

WORCESTER REGIONAL RETIREMENT SYSTEM

**INDEPENDENT AUDITORS' REPORT ON
SCHEDULES OF EMPLOYER ALLOCATIONS AND
SCHEDULES OF PENSION AMOUNTS BY EMPLOYER**

YEAR ENDED DECEMBER 31, 2022



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INDEPENDENT AUDITORS' REPORT

Honorable Retirement Board
Worcester Regional Retirement System
Auburn, Massachusetts

Report on the Audit of the Schedules

Opinions

We have audited the accompanying schedule of employer allocations of the Worcester Regional Retirement System (the System) as of and for the year ended December 31, 2022, and the related notes. We have also audited the total for all entities of the rows titled ending net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified row totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2022, and the related notes.

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and ending net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the System as of and for the year ended December 31, 2022, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a

Honorable Retirement Board
Worcester Regional Retirement System

material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of System as of and for the year ended December 31, 2022, and our report thereon dated September 27, 2023 expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of System management, the Retirement Board, the participating employers, and their auditors and is not intended to be, and should not be, used by anyone other than these specified parties.



CliftonLarsonAllen LLP

Boston, Massachusetts
September 27, 2023

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF EMPLOYER ALLOCATIONS
YEAR ENDED DECEMBER 31, 2022**

Employer	Employer Contributions	Employer Allocation Percentage
Ashburnham	\$ 1,132,577	1.392923%
Ashburnham-Westminster Regional	868,640	1.068315%
Athol	1,994,321	2.452757%
Athol Housing Authority	48,737	0.059940%
Athol-Royalston Regional	741,299	0.911702%
Auburn	4,279,768	5.263561%
Auburn Housing Authority	85,236	0.104829%
Auburn Water District	131,100	0.161236%
Barre	446,614	0.549277%
Barre Housing Authority	33,684	0.041427%
Berlin	605,652	0.744874%
Berlin-Boylston Regional	346,494	0.426143%
Blackstone	1,015,222	1.248592%
Blackstone Housing Authority	21,232	0.026113%
Blackstone-Millville Regional	671,346	0.825669%
Bolton	659,084	0.810588%
Boylston	770,858	0.948056%
Boylston Water District	16,669	0.020501%
Brookfield	399,212	0.490979%
Charlton	1,889,749	2.324147%
Cherry Valley-Rochdale Water	73,262	0.090103%
Cherry Valley Sewer District	-	0.000000%
Douglas	1,396,060	1.716973%
Dudley	1,197,724	1.473046%
Dudley Housing Authority	24,975	0.030716%
Dudley-Charlton Regional	1,352,035	1.662828%
East Brookfield	203,155	0.249854%
Grafton	2,579,015	3.171855%
Grafton Housing Authority	61,868	0.076090%
Hardwick	240,011	0.295182%
Harvard	1,241,423	1.526790%
Hillcrest Water District	11,342	0.013949%
Holden	2,972,584	3.655894%
Holden Housing Authority	26,411	0.032482%
Hopedale	1,316,665	1.619328%
Hopedale Housing Authority	3,821	0.004699%
Hubbardston	351,383	0.432156%
Lancaster	838,022	1.030659%
Lancaster Housing Authority	17,221	0.021180%
Lancaster Sewer	2,891	0.003556%
Leicester	1,717,353	2.112122%
Leicester Housing Authority	65,967	0.081131%
Leicester Water District	58,500	0.071947%
Lunenburg	1,689,147	2.077432%
Lunenburg Housing Authority	2,560	0.003148%

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF EMPLOYER ALLOCATIONS
YEAR ENDED DECEMBER 31, 2022**

Employer	Employer Contributions	Employer Allocation Percentage
Lunenburg Water District	\$ 75,899	0.093346%
Mendon	909,987	1.119166%
Mendon-Upton Regional	1,013,683	1.246699%
Millbury	2,429,017	2.987377%
Millbury Housing Authority	127,765	0.157134%
Millville	225,736	0.277626%
Narragansett Regional	617,693	0.759682%
Nashoba Regional	1,329,615	1.635254%
Nashoba Valley Dispatchers	60,987	0.075006%
New Braintree	73,160	0.089977%
Northboro	2,812,709	3.459268%
Northboro Housing Authority	89,557	0.110144%
Northboro-Southboro Regional	567,141	0.697510%
North Brookfield	725,548	0.892330%
North Brookfield Housing Authority	24,200	0.029763%
Oakham	85,337	0.104953%
Oxford	2,718,666	3.343608%
Oxford Housing Authority	94,854	0.116658%
Oxford-Rochdale Sewer District	46,629	0.057348%
Paxton	999,629	1.229414%
Petersham	204,612	0.251646%
Phillipston	164,088	0.201807%
Princeton	523,409	0.643725%
Quabbin Regional	1,358,209	1.670421%
Quaboag Regional	469,671	0.577635%
Royalston	74,266	0.091338%
Rutland	850,288	1.045744%
Southboro	2,558,308	3.146388%
Southboro Housing Authority	33,135	0.040752%
Spencer	1,202,612	1.479057%
Spencer-East Brookfield Regional	782,690	0.962607%
Spencer Housing Authority	68,053	0.083696%
Sterling	1,379,365	1.696441%
Sterling Housing Authority	12,489	0.015360%
Sturbridge	1,825,683	2.245354%
Sutton	1,564,366	1.923968%
Tantasqua Regional	917,249	1.128098%
Templeton	1,064,999	1.309811%
Templeton Housing Authority	59,185	0.072790%
Upton	841,271	1.034655%
Uxbridge	2,416,713	2.972244%
Uxbridge Housing Authority	77,195	0.094940%
Wachusett Regional	2,570,982	3.161975%
Warren	499,592	0.614434%
Warren Water District	24,264	0.029842%

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF EMPLOYER ALLOCATIONS
YEAR ENDED DECEMBER 31, 2022**

Employer	Employer Contributions	Employer Allocation Percentage
Westboro	\$ 5,584,708	6.868468%
Westboro Housing Authority	61,447	0.075572%
West Boylston	1,657,286	2.038247%
West Boylston Housing Authority	20,162	0.024797%
West Boylston Water District	85,383	0.105010%
West Brookfield	367,845	0.452402%
Westminster	1,150,937	1.415504%
Winchendon	2,052,984	2.524905%
Winchendon Housing Authority	157,217	0.193357%
Total	<u>\$ 81,309,364</u>	<u>100.000000%</u>

