2020 and December 31, 2019. 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, 2020 and December 31, 2019.

## 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 Middlesex County Retirement System as of December 31, 2020 calculated using the discount rate of 7.30%, as well as what the Middlesex County Retirement System's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.30%) or 1-percentage-point higher (8.30%) than the current rate.

<b>Net Pension Liability</b>	<b>1% Decrease (6.30%)</b>	<b>Current Discount Rate (7.30%)</b>	<b>1% Increase (8.30%)</b>
Middlesex County Retirement System's net pension liability as of December 31, 2020	\$1,907,906,916	\$1,531,093,126	\$1,214,072,425

## Section 2: GASB Information

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

	December 31, 2020	December 31, 2019
<b>Total Pension Liability</b>		
Service cost	\$73,591,386	\$66,816,001
Interest	229,825,239	216,905,942
Change of benefit terms	0	29,156,339
Differences between expected and actual experience	0	46,671,873
Changes of assumptions or other inputs	0	65,013,900
Benefit payments, including refunds of member contributions	<u>-181,769,445</u>	<u>-168,486,003</u>
Net change in Total Pension Liability	\$121,647,180	\$256,078,052
Total Pension Liability – beginning	<u>3,165,584,276</u>	<u>2,909,506,224</u>
Total Pension Liability – ending	\$3,287,231,456	\$3,165,584,276
<b>Plan Fiduciary Net Position</b>		
Contributions – employer	\$138,290,237	\$129,685,754
Contributions – employee	51,832,960	49,170,931
Net investment income	185,567,914	208,470,212
Benefit payments, including refunds of member contributions	<u>-181,769,445</u>	<u>-168,486,003</u>
Administrative expense	<u>-3,311,597</u>	<u>-3,352,400</u>
Net change in Plan Fiduciary Net Position	\$190,610,069	\$215,488,494
Plan Fiduciary Net Position – beginning	<u>1,565,528,261</u>	<u>1,350,039,767</u>
Plan Fiduciary Net Position – ending	\$1,756,138,330	\$1,565,528,261
Net Pension Liability – ending	1,531,093,126	1,600,056,015
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	53.42%	49.45%
Covered employee payroll <sup>1</sup>	\$513,201,283	\$492,109,775
Plan Net Pension Liability as percentage of covered employee payroll	298.34%	325.14%

<sup>1</sup> Covered employee payroll for 2020 and 2019 as estimated in the January 1, 2020 funding valuation.  
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Middlesex County Retirement System

## Section 2: GASB Information

### Notes to schedule:

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**Changes in Actuarial Assumptions:**

Effective January 1, 2020:

- The investment return assumption was lowered from 7.50% to 7.30%.

Effective January 1, 2021:

- None
- 

**Changes in Plan Provisions:**

Effective January 1, 2020:

- As permitted by Section 19 of Chapter 188 of the Acts of 2010, the Cost of Living Adjustment base was increased from \$14,000 to \$16,000 as of July 1, 2019.

Effective January 1, 2021:

- None
-

## Section 2: GASB Information

### Exhibit 3 – Schedule of Contributions – Last Seven Fiscal Years

Year Ended December 31	Actuarially Determined Contributions <sup>1</sup>	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
2014	\$92,826,743	\$93,400,946	-\$574,203	\$415,752,810	22.47%
2015	98,792,642	99,820,481	-1,027,839	432,382,921	23.09%
2016	105,246,797	107,067,707	-1,820,910	439,644,322	24.35%
2017	112,017,087	115,426,815	-3,409,728	451,777,105	25.55%
2018	119,298,291	120,614,676	-1,316,385	471,115,185	25.60%
2019	127,151,838	129,685,754	-2,533,916	492,109,775	26.35%
2020	135,472,822	138,290,237	-2,817,415	513,201,283	26.95%

#### Notes to schedule:

<b>Valuation date:</b>	Actuarial determined contribution for year ended December 31, 2020 is determined with the January 1, 2018 actuarial valuation.	
<b>Actuarial cost method:</b>	Entry Age Normal Cost Method	
<b>Amortization method:</b>	Prior year's total contribution increased by 6.5% for fiscal 2020 through fiscal 2027, and thereafter the remaining unfunded liability will be amortized on a 4.0% annual increasing basis; ERI liability amortized in level payments.	
<b>Remaining amortization period:</b>	17 years from July 1, 2018 for non-ERI liability, 1 year from July 1, 2018 for 2002 ERI, 2 years from July 1, 2018 for 2003 ERI, and 4 years from July 1, 2018 for 2010 ERI.	
<b>Asset valuation method:</b>	Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual and expected return on a market value basis, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.	
<b>Actuarial assumptions:</b>		
• Investment rate of return	7.50% (previously, 7.75%)	
• Discount rate	7.50% (previously, 7.75%)	
• Wage inflation rate	3.25% (previously, 3.50%)	
• Projected salary increases	Varies by length of service with ultimate rates of 4.00% for Group 1, 4.25% for Group 2 and 4.50% for Group 4 (previously, ultimate rates of 4.25%, 4.50%, and 4.75% for Groups 1, 2 and 4, respectively)	
• Cost of living adjustments	3% of first \$14,000	
<b>Plan membership:</b>		
	• Retired participants and beneficiaries receiving benefits	5,531
	• Inactive participants entitled to a return of their employee contributions	2,771
	• Inactive participants with a vested right to a deferred or immediate benefit	343
	• Active participants	<u>9,168</u>
	• Total	17,813

<sup>1</sup> The Actuarially Determined Contribution for 2020 is based on the results of the January 1, 2018 actuarial valuation.

## Section 2: GASB Information

### Exhibit 4 – Pension Expense

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
<b>Components of Pension Expense</b>		
Service cost	\$73,591,386	\$66,816,001
Interest on the Total Pension Liability	229,825,239	216,905,942
Current-period benefit changes	--	29,156,339
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	--	9,334,373
Expensed portion of current-period changes of assumptions	--	13,002,780
Member contributions	-51,832,960	-49,170,931
Projected earnings on plan investments	-114,467,602	-101,516,168
Expensed portion of current-period differences between actual and projected earnings on plan investments	-14,220,064	-21,390,808
Administrative expense	3,311,597	3,352,400
Recognition of beginning of year deferred outflows of resources as pension expense	92,016,101	85,363,530
Recognition of beginning of year deferred inflows of resources as pension expense	<u>-42,762,372</u>	<u>-21,371,563</u>
<b>Pension Expense</b>	<b>\$175,461,325</b>	<b>\$230,481,895</b>