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Ashburnham</u>	<u>Ashburnham- Westminster Regional</u>	<u>Athol</u>	<u>Athol Housing Authority</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 11,785,424	\$ 9,014,065	\$ 20,525,227	\$ 503,853
Ending Net Pension Liability	14,323,122	10,985,246	25,221,158	616,352
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	966,600	741,343	1,702,057	41,595
Assumption Changes	759,019	582,136	1,336,534	32,662
Change in Allocated Proportion	531,109	-	307,146	16,770
Total Deferred Outflows of Resources	<u>\$ 2,256,728</u>	<u>\$ 1,323,479</u>	<u>\$ 3,345,737</u>	<u>\$ 91,027</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 438,324	\$ 336,177	\$ 771,832	\$ 18,862
Change in Allocated Proportion	107,863	81,810	13,876	29,154
Total Deferred Inflows of Resources	<u>\$ 546,187</u>	<u>\$ 417,987</u>	<u>\$ 785,708</u>	<u>\$ 48,016</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,548,305	\$ 1,187,487	\$ 2,726,365	\$ 66,627
Net Amortization of Deferred Amounts from Changes in Proportion	191,007	43,784	(1,089,621)	(71,393)
Total Pension Expense	<u>\$ 1,739,312</u>	<u>\$ 1,231,271</u>	<u>\$ 1,636,744</u>	<u>\$ (4,766)</u>
Covered Payroll	\$ 3,858,146	\$ 4,419,463	\$ 6,643,968	\$ 336,935

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**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Athol- Royalston Regional	Auburn	Auburn Housing Authority	Auburn Water District
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 7,630,686	\$ 44,414,357	\$ 882,167	\$ 1,344,209
Ending Net Pension Liability	9,374,829	54,124,037	1,077,936	1,657,955
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	632,663	3,652,577	72,745	111,888
Assumption Changes	496,796	2,868,172	57,123	87,859
Change in Allocated Proportion	76,179	329,119	1,393	62,110
Total Deferred Outflows of Resources	<u>\$ 1,205,638</u>	<u>\$ 6,849,868</u>	<u>\$ 131,261</u>	<u>\$ 261,857</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 286,894	\$ 1,656,334	\$ 32,988	\$ 50,738
Change in Allocated Proportion	187,676	277,200	15,198	51,020
Total Deferred Inflows of Resources	<u>\$ 474,570</u>	<u>\$ 1,933,534</u>	<u>\$ 48,186</u>	<u>\$ 101,758</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,013,403	\$ 5,850,718	\$ 116,523	\$ 179,222
Net Amortization of Deferred Amounts from Changes in Proportion	(617,522)	463,519	(1,784)	(14,503)
Total Pension Expense	<u>\$ 395,881</u>	<u>\$ 6,314,237</u>	<u>\$ 114,739</u>	<u>\$ 164,719</u>
Covered Payroll	\$ 3,090,644	\$ 17,198,399	\$ 315,940	\$ 658,039

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Barre</u>	<u>Barre Housing Authority</u>	<u>Berlin</u>	<u>Berlin- Boylston Regional</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 4,669,123	\$ 343,960	\$ 6,278,951	\$ 3,637,573
Ending Net Pension Liability	5,648,099	425,984	7,659,371	4,381,932
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	381,164	28,748	516,895	295,716
Assumption Changes	299,307	22,574	405,890	232,210
Change in Allocated Proportion	<u>155,343</u>	<u>72,025</u>	<u>-</u>	<u>1,095,065</u>
Total Deferred Outflows of Resources	<u>\$ 835,814</u>	<u>\$ 123,347</u>	<u>\$ 922,785</u>	<u>\$ 1,622,991</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 172,846	\$ 13,036	\$ 234,396	\$ 134,098
Change in Allocated Proportion	<u>65,876</u>	<u>-</u>	<u>376,044</u>	<u>47,730</u>
Total Deferred Inflows of Resources	<u>\$ 238,722</u>	<u>\$ 13,036</u>	<u>\$ 610,440</u>	<u>\$ 181,828</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 610,550	\$ 46,048	\$ 827,965	\$ 473,680
Net Amortization of Deferred Amounts from Changes in Proportion	<u>43,420</u>	<u>23,836</u>	<u>(61,828)</u>	<u>327,533</u>
Total Pension Expense	<u>\$ 653,970</u>	<u>\$ 69,884</u>	<u>\$ 766,137</u>	<u>\$ 801,213</u>
Covered Payroll	\$ 2,676,719	\$ 62,178	\$ 2,001,164	\$ 2,326,343

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Blackstone</u>	<u>Blackstone Housing Authority</u>	<u>Blackstone- Millville Regional</u>	<u>Bolton</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 10,478,120	\$ 212,955	\$ 6,947,093	\$ 6,858,208
Ending Net Pension Liability	12,838,993	268,510	8,490,169	8,335,098
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	866,443	18,120	572,962	562,497
Assumption Changes	680,371	14,229	449,916	441,698
Change in Allocated Proportion	<u>193,260</u>	<u>6,098</u>	<u>5,775</u>	<u>332,963</u>
Total Deferred Outflows of Resources	<u>\$ 1,740,074</u>	<u>\$ 38,447</u>	<u>\$ 1,028,653</u>	<u>\$ 1,337,158</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 392,906	\$ 8,217	\$ 259,821	\$ 255,075
Change in Allocated Proportion	<u>793,717</u>	<u>32,563</u>	<u>273,737</u>	<u>37,350</u>
Total Deferred Inflows of Resources	<u>\$ 1,186,623</u>	<u>\$ 40,780</u>	<u>\$ 533,558</u>	<u>\$ 292,425</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,387,874	\$ 29,026	\$ 917,773	\$ 901,010
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(1,992)</u>	<u>(6,666)</u>	<u>(118,947)</u>	<u>147,104</u>
Total Pension Expense	<u>\$ 1,385,882</u>	<u>\$ 22,360</u>	<u>\$ 798,826</u>	<u>\$ 1,048,114</u>
Covered Payroll	\$ 4,503,114	\$ 41,190	\$ 3,047,067	\$ 2,756,129