## Section 2: GASB Information

### Deferred outflows of resources and deferred inflows of resources

Reporting Date for Employer under GASB 68	June 30, 2021	June 30, 2020
Measurement Date for Employer under GASB 68	December 31, 2020	December 31, 2019
<b>Deferred Outflows of Resources</b>		
Changes in proportion and differences between employer's contributions and proportionate share of contributions	\$22,923,004	\$43,163,151
Changes of assumptions	58,447,504	110,189,599
Net difference between projected and actual earnings on plan investments	0	0
Difference between expected and actual experience in the Total Pension Liability	<u>28,003,125</u>	<u>38,932,789</u>
Total Deferred Outflows of Resources	\$109,373,633	\$192,285,539
<b>Deferred Inflows of Resources</b>		
Changes in proportion and differences between employer's contributions and proportionate share of contributions	\$22,923,004	\$43,163,151
Changes of assumptions	0	0
Net difference between projected and actual earnings on plan investments	86,795,430	41,521,333
Difference between expected and actual experience in the Total Pension Liability	<u>1,811,877</u>	<u>3,623,756</u>
Total Deferred Inflows of Resources	\$111,530,311	\$88,308,240
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
<b>Reporting Date for Employer under GASB 68 Year Ended June 30:</b>		
2021	N/A	\$49,253,729
2022	\$11,702,352	25,922,414
2023	13,634,748	27,854,810
2024	-13,273,716	946,346
2025	-14,220,062	0
Thereafter	0	0

Note: Average expected remaining service life as of December 31, 2020 and December 31, 2019 is 5 years.



## Section 2: GASB Information

### Exhibit 5 – Determination of Proportionate Share

Employer Name	FY 2020 Total Contributions	Share of NPL as of January 1, 2020	Percent of Total NPL	FY 2021 Total Contributions	Share of NPL as of January 1, 2021 <sup>1</sup>	Percent of Total NPL
Middlesex County Retirement Board	\$351,211	\$0	0.000000%	\$356,333	\$0	0.000000%
Middlesex County	0	0	0.000000%	0	0	0.000000%
Middlesex Hospital	0	0	0.000000%	0	0	0.000000%
Town of Acton	4,236,342	54,966,604	3.435292%	4,615,717	52,615,628	3.436475%
Town of Ashby	237,579	1,941,210	0.121321%	251,979	1,775,392	0.115956%
Town of Ashland	3,086,828	37,703,972	2.356416%	3,243,063	35,887,576	2.343919%
Town of Ayer	1,687,582	20,395,526	1.274676%	2,087,745	19,150,544	1.250776%
Town of Bedford	4,470,165	54,291,514	3.393101%	4,787,530	51,394,381	3.356712%
Town of Billerica	11,921,516	157,213,941	9.825526%	12,782,396	152,215,238	9.941605%
Town of Boxborough	943,152	12,546,753	0.784145%	1,008,914	12,166,423	0.794623%
Town of Burlington	10,023,321	137,604,549	8.599982%	10,675,811	133,422,263	8.714183%
Town of Carlisle	991,823	11,101,958	0.693848%	1,057,819	10,349,764	0.675972%
Town of Chelmsford	9,272,242	114,671,152	7.166695%	9,511,562	110,931,084	7.245221%
Town of Dracut	5,348,633	68,887,607	4.305325%	5,727,860	66,580,110	4.348534%
Town of Dunstable	275,072	3,317,391	0.207330%	292,296	3,218,104	0.210183%
Town of Groton	1,973,053	25,513,416	1.594533%	2,090,290	24,595,262	1.606386%
Town of Holliston	2,332,595	26,676,612	1.667230%	2,385,594	25,050,502	1.636119%
Town of Hopkinton	2,341,404	26,084,382	1.630217%	2,486,832	24,095,505	1.573745%
Town of Hudson	5,804,347	69,381,303	4.336180%	6,207,788	66,148,477	4.320343%
Town of Lincoln	2,274,023	27,767,333	1.735398%	2,434,721	26,477,563	1.729324%
Town of Littleton	3,086,111	26,056,611	1.628481%	3,281,774	23,466,261	1.532648%
Town of North Reading	4,161,014	52,178,434	3.261038%	4,401,955	50,095,267	3.271863%
Town of Pepperell	1,455,491	18,312,861	1.144514%	1,531,884	17,612,899	1.150348%

<sup>1</sup> Net Pension Liability for each employer was determined on an individual basis.

The NPL for the Middlesex County Retirement Board, Middlesex County and the Middlesex Hospital has been allocated amongst the other units in the System in proportion to the remaining units' NPL because the obligation to fund these units is a shared responsibility of these other units.

## Section 2: GASB Information

Employer Name	FY 2020 Total Contributions	Share of NPL as of January 1, 2020	Percent of Total NPL	FY 2021 Total Contributions	Share of NPL as of January 1, 2021 <sup>1</sup>	Percent of Total NPL
Town of Sherborn	1,018,037	10,450,215	0.653116%	1,087,478	9,801,713	0.640177%
Town of Shirley	785,020	9,325,501	0.582823%	818,964	8,952,975	0.584744%
Town of Stow	957,695	11,909,143	0.744295%	1,024,938	11,389,407	0.743874%
Town of Sudbury	5,026,152	64,186,721	4.011530%	5,389,846	61,745,935	4.032801%
Town of Tewksbury	8,553,198	107,519,124	6.719710%	8,807,233	104,198,258	6.805481%
Town of Townsend	854,966	8,637,189	0.539805%	911,165	8,103,799	0.529282%
Town of Tyngsborough	2,018,021	25,022,982	1.563882%	2,152,711	24,002,922	1.567698%
Town of Wayland	4,863,333	59,191,196	3.699320%	5,182,543	56,416,777	3.684738%
Town of Westford	5,154,547	59,489,841	3.717985%	5,473,719	56,098,309	3.663938%
Town of Weston	5,287,887	67,631,236	4.226804%	5,668,652	64,849,395	4.235496%
Town of Wilmington	8,088,259	91,654,915	5.728232%	9,104,998	86,423,315	5.644550%
Acton-Boxborough RSD	2,615,376	31,360,065	1.959935%	2,794,347	30,083,545	1.964841%
Acton Water Supply	243,164	3,732,674	0.233284%	256,971	3,548,184	0.231742%
Bedford Housing Authority	32,373	332,568	0.020785%	27,468	315,580	0.020611%
Billerica Housing Authority	107,339	1,647,762	0.102982%	115,453	1,612,020	0.105286%
Chelmsford Housing Authority	323,132	2,275,176	0.142194%	271,136	2,016,950	0.131733%
Chelmsford Water District	63,546	343,766	0.021485%	67,843	24,164	0.001578%
Dracut Housing Authority	150,496	2,317,408	0.144833%	162,257	2,264,513	0.147902%
Dracut Water Supply	229,578	3,356,809	0.209793%	247,338	3,240,627	0.211654%
E. Chelmsford Water	33,752	395,631	0.024726%	35,999	366,619	0.023945%
E. Middlesex Mosq Control	48,048	712,131	0.044507%	51,505	649,547	0.042424%
Greater Lowell RVTSD	1,215,091	18,372,432	1.148237%	1,307,090	17,820,793	1.163926%
Groton-Dunstable RSD	1,022,579	13,046,678	0.815389%	1,077,851	12,381,614	0.808678%

## Section 2: GASB Information

Employer Name	FY 2020 Total Contributions	Share of NPL as of January 1, 2020	Percent of Total NPL	FY 2021 Total Contributions	Share of NPL as of January 1, 2021 <sup>1</sup>	Percent of Total NPL
Hudson Housing Authority	91,276	704,593	0.044036%	98,078	616,643	0.040275%
Lincoln Sudbury	704,071	9,126,061	0.570359%	755,859	8,715,281	0.569220%
Nashoba Vally THSD	302,392	3,735,397	0.233454%	324,010	3,650,910	0.238451%
N. Chelmsford Water	67,121	1,074,652	0.067163%	72,338	977,691	0.063856%
North Middlesex RSD	1,049,643	13,400,780	0.837519%	1,123,918	12,806,518	0.836430%
Shawsheen Valley RVS	675,105	8,870,284	0.554373%	706,293	8,542,800	0.557954%
South Middlesex RVTS	559,609	7,027,195	0.439184%	599,951	6,677,782	0.436145%
Sudbury Water District	131,864	2,571,703	0.160726%	142,163	2,449,672	0.159995%
Tewksbury Housing Authority	133,342	1,723,517	0.107716%	137,197	1,645,758	0.107489%
Wayland Housing Authority	51,279	675,758	0.042233%	55,104	625,875	0.040878%
Hopkinton Housing Authority	37,224	537,329	0.033582%	40,023	517,677	0.033811%
Sudbury Housing Authority	40,316	490,188	0.030636%	43,152	465,613	0.030411%
Wilmington Housing Authority	33,927	382,144	0.023883%	32,574	370,673	0.024210%
Acton Housing Authority	60,962	907,630	0.056725%	66,700	861,176	0.056246%
Burlington Housing Authority	13,577	345,712	0.021606%	14,349	327,467	0.021388%
Ayer Housing Authority	57,680	879,177	0.054947%	62,116	858,485	0.056070%
Holliston Housing Authority	14,815	175,571	0.010973%	15,782	168,599	0.011012%
Littleton Housing Authority	40,463	621,840	0.038864%	43,356	607,838	0.039700%
Westford Housing Authority	47,397	570,710	0.035668%	50,725	537,128	0.035081%
Shirley Water District	22,677	484,781	0.030298%	24,607	453,772	0.029637%
Tyngsboro Housing Authority	41,548	528,855	0.033052%	44,565	516,453	0.033731%
Pepperell Housing Authority	17,159	251,415	0.015713%	18,331	247,338	0.016154%
Groton Housing Authority <sup>1</sup>	2,809	0	0.000000%	2,867	0	0.000000%

<sup>1</sup> Since the last participant employed by the Groton Housing Authority transferred to the Westford Housing Authority prior to 2020, the fiscal year 2021 contribution from the Groton Housing Authority has been credited to the Westford Housing Authority.

## Section 2: GASB Information

Employer Name	FY 2020 Total Contributions	Share of NPL as of January 1, 2020	Percent of Total NPL	FY 2021 Total Contributions	Share of NPL as of January 1, 2021 <sup>1</sup>	Percent of Total NPL
Tyngsboro Water District	37,652	481,728	0.030107%	40,250	440,581	0.028776%
North Reading Housing Authority	16,668	214,226	0.013389%	17,708	212,881	0.013904%
West Groton Water	2,545	36,784	0.002299%	2,737	18,060	0.001180%
Ayer-Shirley RSD	467,540	4,713,693	0.294595%	498,116	4,239,976	0.276925%
NMRECC	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-14,725</u>	<u>-0.000962%</u>
<b>Grand Totals:</b>	<b>\$129,685,754</b>	<b>\$1,600,056,015</b>	<b>100.000000%</b>	<b>\$138,290,237</b>	<b>\$1,531,093,126</b>	<b>100.000000%</b>

## Section 2: GASB Information

### Exhibit 6 – Determination of Proportionate Share Amounts by Employer

Employer Name	2021 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	Discount Rate Sensitivity		
				1% Decrease (6.30%) (4)	Current Discount Rate (7.30%) (5)	1% Increase (8.30%) (6)
Middlesex County Retirement Board	0.000000%	\$0	1,401,093	\$0	\$0	\$0
Middlesex County	0.000000%	0	0	0	0	0
Middlesex Hospital	0.000000%	0	0	0	0	0
Town of Acton	3.436475%	52,615,628	15,204,987	65,564,739	52,615,628	41,721,292
Town of Ashby	0.115956%	1,775,392	1,160,138	2,212,330	1,775,392	1,407,788
Town of Ashland	2.343919%	35,887,576	15,134,292	44,719,784	35,887,576	28,456,869
Town of Ayer	1.250776%	19,150,544	7,568,121	23,863,640	19,150,544	15,185,325
Town of Bedford	3.356712%	51,394,381	20,438,300	64,042,933	51,394,381	40,752,910
Town of Billerica	9.941605%	152,215,238	38,618,991	189,676,577	152,215,238	120,698,290
Town of Boxborough	0.794623%	12,166,423	3,536,280	15,160,673	12,166,423	9,647,303
Town of Burlington	8.714183%	133,422,263	36,934,043	166,258,508	133,422,263	105,796,498
Town of Carlisle	0.675972%	10,349,764	6,020,631	12,896,921	10,349,764	8,206,792
Town of Chelmsford	7.245221%	110,931,084	29,108,756	138,232,077	110,931,084	87,962,233
Town of Dracut	4.348534%	66,580,110	17,454,816	82,965,987	66,580,110	52,794,356
Town of Dunstable	0.210183%	3,218,104	1,504,932	4,010,104	3,218,104	2,551,779
Town of Groton	1.606386%	24,595,262	8,305,473	30,648,345	24,595,262	19,502,687
Town of Holliston	1.636119%	25,050,502	11,860,989	31,215,623	25,050,502	19,863,667
Town of Hopkinton	1.573745%	24,095,505	17,002,761	30,025,594	24,095,505	19,106,407
Town of Hudson	4.320343%	66,148,477	22,598,280	82,428,126	66,148,477	52,452,095
Town of Lincoln	1.729324%	26,477,563	11,002,408	32,993,895	26,477,563	20,995,248
Town of Littleton	1.532648%	23,466,261	13,713,395	29,241,488	23,466,261	18,607,451
Town of North Reading	3.271863%	50,095,267	14,347,517	62,424,097	50,095,267	39,722,785
Town of Pepperell	1.150348%	17,612,899	5,064,259	21,947,569	17,612,899	13,966,058