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Boylston	Boylston Water District	Brookfield	Charlton
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 8,031,694	\$ 168,410	\$ 4,150,866	\$ 19,648,787
Ending Net Pension Liability	9,748,647	210,804	5,048,630	23,898,689
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	657,890	14,226	340,708	1,612,810
Assumption Changes	516,606	11,171	267,540	1,266,453
Change in Allocated Proportion	-	7,928	147,948	1,023,032
Total Deferred Outflows of Resources	<u>\$ 1,174,496</u>	<u>\$ 33,325</u>	<u>\$ 756,196</u>	<u>\$ 3,902,295</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 298,334	\$ 6,451	\$ 154,501	\$ 731,361
Change in Allocated Proportion	810,793	1,119	64,550	111,112
Total Deferred Inflows of Resources	<u>\$ 1,109,127</u>	<u>\$ 7,570</u>	<u>\$ 219,051</u>	<u>\$ 842,473</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,053,812	\$ 22,788	\$ 545,748	\$ 2,583,408
Net Amortization of Deferred Amounts from Changes in Proportion	(93,541)	5,250	52,426	388,417
Total Pension Expense	<u>\$ 960,271</u>	<u>\$ 28,038</u>	<u>\$ 598,174</u>	<u>\$ 2,971,825</u>
Covered Payroll	\$ 3,616,888	\$ 71,935	\$ 1,858,889	\$ 6,766,038

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Cherry Valley- Rochdale Water	Cherry Valley Sewer District	Douglas	Dudley
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 743,955	\$ -	\$ 14,542,025	\$ 12,427,148
Ending Net Pension Liability	926,507	-	17,655,257	15,147,003
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	62,526	-	1,191,470	1,022,200
Assumption Changes	49,098	-	935,597	802,679
Change in Allocated Proportion	39,312	148	-	327,954
Total Deferred Outflows of Resources	<u>\$ 150,936</u>	<u>\$ 148</u>	<u>\$ 2,127,067</u>	<u>\$ 2,152,833</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 28,353	\$ -	\$ 540,296	\$ 463,537
Change in Allocated Proportion	13,447	8,097	432,234	96,149
Total Deferred Inflows of Resources	<u>\$ 41,800</u>	<u>\$ 8,097</u>	<u>\$ 972,530</u>	<u>\$ 559,686</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 100,154	\$ -	\$ 1,908,504	\$ 1,637,366
Net Amortization of Deferred Amounts from Changes in Proportion	11,272	(1,129)	8,696	(18,731)
Total Pension Expense	<u>\$ 111,426</u>	<u>\$ (1,129)</u>	<u>\$ 1,917,200</u>	<u>\$ 1,618,635</u>
Covered Payroll	\$ 345,769	\$ -	\$ 6,900,219	\$ 4,129,721

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**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Dudley Housing Authority	Dudley- Charlton Regional	East Brookfield	Grafton
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 256,521	\$ 14,000,481	\$ 2,112,167	\$ 26,736,222
Ending Net Pension Liability	315,846	17,098,495	2,569,197	32,615,484
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	21,315	1,153,897	173,383	2,201,066
Assumption Changes	16,737	906,093	136,148	1,728,378
Change in Allocated Proportion	31,372	35,684	16,332	720,631
Total Deferred Outflows of Resources	<u>\$ 69,424</u>	<u>\$ 2,095,674</u>	<u>\$ 325,863</u>	<u>\$ 4,650,075</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 9,666	\$ 523,258	\$ 78,624	\$ 998,117
Change in Allocated Proportion	-	110,192	24,438	37,874
Total Deferred Inflows of Resources	<u>\$ 9,666</u>	<u>\$ 633,450</u>	<u>\$ 103,062</u>	<u>\$ 1,035,991</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 34,142	\$ 1,848,319	\$ 277,726	\$ 3,525,679
Net Amortization of Deferred Amounts from Changes in Proportion	(11,419)	4,461	50,668	273,633
Total Pension Expense	<u>\$ 22,723</u>	<u>\$ 1,852,780</u>	<u>\$ 328,394</u>	<u>\$ 3,799,312</u>
Covered Payroll	\$ 127,470	\$ 6,110,020	\$ 975,083	\$ 12,786,214

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Grafton Housing Authority	Hardwick	Harvard	Hillcrest Water District
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 635,405	\$ 2,485,869	\$ 12,848,117	\$ 113,982
Ending Net Pension Liability	782,413	3,035,296	15,699,642	143,436
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	52,801	204,838	1,059,495	9,680
Assumption Changes	41,462	160,848	831,964	7,601
Change in Allocated Proportion	8,716	4,518	269,947	48,041
Total Deferred Outflows of Resources	<u>\$ 102,979</u>	<u>\$ 370,204</u>	<u>\$ 2,161,406</u>	<u>\$ 65,322</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 23,944	\$ 92,888	\$ 480,449	\$ 4,390
Change in Allocated Proportion	72,414	189,643	58,933	29,851
Total Deferred Inflows of Resources	<u>\$ 96,358</u>	<u>\$ 282,531</u>	<u>\$ 539,382</u>	<u>\$ 34,241</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 84,578	\$ 328,110	\$ 1,697,105	\$ 15,505
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(25,927)</u>	<u>(126,755)</u>	26,843	<u>(2,358)</u>
Total Pension Expense	<u>\$ 58,651</u>	<u>\$ 201,355</u>	<u>\$ 1,723,948</u>	<u>\$ 13,147</u>
Covered Payroll	\$ 236,422	\$ 1,096,184	\$ 5,653,864	\$ -

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Holden</u>	<u>Holden Housing Authority</u>	<u>Hopedale</u>	<u>Hopedale Housing Authority</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 30,641,099	\$ 264,902	\$ 13,683,610	\$ 38,316
Ending Net Pension Liability	37,592,749	334,006	16,651,189	48,322
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	2,536,958	22,541	1,123,710	3,261
Assumption Changes	1,992,136	17,700	882,389	2,561
Change in Allocated Proportion	<u>737,669</u>	<u>14,853</u>	<u>223,007</u>	<u>3,422</u>
Total Deferred Outflows of Resources	<u>\$ 5,266,763</u>	<u>\$ 55,094</u>	<u>\$ 2,229,106</u>	<u>\$ 9,244</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 1,150,434	\$ 10,221	\$ 509,569	\$ 1,479
Change in Allocated Proportion	<u>509,999</u>	<u>135,854</u>	<u>236,722</u>	<u>25,578</u>
Total Deferred Inflows of Resources	<u>\$ 1,660,433</u>	<u>\$ 146,075</u>	<u>\$ 746,291</u>	<u>\$ 27,057</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 4,063,713	\$ 36,106	\$ 1,799,966	\$ 5,224
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(215,672)</u>	<u>(34,140)</u>	<u>74,947</u>	<u>(11,579)</u>
Total Pension Expense	<u>\$ 3,848,041</u>	<u>\$ 1,966</u>	<u>\$ 1,874,913</u>	<u>\$ (6,355)</u>
Covered Payroll	\$ 11,333,737	\$ -	\$ 5,798,933	\$ -