## Section 2: GASB Information

Employer Name	2021 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	Discount Rate Sensitivity		
				1% Decrease (6.30%) (4)	Current Discount Rate (7.30%) (5)	1% Increase (8.30%) (6)
Town of Sherborn	0.640177%	9,801,713	4,571,874	12,213,990	9,801,713	7,772,218
Town of Shirley	0.584744%	8,952,975	2,091,842	11,156,371	8,952,975	7,099,216
Town of Stow	0.743874%	11,389,407	3,689,219	14,192,428	11,389,407	9,031,172
Town of Sudbury	4.032801%	61,745,935	18,621,425	76,942,084	61,745,935	48,961,122
Town of Tewksbury	6.805481%	104,198,258	24,269,942	129,842,250	104,198,258	82,623,473
Town of Townsend	0.529282%	8,103,799	3,721,241	10,098,206	8,103,799	6,425,866
Town of Tyngsborough	1.567698%	24,002,922	9,090,782	29,910,226	24,002,922	19,032,994
Town of Wayland	3.684738%	56,416,777	20,891,951	70,301,380	56,416,777	44,735,393
Town of Westford	3.663938%	56,098,309	27,016,988	69,904,534	56,098,309	44,482,866
Town of Weston	4.235496%	64,849,395	21,442,179	80,809,330	64,849,395	51,421,994
Town of Wilmington	5.644550%	86,423,315	24,560,364	107,692,757	86,423,315	68,528,923
Acton-Boxborough RSD	1.964841%	30,083,545	15,468,104	37,487,337	30,083,545	23,854,592
Acton Water Supply	0.231742%	3,548,184	1,275,867	4,421,419	3,548,184	2,813,514
Bedford Housing Authority	0.020611%	315,580	175,575	393,247	315,580	250,238
Billerica Housing Authority	0.105286%	1,612,020	413,931	2,008,750	1,612,020	1,278,243
Chelmsford Housing Authority	0.131733%	2,016,950	2,729,849	2,513,337	2,016,950	1,599,330
Chelmsford Water District	0.001578%	24,164	1,463,629	30,111	24,164	19,161
Dracut Housing Authority	0.147902%	2,264,513	426,964	2,821,827	2,264,513	1,795,634
Dracut Water Supply	0.211654%	3,240,627	736,128	4,038,170	3,240,627	2,569,639
E. Chelmsford Water	0.023945%	366,619	222,136	456,847	366,619	290,709
E. Middlesex Mosq Control	0.042424%	649,547	378,327	809,405	649,547	515,055
Greater Lowell RVTSD	1.163926%	17,820,793	4,471,774	22,206,627	17,820,793	14,130,906
Groton-Dunstable RSD	0.808678%	12,381,614	4,064,118	15,428,824	12,381,614	9,817,937

## Section 2: GASB Information

Employer Name	2021 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	Discount Rate Sensitivity		
				1% Decrease (6.30%) (4)	Current Discount Rate (7.30%) (5)	1% Increase (8.30%) (6)
Hudson Housing Authority	0.040275%	616,643	371,288	768,404	616,643	488,964
Lincoln Sudbury	0.569220%	8,715,281	2,995,522	10,860,179	8,715,281	6,910,737
Nashoba Vally THSD	0.238451%	3,650,910	993,404	4,549,427	3,650,910	2,894,970
N. Chelmsford Water	0.063856%	977,691	669,355	1,218,308	977,691	775,255
North Middlesex RSD	0.836430%	12,806,518	5,512,936	15,958,300	12,806,518	10,154,863
Shawsheen Valley RVS	0.557954%	8,542,800	2,741,245	10,645,249	8,542,800	6,773,969
South Middlesex RVTS	0.436145%	6,677,782	2,262,465	8,321,235	6,677,782	5,295,113
Sudbury Water District	0.159995%	2,449,672	1,073,885	3,052,555	2,449,672	1,942,455
Tewksbury Housing Authority	0.107489%	1,645,758	420,708	2,050,792	1,645,758	1,304,995
Wayland Housing Authority	0.040878%	625,875	317,752	779,908	625,875	496,284
Hopkinton Housing Authority	0.033811%	517,677	80,704	645,081	517,677	410,489
Sudbury Housing Authority	0.030411%	465,613	106,861	580,204	465,613	369,205
Wilmington Housing Authority	0.024210%	370,673	145,743	461,899	370,673	293,923
Acton Housing Authority	0.056246%	861,176	417,322	1,073,118	861,176	682,865
Burlington Housing Authority	0.021388%	327,467	217,060	408,059	327,467	259,663
Ayer Housing Authority	0.056070%	858,485	121,622	1,069,765	858,485	680,731
Holliston Housing Authority	0.011012%	168,599	84,340	210,093	168,599	133,690
Littleton Housing Authority	0.039700%	607,838	41,096	757,432	607,838	481,982
Westford Housing Authority	0.035081%	537,128	235,134	669,319	537,128	425,913
Shirley Water District	0.029637%	453,772	225,565	565,449	453,772	359,816
Tyngsboro Housing Authority	0.033731%	516,453	180,246	643,556	516,453	409,519
Pepperell Housing Authority	0.016154%	247,338	108,132	308,210	247,338	196,125
Groton Housing Authority	0.000000%	0	0	0	0	0

## Section 2: GASB Information

Employer Name	2021 Share of Cost Allocation (1)	Net Pension Liability (2)	Covered Employee Payroll (3)	Discount Rate Sensitivity		
				1% Decrease (6.30%) (4)	Current Discount Rate (7.30%) (5)	1% Increase (8.30%) (6)
Tyngsboro Water District	0.028776%	440,581	211,109	549,011	440,581	349,356
North Reading Housing Authority	0.013904%	212,881	94,616	265,273	212,881	168,803
West Groton Water	0.001180%	18,060	129,814	22,505	18,060	14,321
Ayer-Shirley RSD	0.276925%	4,239,976	3,668,688	5,283,467	4,239,976	3,362,067
NMRECC	<u>-0.000962%</u>	<u>-14,725</u>	<u>0</u>	<u>-18,349</u>	<u>-14,725</u>	<u>-11,676</u>
<b>Grand Totals:</b>	<b>100.000000%</b>	<b>\$1,531,093,126</b>	<b>\$513,201,283</b>	<b>\$1,907,906,916</b>	<b>\$1,531,093,126</b>	<b>\$1,214,072,425</b>



## Section 2: GASB Information

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)
Middlesex County Retirement Board	\$356,333	\$356,333	\$0	25.43%	\$356,333	\$0	\$356,333
Middlesex County	0	0	0	0.00%	0	0	0
Middlesex Hospital	0	0	0	0.00%	0	0	0
Town of Acton	4,615,717	4,615,717	0	30.36%	6,017,439	-221,259	5,796,180
Town of Ashby	251,979	251,979	0	21.72%	203,045	21,073	224,118
Town of Ashland	3,209,995	3,243,063	-33,068	21.43%	4,104,319	729,031	4,833,350
Town of Ayer	1,787,745	2,087,745	-300,000	27.59%	2,190,171	-122,402	2,067,769
Town of Bedford	4,786,602	4,787,530	-928	23.42%	5,877,770	-827,170	5,050,600
Town of Billerica	12,782,396	12,782,396	0	33.10%	17,408,240	-404,712	17,003,528
Town of Boxborough	1,008,914	1,008,914	0	28.53%	1,391,426	402,845	1,794,271
Town of Burlington	10,675,811	10,675,811	0	28.91%	15,258,971	954,544	16,213,515
Town of Carlisle	1,057,819	1,057,819	0	17.57%	1,183,661	46,834	1,230,495
Town of Chelmsford	9,511,562	9,511,562	0	32.68%	12,686,744	-51,174	12,635,570
Town of Dracut	5,727,650	5,727,860	-210	32.82%	7,614,501	534,168	8,148,669
Town of Dunstable	292,296	292,296	0	19.42%	368,042	85,680	453,722
Town of Groton	2,090,290	2,090,290	0	25.17%	2,812,862	146,886	2,959,748
Town of Holliston	2,385,594	2,385,594	0	20.11%	2,864,926	-304,593	2,560,333
Town of Hopkinton	2,486,832	2,486,832	0	14.63%	2,755,706	399,656	3,155,362
Town of Hudson	6,204,177	6,207,788	-3,611	27.47%	7,565,136	-220,380	7,344,756
Town of Lincoln	2,434,008	2,434,721	-713	22.13%	3,028,133	-257,082	2,771,051
Town of Littleton	2,355,174	3,281,774	-926,600	23.93%	2,683,743	638,992	3,322,735
Town of North Reading	4,401,955	4,401,955	0	30.68%	5,729,195	-534,216	5,194,979
Town of Pepperell	1,530,300	1,531,884	-1,584	30.25%	2,014,317	332,236	2,346,553

## Section 2: GASB Information

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 Sherborn	1,087,478	1,087,478	0	23.79%	1,120,983	-303,272	817,711
Town of Shirley	818,964	818,964	0	39.15%	1,023,916	-246,747	777,169
Town of Stow	1,024,938	1,024,938	0	27.78%	1,302,561	51,934	1,354,495
Town of Sudbury	5,389,846	5,389,846	0	28.94%	7,061,636	-313,354	6,748,282
Town of Tewksbury	8,797,968	8,807,233	-9,265	36.29%	11,916,738	257,644	12,174,382
Town of Townsend	911,165	911,165	0	24.49%	926,799	-41,155	885,644
Town of Tyngsborough	2,152,711	2,152,711	0	23.68%	2,745,118	462,648	3,207,766
Town of Wayland	5,182,237	5,182,543	-306	24.81%	6,452,161	-1,054,459	5,397,702
Town of Westford	5,473,719	5,473,719	0	20.26%	6,415,739	300,562	6,716,301
Town of Weston	5,668,652	5,668,652	0	26.44%	7,416,566	-965,118	6,451,448
Town of Wilmington	7,593,868	9,104,998	-1,511,130	37.07%	9,883,889	116,078	9,999,967
Acton-Boxborough RSD	2,794,347	2,794,347	0	18.07%	3,440,535	456,183	3,896,718
Acton Water Supply	256,971	256,971	0	20.14%	405,791	-30,213	375,578
Bedford Housing Authority	27,468	27,468	0	15.64%	36,092	3,306	39,398
Billerica Housing Authority	115,453	115,453	0	27.89%	184,360	42,968	227,328
Chelmsford Housing Authority	241,136	271,136	-30,000	9.93%	230,671	156,340	387,011
Chelmsford Water District	67,843	67,843	0	4.64%	2,763	64,781	67,544
Dracut Housing Authority	162,257	162,257	0	38.00%	258,983	-10,205	248,778
Dracut Water Supply	247,338	247,338	0	33.60%	370,618	4,119	374,737
E. Chelmsford Water	35,999	35,999	0	16.21%	41,929	6,314	48,243
E. Middlesex Mosq Control	51,505	51,505	0	13.61%	74,286	5,358	79,644
Greater Lowell RVTSD	1,307,090	1,307,090	0	29.23%	2,038,093	-48,921	1,989,172
Groton-Dunstable RSD	1,077,851	1,077,851	0	26.52%	1,416,035	351,249	1,767,284

## Section 2: GASB Information

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)
Hudson Housing Authority	98,078	98,078	0	26.42%	70,523	-166,362	-95,839
Lincoln Sudbury	755,859	755,859	0	25.23%	996,732	-162,808	833,924
Nashoba Vally THSD	324,010	324,010	0	32.62%	417,540	-21,989	395,551
N. Chelmsford Water	72,338	72,338	0	10.81%	111,814	-6,457	105,357
North Middlesex RSD	1,123,918	1,123,918	0	20.39%	1,464,631	-56,911	1,407,720
Shawsheen Valley RVS	706,293	706,293	0	25.77%	977,006	-75,606	901,400
South Middlesex RVTS	599,951	599,951	0	26.52%	763,711	-174,756	588,955
Sudbury Water District	142,163	142,163	0	13.24%	280,159	74,527	354,686
Tewksbury Housing Authority	137,197	137,197	0	32.61%	188,219	22,571	210,790
Wayland Housing Authority	55,104	55,104	0	17.34%	71,578	6,616	78,194
Hopkinton Housing Authority	40,023	40,023	0	49.59%	59,205	-5,789	53,416
Sudbury Housing Authority	43,152	43,152	0	40.38%	53,251	21,075	74,326
Wilmington Housing Authority	32,574	32,574	0	22.35%	42,393	9,404	51,797
Acton Housing Authority	66,700	66,700	0	15.98%	98,490	-22,108	76,382
Burlington Housing Authority	14,349	14,349	0	6.61%	37,451	30,738	68,189
Ayer Housing Authority	62,116	62,116	0	51.07%	98,181	25,658	123,839
Holliston Housing Authority	15,782	15,782	0	18.71%	19,282	-10,022	9,260
Littleton Housing Authority	43,356	43,356	0	105.50%	69,516	26,128	95,644
Westford Housing Authority	50,725	50,725	0	21.57%	61,429	6,509	67,938
Shirley Water District	24,607	24,607	0	10.91%	51,896	-5,788	46,108
Tyngsboro Housing Authority	44,565	44,565	0	24.72%	59,065	5,519	64,584
Pepperell Housing Authority	18,331	18,331	0	16.95%	28,287	19,979	48,266
Groton Housing Authority	2,867	2,867	0	0.00%	0	867	867