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Hubbardston</u>	<u>Lancaster</u>	<u>Lancaster Housing Authority</u>	<u>Lancaster Sewer</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 3,683,997	\$ 8,655,724	\$ 178,704	\$ 31,632
Ending Net Pension Liability	4,443,761	10,598,036	217,785	36,561
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	299,889	715,212	14,697	2,467
Assumption Changes	235,486	561,617	11,541	1,937
Change in Allocated Proportion	180,609	219,832	167	7,918
Total Deferred Outflows of Resources	<u>\$ 715,984</u>	<u>\$ 1,496,661</u>	<u>\$ 26,405</u>	<u>\$ 12,322</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 135,990	\$ 324,327	\$ 6,665	\$ 1,119
Change in Allocated Proportion	197,906	317,759	29,281	2,677
Total Deferred Inflows of Resources	<u>\$ 333,896</u>	<u>\$ 642,086</u>	<u>\$ 35,946</u>	<u>\$ 3,796</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 480,363	\$ 1,145,630	\$ 23,542	\$ 3,952
Net Amortization of Deferred Amounts from Changes in Proportion	(18,380)	27,465	1,059	4,699
Total Pension Expense	<u>\$ 461,983</u>	<u>\$ 1,173,095</u>	<u>\$ 24,601</u>	<u>\$ 8,651</u>
Covered Payroll	\$ 1,342,045	\$ 3,135,422	\$ 55,810	\$ 46,800

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Leicester</u>	<u>Leicester Housing Authority</u>	<u>Leicester Water District</u>	<u>Lunenburg</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 17,721,724	\$ 683,981	\$ 638,069	\$ 17,433,946
Ending Net Pension Liability	21,718,485	834,251	739,820	21,361,778
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	1,465,678	56,300	49,927	1,441,606
Assumption Changes	1,150,918	44,209	39,205	1,132,015
Change in Allocated Proportion	<u>265,554</u>	<u>43,991</u>	<u>41,464</u>	<u>171,490</u>
Total Deferred Outflows of Resources	<u>\$ 2,882,150</u>	<u>\$ 144,500</u>	<u>\$ 130,596</u>	<u>\$ 2,745,111</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 664,641	\$ 25,530	\$ 22,640	\$ 653,725
Change in Allocated Proportion	<u>352,010</u>	<u>748</u>	<u>76,348</u>	<u>951,645</u>
Total Deferred Inflows of Resources	<u>\$ 1,016,651</u>	<u>\$ 26,278</u>	<u>\$ 98,988</u>	<u>\$ 1,605,370</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 2,347,732	\$ 90,181	\$ 79,973	\$ 2,309,172
Net Amortization of Deferred Amounts from Changes in Proportion	<u>5,049</u>	<u>13,490</u>	<u>(27,195)</u>	<u>(158,202)</u>
Total Pension Expense	<u>\$ 2,352,781</u>	<u>\$ 103,671</u>	<u>\$ 52,778</u>	<u>\$ 2,150,970</u>
Covered Payroll	\$ 6,387,084	\$ 227,636	\$ 468,584	\$ 7,853,347

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Lunenburg Housing Authority	Lunenburg Water District	Mendon	Mendon- Upton Regional
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 27,009	\$ 760,101	\$ 9,434,419	\$ 10,531,968
Ending Net Pension Liability	32,375	959,856	11,508,140	12,819,530
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	2,185	64,776	776,630	865,130
Assumption Changes	1,716	50,865	609,846	679,340
Change in Allocated Proportion	3,936	54,745	442,210	9,049
Total Deferred Outflows of Resources	<u>\$ 7,837</u>	<u>\$ 170,386</u>	<u>\$ 1,828,686</u>	<u>\$ 1,553,519</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 991	\$ 29,374	\$ 352,179	\$ 392,310
Change in Allocated Proportion	946	49,918	33,654	187,596
Total Deferred Inflows of Resources	<u>\$ 1,937</u>	<u>\$ 79,292</u>	<u>\$ 385,833</u>	<u>\$ 579,906</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 3,500	\$ 103,759	\$ 1,244,011	\$ 1,385,770
Net Amortization of Deferred Amounts from Changes in Proportion	(4,308)	(1,838)	204,334	(25,591)
Total Pension Expense	<u>\$ (808)</u>	<u>\$ 101,921</u>	<u>\$ 1,448,345</u>	<u>\$ 1,360,179</u>
Covered Payroll	\$ 11,264	\$ 373,362	\$ 3,066,522	\$ 4,775,640

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Millbury</u>	<u>Millbury Housing Authority</u>	<u>Millville</u>	<u>Narragansett Regional</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 25,055,853	\$ 1,313,999	\$ 2,412,254	\$ 6,434,221
Ending Net Pension Liability	30,718,536	1,615,779	2,854,768	7,811,647
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	2,073,050	109,041	192,655	527,171
Assumption Changes	1,627,854	85,624	151,281	413,959
Change in Allocated Proportion	<u>136,109</u>	<u>10,855</u>	<u>81,431</u>	<u>638,113</u>
Total Deferred Outflows of Resources	<u>\$ 3,837,013</u>	<u>\$ 205,520</u>	<u>\$ 425,367</u>	<u>\$ 1,579,243</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 940,066	\$ 49,447	\$ 87,363	\$ 239,056
Change in Allocated Proportion	<u>585,610</u>	<u>30,351</u>	<u>150,414</u>	<u>61,536</u>
Total Deferred Inflows of Resources	<u>\$ 1,525,676</u>	<u>\$ 79,798</u>	<u>\$ 237,777</u>	<u>\$ 300,592</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 3,320,622	\$ 174,663	\$ 308,596	\$ 844,426
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(193,618)</u>	<u>(9,168)</u>	<u>22,671</u>	<u>119,218</u>
Total Pension Expense	<u>\$ 3,127,004</u>	<u>\$ 165,495</u>	<u>\$ 331,267</u>	<u>\$ 963,644</u>
Covered Payroll	\$ 8,485,566	\$ 455,025	\$ 651,000	\$ 3,027,130

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Nashoba Regional</u>	<u>Nashoba Valley Dispatchers</u>	<u>New Braintree</u>	<u>Northboro</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 13,788,983	\$ 639,618	\$ 749,865	\$ 29,016,674
Ending Net Pension Liability	16,814,961	771,271	925,217	35,570,892
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	1,134,763	52,049	62,439	2,400,512
Assumption Changes	891,068	40,872	49,030	1,884,993
Change in Allocated Proportion	-	192,702	22,052	459,430
Total Deferred Outflows of Resources	<u>\$ 2,025,831</u>	<u>\$ 285,623</u>	<u>\$ 133,521</u>	<u>\$ 4,744,935</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 514,581	\$ 23,603	\$ 28,314	\$ 1,088,560
Change in Allocated Proportion	565,991	9,420	37,947	330,864
Total Deferred Inflows of Resources	<u>\$ 1,080,572</u>	<u>\$ 33,023</u>	<u>\$ 66,261</u>	<u>\$ 1,419,424</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,817,669	\$ 83,373	\$ 100,014	\$ 3,845,154
Net Amortization of Deferred Amounts from Changes in Proportion	(7,806)	103,878	(40,547)	171,141
Total Pension Expense	<u>\$ 1,809,863</u>	<u>\$ 187,251</u>	<u>\$ 59,467</u>	<u>\$ 4,016,295</u>
Covered Payroll	\$ 6,648,761	\$ 870,168	\$ 218,152	\$ 11,059,672

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Northboro Housing Authority	Northboro- Southboro Regional	North Brookfield	North Brookfield Housing Authority
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 924,674	\$ 5,909,200	\$ 7,533,067	\$ 249,325
Ending Net Pension Liability	1,132,582	7,172,342	9,175,634	306,045
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	76,433	484,028	619,220	20,654
Assumption Changes	60,018	380,081	486,240	16,218
Change in Allocated Proportion	4,128	363,102	517,334	18,536
Total Deferred Outflows of Resources	<u>\$ 140,579</u>	<u>\$ 1,227,211</u>	<u>\$ 1,622,794</u>	<u>\$ 55,408</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 34,660	\$ 219,492	\$ 280,798	\$ 9,366
Change in Allocated Proportion	13,289	53,084	30,684	15,856
Total Deferred Inflows of Resources	<u>\$ 47,949</u>	<u>\$ 272,576</u>	<u>\$ 311,482</u>	<u>\$ 25,222</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 122,430	\$ 775,318	\$ 991,871	\$ 33,083
Net Amortization of Deferred Amounts from Changes in Proportion	3,843	161,397	156,958	(2,013)
Total Pension Expense	<u>\$ 126,273</u>	<u>\$ 936,715</u>	<u>\$ 1,148,829</u>	<u>\$ 31,070</u>
Covered Payroll	\$ 288,758	\$ 2,589,568	\$ 2,704,994	\$ 58,237

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Oakham	Oxford	Oxford Housing Authority	Oxford- Rochdale Sewer District
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 877,795	\$ 28,197,247	\$ 979,149	\$ 480,021
Ending Net Pension Liability	1,079,213	34,381,578	1,199,570	589,693
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	72,831	2,320,251	80,953	39,796
Assumption Changes	57,190	1,821,968	63,568	31,249
Change in Allocated Proportion	9,893	624,591	57,658	16,820
Total Deferred Outflows of Resources	<u>\$ 139,914</u>	<u>\$ 4,766,810</u>	<u>\$ 202,179</u>	<u>\$ 87,865</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 33,027	\$ 1,052,164	\$ 36,710	\$ 18,046
Change in Allocated Proportion	73,948	493,797	48,500	-
Total Deferred Inflows of Resources	<u>\$ 106,975</u>	<u>\$ 1,545,961</u>	<u>\$ 85,210</u>	<u>\$ 18,046</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 116,661	\$ 3,716,591	\$ 129,672	\$ 63,745
Net Amortization of Deferred Amounts from Changes in Proportion	(37,705)	(343,426)	14,549	23,441
Total Pension Expense	<u>\$ 78,956</u>	<u>\$ 3,373,165</u>	<u>\$ 144,221</u>	<u>\$ 87,186</u>
Covered Payroll	\$ 402,042	\$ 10,139,165	\$ 349,291	\$ -

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Paxton</u>	<u>Petersham</u>	<u>Phillipston</u>	<u>Princeton</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 10,409,788	\$ 2,112,155	\$ 1,710,544	\$ 5,374,329
Ending Net Pension Liability	12,641,797	2,587,623	2,075,137	6,619,286
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	853,135	174,627	140,041	446,705
Assumption Changes	669,921	137,125	109,967	350,773
Change in Allocated Proportion	<u>214,117</u>	<u>5,941</u>	<u>8,001</u>	<u>268,694</u>
Total Deferred Outflows of Resources	<u>\$ 1,737,173</u>	<u>\$ 317,693</u>	<u>\$ 258,009</u>	<u>\$ 1,066,172</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 386,871	\$ 79,188	\$ 63,505	\$ 202,567
Change in Allocated Proportion	<u>165,524</u>	<u>86,309</u>	<u>130,846</u>	<u>97,432</u>
Total Deferred Inflows of Resources	<u>\$ 552,395</u>	<u>\$ 165,497</u>	<u>\$ 194,351</u>	<u>\$ 299,999</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,366,557	\$ 279,718	\$ 224,319	\$ 715,534
Net Amortization of Deferred Amounts from Changes in Proportion	<u>259,201</u>	<u>(37,686)</u>	<u>(35,977)</u>	<u>(29,375)</u>
Total Pension Expense	<u>\$ 1,625,758</u>	<u>\$ 242,032</u>	<u>\$ 188,342</u>	<u>\$ 686,159</u>
Covered Payroll	\$ 3,696,886	\$ 576,818	\$ 618,443	\$ 1,869,526