## Section 2: GASB Information

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)
Tyngsboro Water District	40,250	40,250	0	19.07%	50,387	-839	49,548
North Reading Housing Authority	17,708	17,708	0	18.72%	24,346	20,657	45,003
West Groton Water	2,737	2,737	0	2.11%	2,066	-1,678	388
Ayer-Shirley RSD	498,116	498,116	0	13.58%	484,909	-171,523	313,386
NMRECC	0	0	0	0.00%	-1,684	-2,609	-4,293
<b>Grand Totals:</b>	<b>\$135,472,822</b>	<b>\$138,290,237</b>	<b>-\$2,817,415</b>	<b>26.95%</b>	<b>\$175,461,325</b>	<b>\$0</b>	<b>\$175,461,325</b>

## Section 2: GASB Information

### Deferred Outflows of Resources

### Deferred Inflows of Resources

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)	
Middlesex County Retirement Board	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Middlesex County	0	0	0	0	0	0	0	0	0	
Middlesex Hospital	0	0	0	0	0	0	0	0	0	
Town of Acton	962,320	2,008,534	374,225	3,345,079	62,265	2,982,703	0	195,119	3,240,087	
Town of Ashby	32,471	67,773	149,757	250,001	2,101	100,644	0	103,740	206,485	
Town of Ashland	656,370	1,369,962	723,399	2,749,731	42,469	2,034,414	0	141,568	2,218,451	
Town of Ayer	350,256	731,047	290,191	1,371,494	22,663	1,085,616	0	212,355	1,320,634	
Town of Bedford	939,984	1,961,914	188,088	3,089,986	60,819	2,913,472	0	1,639,291	4,613,582	
Town of Billerica	2,783,963	5,810,617	1,491,321	10,085,901	180,127	8,628,858	0	1,955,419	10,764,404	
Town of Boxborough	222,519	464,437	564,014	1,250,970	14,398	689,697	0	0	704,095	
Town of Burlington	2,440,244	5,093,223	3,490,509	11,023,976	157,890	7,563,513	0	668,051	8,389,454	
Town of Carlisle	189,293	395,089	296,813	881,195	12,248	586,713	0	317,499	916,460	
Town of Chelmsford	2,028,888	4,234,651	1,539,688	7,803,227	131,274	6,288,521	0	1,105,442	7,525,237	
Town of Dracut	1,217,726	2,541,610	1,315,405	5,074,741	78,790	3,774,329	0	240,727	4,093,846	
Town of Dunstable	58,858	122,847	296,849	478,554	3,808	182,430	0	0	186,238	
Town of Groton	449,838	938,892	870,744	2,259,474	29,106	1,394,269	0	143,377	1,566,752	
Town of Holliston	458,164	956,271	446,142	1,860,577	29,644	1,420,076	0	928,337	2,378,057	
Town of Hopkinton	440,698	919,815	1,136,656	2,497,169	28,514	1,365,939	0	489,170	1,883,623	
Town of Hudson	1,209,831	2,525,133	199,174	3,934,138	78,279	3,749,860	0	1,008,453	4,836,592	
Town of Lincoln	484,265	1,010,747	150,639	1,645,651	31,333	1,500,974	0	506,474	2,038,781	
Town of Littleton	429,189	895,794	1,320,076	2,645,059	27,770	1,330,268	0	310,142	1,668,180	
Town of North Reading	916,224	1,912,322	70,700	2,899,246	59,282	2,839,827	0	1,049,585	3,948,694	
Town of Pepperell	322,133	672,350	25,960	1,020,443	20,843	998,449	0	141,622	1,160,914	

## Section 2: GASB Information

### Deferred Outflows of Resources

### Deferred Inflows of Resources

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 Sherborn	179,270	374,168	100,762	654,200	11,599	555,645	0	755,393	1,322,637
Town of Shirley	163,747	341,768	38,702	544,217	10,595	507,531	0	81,437	599,563
Town of Stow	208,308	434,776	44,864	687,948	13,478	645,649	0	42,971	702,098
Town of Sudbury	1,129,310	2,357,071	415,995	3,902,376	73,069	3,500,287	0	1,239,986	4,813,342
Town of Tewksbury	1,905,747	3,977,634	1,352,170	7,235,551	123,307	5,906,847	0	1,130,973	7,161,127
Town of Townsend	148,215	309,352	182,913	640,480	9,590	459,393	0	530,294	999,277
Town of Tyngsborough	439,005	916,281	802,436	2,157,722	28,405	1,360,691	0	311,089	1,700,185
Town of Wayland	1,031,842	2,153,638	117,079	3,302,559	66,763	3,198,185	0	1,224,644	4,489,592
Town of Westford	1,026,017	2,141,481	1,001,946	4,169,444	66,386	3,180,131	0	999,143	4,245,660
Town of Weston	1,186,071	2,475,542	0	3,661,613	76,742	3,676,217	0	1,287,778	5,040,737
Town of Wilmington	1,580,650	3,299,099	337,745	5,217,494	102,272	4,899,211	0	512,919	5,514,402
Acton-Boxborough RSD	550,217	1,148,401	629,969	2,328,587	35,601	1,705,392	0	46,454	1,787,447
Acton Water Supply	64,895	135,447	0	200,342	4,199	201,141	0	180,239	385,579
Bedford Housing Authority	5,772	12,047	1,770	19,589	373	17,890	0	8,952	27,215
Billerica Housing Authority	29,483	61,537	77,417	168,437	1,908	91,383	0	19,343	112,634
Chelmsford Housing Authority	36,889	76,994	223,910	337,793	2,387	114,338	0	90,196	206,921
Chelmsford Water District	442	922	275,404	276,768	29	1,370	0	389,104	390,503
Dracut Housing Authority	41,417	86,445	44,940	172,802	2,680	128,372	0	43,511	174,563
Dracut Water Supply	59,270	123,707	68,943	251,920	3,835	183,706	0	94,000	281,541
E. Chelmsford Water	6,705	13,995	14,729	35,429	434	20,783	0	7,321	28,538
E. Middlesex Mosq Control	11,880	24,796	44,301	80,977	769	36,822	0	44,010	81,601
Greater Lowell RVTSD	325,936	680,286	531,315	1,537,537	21,089	1,010,235	0	189,529	1,220,853
Groton-Dunstable RSD	226,455	472,652	427,683	1,126,790	14,652	701,896	0	110,392	826,940

## Section 2: GASB Information

### Deferred Outflows of Resources

### Deferred Inflows of Resources

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)
Hudson Housing Authority	11,278	23,540	0	34,818	730	34,957	0	337,713	373,400
Lincoln Sudbury	159,399	332,695	34,883	526,977	10,314	494,057	0	288,509	792,880
Nashoba Vally THSD	66,774	139,369	99,809	305,952	4,320	206,965	0	80,848	292,133
N. Chelmsford Water	17,882	37,322	51,684	106,888	1,157	55,424	0	64,687	121,268
North Middlesex RSD	234,226	488,872	99,538	822,636	15,155	725,983	0	76,037	817,175
Shawsheen Valley RVS	156,245	326,110	17,943	500,298	10,109	484,279	0	161,430	655,818
South Middlesex RVTS	122,134	254,916	14,425	391,475	7,902	378,554	0	341,979	728,435
Sudbury Water District	44,804	93,513	254,281	392,598	2,899	138,868	0	130,042	271,809
Tewksbury Housing Authority	30,100	62,825	18,666	111,591	1,948	93,296	0	20,416	115,660
Wayland Housing Authority	11,447	23,892	12,210	47,549	741	35,480	0	53,346	89,567
Hopkinton Housing Authority	9,468	19,762	4,801	34,031	613	29,346	0	13,069	43,028
Sudbury Housing Authority	8,516	17,774	10,840	37,130	551	26,395	0	6,428	33,374
Wilmington Housing Authority	6,779	14,150	12,102	33,031	439	21,013	0	466	21,918
Acton Housing Authority	15,751	32,874	27,910	76,535	1,019	48,819	0	57,546	107,384
Burlington Housing Authority	5,989	12,501	121,361	139,851	388	18,564	0	14,732	33,684
Ayer Housing Authority	15,701	32,772	23,323	71,796	1,016	48,666	0	216,044	265,726
Holliston Housing Authority	3,084	6,436	11,777	21,297	200	9,558	0	13,692	23,450
Littleton Housing Authority	11,117	23,203	60,583	94,903	719	34,457	0	7,047	42,223
Westford Housing Authority	9,824	20,504	7,328	37,656	636	30,449	0	8,626	39,711
Shirley Water District	8,299	17,322	34,386	60,007	537	25,724	0	26,984	53,245
Tyngsboro Housing Authority	9,446	19,715	13,309	42,470	611	29,277	0	13,439	43,327
Pepperell Housing Authority	4,524	9,442	34,014	47,980	293	14,021	0	1,837	16,151
Groton Housing Authority	0	0	13,074	13,074	0	0	0	4,284	4,284

## Section 2: GASB Information

### Deferred Outflows of Resources

### Deferred Inflows of Resources

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)
Tyngsboro Water District	8,058	16,819	17,211	42,088	521	24,976	0	19,950	45,447
North Reading Housing Authority	3,894	8,126	34,757	46,777	252	12,068	0	496	12,816
West Groton Water	330	689	5,727	6,746	21	1,024	0	14,465	15,510
Ayer-Shirley RSD	77,548	161,856	211,719	451,123	5,018	240,358	0	442,391	687,767
NMRECC	<u>-269</u>	<u>-562</u>	<u>0</u>	<u>-831</u>	<u>-17</u>	<u>-835</u>	<u>0</u>	<u>10,452</u>	<u>9,600</u>
<b>Grand Totals:</b>	<b>\$28,003,125</b>	<b>\$58,447,504</b>	<b>\$22,923,004</b>	<b>\$109,373,633</b>	<b>\$1,811,877</b>	<b>\$86,795,430</b>	<b>\$0</b>	<b>\$22,923,004</b>	<b>\$111,530,311</b>



## Section 2: GASB Information

### Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended June 30)

Employer Name	2022 (23)	2023 (24)	2024 (25)	2025 (26)	Thereafter (27)
Middlesex County Retirement Board	\$0	\$0	\$0	\$0	\$0
Middlesex County	0	0	0	0	0
Middlesex Hospital	0	0	0	0	0
Town of Acton	704,028	425,042	-514,077	-510,001	0
Town of Ashby	86,876	18,395	-47,619	-14,136	0
Town of Ashland	605,652	535,028	-240,701	-368,699	0
Town of Ayer	294,371	169,184	-235,821	-176,873	0
Town of Bedford	-132,021	80,209	-917,073	-554,711	0
Town of Billerica	243,239	1,206,980	-876,257	-1,252,470	0
Town of Boxborough	299,219	280,294	66,434	-99,070	0
Town of Burlington	2,009,236	1,901,187	-109,644	-1,166,258	0
Town of Carlisle	77,979	170,793	-159,511	-124,526	0
Town of Chelmsford	1,143,379	711,598	-685,261	-891,726	0
Town of Dracut	1,015,509	779,136	-270,627	-543,123	0
Town of Dunstable	171,075	110,495	31,619	-20,873	0
Town of Groton	337,566	511,983	61,229	-218,055	0
Town of Holliston	100,502	172,661	-490,664	-299,980	0
Town of Hopkinton	552,506	649,082	-258,504	-329,539	0
Town of Hudson	313,855	303,009	-907,292	-612,026	0
Town of Lincoln	20,317	190,705	-349,949	-254,204	0
Town of Littleton	585,195	712,148	-49,317	-271,145	0
Town of North Reading	36,029	69,268	-699,664	-455,082	0
Town of Pepperell	55,025	131,498	-169,904	-157,090	0

## Section 2: GASB Information

### Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended June 30)

Employer Name	2022 (23)	2023 (24)	2024 (25)	2025 (26)	Thereafter (27)
Town of Sherborn	-150,323	-105,486	-323,772	-88,856	0
Town of Shirley	-1,447	88,483	-67,459	-74,923	0
Town of Stow	86,640	114,535	-108,063	-107,262	0
Town of Sudbury	319,715	98,035	-784,345	-544,371	0
Town of Tewksbury	1,098,016	534,620	-731,143	-827,069	0
Town of Townsend	-144,473	40,309	-184,101	-70,531	0
Town of Tyngsborough	165,232	506,614	-866	-213,443	0
Town of Wayland	-135,015	272,812	-777,235	-547,595	0
Town of Westford	524,941	742,237	-744,645	-598,749	0
Town of Weston	-247,438	256,687	-777,384	-610,989	0
Town of Wilmington	706,419	531,592	-745,723	-789,197	0
Acton-Boxborough RSD	404,562	488,982	-104,513	-247,891	0
Acton Water Supply	-33,703	-23,442	-77,989	-50,104	0
Bedford Housing Authority	957	541	-5,483	-3,642	0
Billerica Housing Authority	28,563	29,965	11,307	-14,032	0
Chelmsford Housing Authority	179,711	26,388	-43,080	-32,146	0
Chelmsford Water District	7,528	31,760	-106,367	-46,654	0
Dracut Housing Authority	22,176	7,153	-10,890	-20,200	0
Dracut Water Supply	55,722	-9,130	-42,763	-33,449	0
E. Chelmsford Water	7,569	8,380	-3,909	-5,148	0
E. Middlesex Mosq Control	4,150	18,447	-9,554	-13,667	0
Greater Lowell RVTSD	297,608	220,599	-23,285	-178,238	0
Groton-Dunstable RSD	277,349	233,028	-67,935	-142,593	0