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Quabbin Regional</u>	<u>Quaboag Regional</u>	<u>Royalston</u>	<u>Rutland</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 14,006,083	\$ 4,962,970	\$ 750,172	\$ 8,835,840
Ending Net Pension Liability	17,176,574	5,939,689	939,204	10,753,157
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	1,159,166	400,842	63,382	725,680
Assumption Changes	910,231	314,759	49,771	569,837
Change in Allocated Proportion	<u>103,207</u>	<u>14,106</u>	<u>28,302</u>	<u>223,564</u>
Total Deferred Outflows of Resources	<u>\$ 2,172,604</u>	<u>\$ 729,707</u>	<u>\$ 141,455</u>	<u>\$ 1,519,081</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 525,647	\$ 181,770	\$ 28,742	\$ 329,074
Change in Allocated Proportion	<u>316,607</u>	<u>141,193</u>	<u>35,870</u>	<u>37,256</u>
Total Deferred Inflows of Resources	<u>\$ 842,254</u>	<u>\$ 322,963</u>	<u>\$ 64,612</u>	<u>\$ 366,330</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,856,759	\$ 642,070	\$ 101,526	\$ 1,162,398
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(141,157)</u>	<u>(37,126)</u>	<u>(12,008)</u>	<u>179,972</u>
Total Pension Expense	<u>\$ 1,715,602</u>	<u>\$ 604,944</u>	<u>\$ 89,518</u>	<u>\$ 1,342,370</u>
Covered Payroll	\$ 5,526,266	\$ 2,727,474	\$ 156,599	\$ 4,744,229

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Southboro</u>	<u>Southboro Housing Authority</u>	<u>Spencer</u>	<u>Spencer- East Brookfield Regional</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 26,434,803	\$ 350,974	\$ 12,443,989	\$ 8,140,017
Ending Net Pension Liability	32,353,613	419,041	15,208,819	9,898,280
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	2,183,393	28,279	1,026,372	667,988
Assumption Changes	1,714,501	22,206	805,954	524,535
Change in Allocated Proportion	<u>163,382</u>	<u>100,442</u>	<u>175,577</u>	<u>1,277</u>
Total Deferred Outflows of Resources	<u>\$ 4,061,276</u>	<u>\$ 150,927</u>	<u>\$ 2,007,903</u>	<u>\$ 1,193,800</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 990,103	\$ 12,824	\$ 465,429	\$ 302,913
Change in Allocated Proportion	<u>511,190</u>	<u>15,700</u>	<u>159,175</u>	<u>295,845</u>
Total Deferred Inflows of Resources	<u>\$ 1,501,293</u>	<u>\$ 28,524</u>	<u>\$ 624,604</u>	<u>\$ 598,758</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 3,497,371	\$ 45,298	\$ 1,644,048	\$ 1,069,987
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(35,047)</u>	<u>20,652</u>	<u>45,798</u>	<u>(102,909)</u>
Total Pension Expense	<u>\$ 3,462,324</u>	<u>\$ 65,950</u>	<u>\$ 1,689,846</u>	<u>\$ 967,078</u>
Covered Payroll	\$ 10,715,927	\$ 61,504	\$ 3,955,679	\$ 3,291,529

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Spencer Housing Authority	Sterling	Sterling Housing Authority	Sturbridge
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 695,322	\$ 14,306,387	\$ 130,356	\$ 19,070,840
Ending Net Pension Liability	860,631	17,444,124	157,942	23,088,479
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	58,080	1,177,222	10,659	1,558,133
Assumption Changes	45,607	924,409	8,370	1,223,518
Change in Allocated Proportion	59,295	292,212	37,677	190,520
Total Deferred Outflows of Resources	<u>\$ 162,982</u>	<u>\$ 2,393,843</u>	<u>\$ 56,706</u>	<u>\$ 2,972,171</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 26,338	\$ 533,835	\$ 4,833	\$ 706,567
Change in Allocated Proportion	-	510,104	19,101	352,651
Total Deferred Inflows of Resources	<u>\$ 26,338</u>	<u>\$ 1,043,939</u>	<u>\$ 23,934</u>	<u>\$ 1,059,218</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 93,033	\$ 1,885,680	\$ 17,073	\$ 2,495,826
Net Amortization of Deferred Amounts from Changes in Proportion	14,549	64,261	739	41,552
Total Pension Expense	<u>\$ 107,582</u>	<u>\$ 1,949,941</u>	<u>\$ 17,812</u>	<u>\$ 2,537,378</u>
Covered Payroll	\$ 310,919	\$ 5,487,627	\$ 58,528	\$ 8,964,171

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Sutton	Tantasqua Regional	Templeton	Templeton Housing Authority
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 16,161,656	\$ 9,328,169	\$ 10,983,225	\$ 623,654
Ending Net Pension Liability	19,783,737	11,599,979	13,468,498	748,482
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	1,335,111	782,828	908,926	50,512
Assumption Changes	1,048,391	614,713	713,730	39,664
Change in Allocated Proportion	151,806	313,177	81,144	29,952
Total Deferred Outflows of Resources	<u>\$ 2,535,308</u>	<u>\$ 1,710,718</u>	<u>\$ 1,703,800</u>	<u>\$ 120,128</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 605,433	\$ 354,989	\$ 412,170	\$ 22,905
Change in Allocated Proportion	203,693	433,537	121,999	22,254
Total Deferred Inflows of Resources	<u>\$ 809,126</u>	<u>\$ 788,526</u>	<u>\$ 534,169</u>	<u>\$ 45,159</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 2,138,589	\$ 1,253,938	\$ 1,455,922	\$ 80,910
Net Amortization of Deferred Amounts from Changes in Proportion	38,186	6,672	(62,425)	(1,835)
Total Pension Expense	<u>\$ 2,176,775</u>	<u>\$ 1,260,610</u>	<u>\$ 1,393,497</u>	<u>\$ 79,075</u>
Covered Payroll	\$ 7,529,401	\$ 4,757,757	\$ 4,315,139	\$ 64,611

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Upton	Uxbridge	Uxbridge Housing Authority	Wachusett Regional
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 8,628,031	\$ 24,988,090	\$ 791,312	\$ 26,760,851
Ending Net Pension Liability	10,639,124	30,562,933	976,246	32,513,894
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	717,984	2,062,549	65,882	2,194,210
Assumption Changes	563,794	1,619,608	51,734	1,722,995
Change in Allocated Proportion	139,667	105,102	48,544	491,986
Total Deferred Outflows of Resources	<u>\$ 1,421,445</u>	<u>\$ 3,787,259</u>	<u>\$ 166,160</u>	<u>\$ 4,409,191</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 325,584	\$ 935,304	\$ 29,876	\$ 995,008
Change in Allocated Proportion	64,450	662,413	-	646,577
Total Deferred Inflows of Resources	<u>\$ 390,034</u>	<u>\$ 1,597,717</u>	<u>\$ 29,876</u>	<u>\$ 1,641,585</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,150,071	\$ 3,303,802	\$ 105,531	\$ 3,514,697
Net Amortization of Deferred Amounts from Changes in Proportion	121,093	(289,458)	(7,851)	190,697
Total Pension Expense	<u>\$ 1,271,164</u>	<u>\$ 3,014,344</u>	<u>\$ 97,680</u>	<u>\$ 3,705,394</u>
Covered Payroll	\$ 3,631,891	\$ 11,177,360	\$ 225,821	\$ 13,881,126

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Warren	Warren Water District	Westboro	Westboro Housing Authority
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 5,269,309	\$ 252,547	\$ 57,590,002	\$ 642,613
Ending Net Pension Liability	6,318,084	306,854	70,626,947	777,089
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	426,378	20,708	4,766,282	52,442
Assumption Changes	334,812	16,261	3,742,706	41,180
Change in Allocated Proportion	159,412	10,025	1,271,890	27,225
Total Deferred Outflows of Resources	<u>\$ 920,602</u>	<u>\$ 46,994</u>	<u>\$ 9,780,878</u>	<u>\$ 120,847</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 193,350	\$ 9,391	\$ 2,161,366	\$ 23,781
Change in Allocated Proportion	220,425	2,237	213,166	7,804
Total Deferred Inflows of Resources	<u>\$ 413,775</u>	<u>\$ 11,628</u>	<u>\$ 2,374,532</u>	<u>\$ 31,585</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 682,974	\$ 33,170	\$ 7,634,651	\$ 84,002
Net Amortization of Deferred Amounts from Changes in Proportion	15,392	6,985	256,582	17,547
Total Pension Expense	<u>\$ 698,366</u>	<u>\$ 40,155</u>	<u>\$ 7,891,233</u>	<u>\$ 101,549</u>
Covered Payroll	\$ 1,935,591	\$ 58,588	\$ 23,268,371	\$ 172,400

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>West Boylston</u>	<u>West Boylston Housing Authority</u>	<u>West Boylston Water District</u>	<u>West Brookfield</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 17,244,618	\$ 209,767	\$ 871,213	\$ 3,829,713
Ending Net Pension Liability	20,958,848	254,979	1,079,795	4,651,948
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	1,414,414	17,207	72,870	313,938
Assumption Changes	1,110,663	13,512	57,221	246,519
Change in Allocated Proportion	<u>163,853</u>	<u>93,412</u>	<u>61,524</u>	<u>51,792</u>
Total Deferred Outflows of Resources	<u>\$ 2,688,930</u>	<u>\$ 124,131</u>	<u>\$ 191,615</u>	<u>\$ 612,249</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 641,394	\$ 7,803	\$ 33,044	\$ 142,361
Change in Allocated Proportion	<u>619,668</u>	<u>25,917</u>	<u>33,843</u>	<u>160,584</u>
Total Deferred Inflows of Resources	<u>\$ 1,261,062</u>	<u>\$ 33,720</u>	<u>\$ 66,887</u>	<u>\$ 302,945</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 2,265,616	\$ 27,563	\$ 116,724	\$ 502,868
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(56,829)</u>	<u>8,829</u>	<u>19,071</u>	<u>(19,999)</u>
Total Pension Expense	<u>\$ 2,208,787</u>	<u>\$ 36,392</u>	<u>\$ 135,795</u>	<u>\$ 482,869</u>
Covered Payroll	\$ 5,533,636	\$ 60,375	\$ 433,695	\$ 1,256,660

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	<u>Westminster</u>	<u>Winchendon</u>	<u>Winchendon Housing Authority</u>	<u>Worcester Regional Retirement System</u>
<u>Net Pension Liability</u>				
Beginning Net Pension Liability	\$ 11,834,523	\$ 21,242,856	\$ 1,627,819	\$ -
Ending Net Pension Liability	14,555,312	25,963,039	1,988,243	-
<u>Deferred Outflows of Resources</u>				
Net Difference Between Projected and Actual Investment Earnings	982,270	1,752,123	134,177	-
Assumption Changes	771,323	1,375,848	105,362	-
Change in Allocated Proportion	<u>117,330</u>	<u>152,790</u>	<u>77,896</u>	<u>-</u>
Total Deferred Outflows of Resources	<u>\$ 1,870,923</u>	<u>\$ 3,280,761</u>	<u>\$ 317,435</u>	<u>\$ -</u>
<u>Deferred Inflows of Resources</u>				
Net Difference Between Expected and Actual Experience	\$ 445,430	\$ 794,535	\$ 60,845	\$ -
Change in Allocated Proportion	<u>249,398</u>	<u>249,069</u>	<u>-</u>	<u>-</u>
Total Deferred Inflows of Resources	<u>\$ 694,828</u>	<u>\$ 1,043,604</u>	<u>\$ 60,845</u>	<u>\$ -</u>
<u>Pension Expense</u>				
Proportionate Share of Pension Expense	\$ 1,573,405	\$ 2,806,561	\$ 214,926	\$ -
Net Amortization of Deferred Amounts from Changes in Proportion	<u>(56,529)</u>	<u>(207,622)</u>	<u>51,351</u>	<u>-</u>
Total Pension Expense	<u>\$ 1,516,876</u>	<u>\$ 2,598,939</u>	<u>\$ 266,277</u>	<u>\$ -</u>
Covered Payroll	\$ 4,687,311	\$ 6,821,140	\$ 605,988	\$ 624,244

(Continued)

**WORCESTER REGIONAL RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
YEAR ENDED DECEMBER 31, 2022**

	Totals
<u>Net Pension Liability</u>	
Beginning Net Pension Liability	\$ 842,013,303
Ending Net Pension Liability	1,028,277,936
<u>Deferred Outflows of Resources</u>	
Net Difference Between Projected and Actual Investment Earnings	69,393,646
Assumption Changes	54,491,085
Change in Allocated Proportion	16,873,429
Total Deferred Outflows of Resources	\$ 140,758,160
<u>Deferred Inflows of Resources</u>	
Net Difference Between Expected and Actual Experience	\$ 31,467,935
Change in Allocated Proportion	16,873,429
Total Deferred Inflows of Resources	\$ 48,341,364
<u>Pension Expense</u>	
Proportionate Share of Pension Expense	\$ 111,155,119
Net Amortization of Deferred Amounts from Changes in Proportion	-
Total Pension Expense	\$ 111,155,119
Covered Payroll	\$ 341,237,099

(Concluded)

**WORCESTER REGIONAL RETIREMENT SYSTEM
NOTES TO SCHEDULES
DECEMBER 31, 2022**

NOTE 1 DESCRIPTION OF THE ENTITY

The Worcester Regional Retirement System (System) was established to provide retirement benefits to eligible employees of its member employers. The System is governed by a five-member board comprised of the Chairman, who serves ex-officio and is appointed by the other members of the board; two members who are elected by the participants in or retired from the services of the System; a fourth member elected by and of the Advisory Council; and a fifth member appointed by the other members of the board.