## Section 2: GASB Information

### Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended June 30)

Employer Name	2022 (23)	2023 (24)	2024 (25)	2025 (26)	Thereafter (27)
Hudson Housing Authority	-141,223	-91,667	-97,217	-8,475	0
Lincoln Sudbury	32	-23,854	-151,870	-90,210	0
Nashoba Vally THSD	42,312	7,591	-16,150	-19,935	0
N. Chelmsford Water	23,137	10,299	-25,690	-22,125	0
North Middlesex RSD	90,970	146,283	-103,629	-128,162	0
Shawsheen Valley RVS	-57,528	53,326	-70,028	-81,289	0
South Middlesex RVTS	-145,737	2,396	-122,177	-71,443	0
Sudbury Water District	34,097	95,662	31,673	-40,643	0
Tewksbury Housing Authority	14,934	11,837	-12,662	-18,177	0
Wayland Housing Authority	-6,314	-4,236	-21,341	-10,126	0
Hopkinton Housing Authority	-5,181	5,989	-4,359	-5,446	0
Sudbury Housing Authority	12,274	2,020	-5,781	-4,757	0
Wilmington Housing Authority	8,460	5,782	-499	-2,630	0
Acton Housing Authority	-28,564	15,635	-6,313	-11,607	0
Burlington Housing Authority	44,269	43,838	24,785	-6,724	0
Ayer Housing Authority	-192,327	5,828	226	-7,657	0
Holliston Housing Authority	-7,948	5,958	1,168	-1,331	0
Littleton Housing Authority	22,464	21,400	14,241	-5,425	0
Westford Housing Authority	8,726	2,076	-6,580	-6,278	0
Shirley Water District	5,086	11,713	-590	-9,446	0
Tyngsboro Housing Authority	6,739	639	-5,078	-3,158	0
Pepperell Housing Authority	13,889	11,567	8,139	-1,766	0
Groton Housing Authority	546	4,832	2,839	573	0

## Section 2: GASB Information

### Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended June 30)

Employer Name	2022 (23)	2023 (24)	2024 (25)	2025 (26)	Thereafter (27)
Tyngsboro Water District	3,193	8,210	-6,800	-7,964	0
North Reading Housing Authority	12,873	13,639	8,178	-729	0
West Groton Water	-63	-1,469	-3,936	-3,296	0
Ayer-Shirley RSD	-48,034	30,394	-149,980	-69,024	0
NMRECC	-2,726	-2,744	-2,485	-2,476	0
<b>Grand Totals:</b>	<b>\$11,702,352</b>	<b>\$13,634,748</b>	<b>-\$13,273,716</b>	<b>-\$14,220,062</b>	<b>\$0</b>

## Section 2: GASB Information

### Appendix – Glossary of Terms

Definitions of certain terms as they are used in Statement 68. The terms may have different meanings in other contexts.

<b>Active Employees:</b>	Individuals employed at the end of the reporting or measurement period, as applicable.
<b>Actual Contributions:</b>	Cash contributions recognized as additions to a pension Plan Fiduciary Net Position.
<b>Actuarial Present Value of Projected Benefit Payments:</b>	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
<b>Actuarial Valuation:</b>	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.
<b>Actuarial Valuation Date:</b>	The date as of which an actuarial valuation is performed.
<b>Actuarially Determined Contribution:</b>	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.
<b>Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):</b>	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
<b>Ad Hoc Postemployment Benefit Changes:</b>	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
<b>Agent Employer:</b>	An employer whose employees are provided with pensions through an agent multiple-employer defined benefit pension plan.
<b>Agent Multiple-Employer Defined Benefit Pension Plan (Agent Pension Plan):</b>	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.
<b>Allocated Insurance Contract:</b>	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.
<b>Automatic Cost-of-Living Adjustments (Automatic COLAs):</b>	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).

## Section 2: GASB Information

<b>Automatic Postemployment Benefit Changes:</b>	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).
<b>Closed Period:</b>	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.
<b>Collective Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions:</b>	Deferred outflows of resources and deferred inflows of resources related to pensions arising from certain changes in the collective Net Pension Liability.
<b>Collective Net Pension Liability:</b>	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.
<b>Collective Pension Expense:</b>	Pension expense arising from certain changes in the collective Net Pension Liability.
<b>Contributions:</b>	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.
<b>Cost-of-Living Adjustments:</b>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<b>Cost-Sharing Employer:</b>	An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.
<b>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):</b>	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.
<b>Covered-Employee Payroll:</b>	The payroll of employees that are provided with pensions through the pension plan.
<b>Deferred Retirement Option Program (DROP):</b>	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.
<b>Defined Benefit Pension Plans:</b>	Pension plans that are used to provide defined benefit pensions.
<b>Defined Benefit Pensions:</b>	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.)

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<b>Defined Contribution Pension Plans:</b>	Pension plans that are used to provide defined contribution pensions.
<b>Defined Contribution Pensions:</b>	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.
<b>Discount Rate:</b>	<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"> <li>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.</li> <li>2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.</li> </ol>
<b>Entry Age Actuarial Cost Method:</b>	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.
<b>Inactive Employees:</b>	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
<b>Measurement Period:</b>	The period between the prior and the current measurement dates.
<b>Multiple-Employer Defined Benefit Pension Plan:</b>	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
<b>Net Pension Liability (NPL):</b>	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.
<b>Non-Employer Contributing Entities:</b>	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.
<b>Other Postemployment Benefits:</b>	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.

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<b>Pension Plans:</b>	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
<b>Pensions:</b>	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.
<b>Plan Members:</b>	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).
<b>Postemployment:</b>	The period after employment.
<b>Postemployment Benefit Changes:</b>	Adjustments to the pension of an inactive employee.
<b>Postemployment Healthcare Benefits:</b>	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
<b>Projected Benefit Payments:</b>	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.
<b>Public Employee Retirement System:</b>	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.
<b>Real Rate of Return:</b>	The rate of return on an investment after adjustment to eliminate inflation.
<b>Service Costs:</b>	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
<b>Single Employer:</b>	An employer whose employees are provided with pensions through a single-employer defined benefit pension plan.
<b>Single-Employer Defined Benefit Pension Plan (Single-Employer Pension Plan):</b>	A defined benefit pension plan that is used to provide pensions to employees of only one employer.
<b>Special Funding Situations:</b>	<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"> <li>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.</li> <li>2. The non-employer entity is the only entity with a legal obligation to make contributions directly to a pension plan.</li> </ol>



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<b>Termination Benefits:</b>	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.
<b>Total Pension Liability (TPL):</b>	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.