The System issued a publicly available audited financial statement for the year ended December 31, 2022. A copy may be obtained by submitting a request to the System's Chief Executive Officer at 23 Midstate Drive, Suite 106, Auburn, Massachusetts 01501.

Basis of Presentation

The Schedule of Employer Allocations and Schedule of Pension Amounts by Employer (collectively, "the Schedules") presents amounts that are elements of the financial statements of the System or of its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the System or its participating employers. The accompanying Schedules were prepared in accordance with accounting principles generally accepted in the United States of America. Such preparation requires management of the System to make several estimates and assumptions relating to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates.

Plan Description

The System is a cost-sharing multiple-employer public employee retirement system established in 1937, under Massachusetts General Laws (MGL), Chapter 32, and is regulated by the Massachusetts Public Employee Retirement Administration Commission (PERAC). The System is a defined benefit pension plan that covers eligible employees of its member employers.

Membership

All permanent full-time employees of the member units are required to become members of the System, except for school teachers and school administrators who participate in the Massachusetts Teachers' Retirement System. The System considers an employee who is permanently employed at least 30 hours per week to be considered full-time. All other employees are considered part-time.

Effective July 1, 2021 employees who are permanently employed 20 or more hours per week in a single member unit are required to become members of the System. Notwithstanding the foregoing, no part-time employees shall be eligible for System membership until the employee has completed 15 consecutive months of employment (with certain exceptions for school employees).

**WORCESTER REGIONAL RETIREMENT SYSTEM
NOTES TO SCHEDULES
DECEMBER 31, 2022**

NOTE 1 DESCRIPTION OF THE ENTITY (CONTINUED)

Benefits

Benefit provisions and state law establishes contribution requirements of the System. Members of the System become vested after 10 years of creditable service. Normal retirement occurs at age 65 (age 67 if hired on or after April 2, 2012), except for certain public safety employees and other special situations.

For employees hired prior to April 2, 2012, the annual amount of the retirement allowance is based on the member's final three-year average salary multiplied by (1) the number of years and full months of creditable service at the time of retirement and (2) a percentage based on age at retirement in accordance with a schedule provided by state law. Assuming normal retirement at age 65, this percentage is 2.5%, which is reduced for individuals who retire prior to age 65 to reflect the longer pay out period. A member's final three-year average salary is defined as the greater of the highest consecutive three-year average annual rate of regular compensation and the average annual rate of regular compensation received during the last three years of creditable service prior to retirement.

For employees hired on or after April 2, 2012, the annual amount of the retirement allowance is based on the member's final five-year average salary multiplied by (1) the number of years and full months of creditable service at the time of retirement and (2) a percentage based on age at retirement in accordance with a schedule provided by state law. Assuming normal retirement at age 67, this percentage is 2.5%. A member's final five-year average salary is defined as the greater of the highest consecutive five-year average annual rate of regular compensation and the average annual rate of regular compensation received during the last five years of creditable service prior to retirement.

Employees hired before April 2, 2012 may elect early retirement after 20 years of service or at any time after attaining age 55 with 10 years of eligible service. Plan members who become permanently and totally disabled may be eligible to receive a disability retirement allowance. The amount of benefits to be received depends on several factors, including the member's age, compensation, veteran status, years of service, and whether or not the disability is work-related. In addition, certain death benefits exist for beneficiaries of employees who die in active service.

Under MGL, c.32 Section 3(8)(c), members leaving a member employer to work for other Massachusetts governmental units requires the System transfer their accumulated account balances and creditable service to the retirement system of their new employer. Other such retirement systems are in turn required to make comparable transfers to the System for employees coming to work at a member employer of the System. Per statute, the PERAC actuary shall consider length of service as well as acceptance of military service credit and salary cap provisions if applicable in calculating the liability.

**WORCESTER REGIONAL RETIREMENT SYSTEM
NOTES TO SCHEDULES
DECEMBER 31, 2022**

NOTE 1 DESCRIPTION OF THE ENTITY (CONTINUED)

Contributions

Chapter 32 of MGL governs the contributions of plan members and member employers. Depending on their employment date, active System members must contribute anywhere between 5%-9% of their gross regular compensation. Members hired after December 31, 1978 must contribute an additional 2% of regular compensation in excess of \$30,000. Employees in Group 1 hired on or after April 2, 2012 with 30 years of creditable service or greater will pay a base contribution rate of 6%. These deductions earn interest at a rate determined by PERAC that vests based upon years of service. Employers are required to pay into the System its share of the system-wide actuarial determined contribution, in accordance with Chapter 32, Section 22D of MGL, apportioned among the employers based on annual employer normal cost and amortization payments to pay the unfunded actuarial accrued liability.

Except for a portion of benefits owed due to cost-of-living adjustments (COLA's) granted through June 30, 1998, member employers are required to contribute the remaining amounts necessary to finance benefits. Member employer contributions are determined by actuarial valuations.

COLA's granted through June 30, 1998 are reimbursed by the Commonwealth of Massachusetts (the Commonwealth). COLA's granted subsequent to June 30, 1998 must be granted by the Board and are the responsibility of the System. COLA's may be approved in excess of the Consumer Price Index but not to exceed 3% of the base retirement allowance.

NOTE 2 ACTUARIAL ASSUMPTIONS AND METHODS

The total pension liability was determined by an actuarial valuation as of January 1, 2022, using the following actuarial assumptions, applied to all periods included in the measurement that was updated to December 31, 2022:

Inflation:	2.4% per year
Salary increases:	Group 1: 6.00%-4.25%, based on service Group 4: 7.00%-4.75%, based on service
Investment rate of return:	7.25%, net of pension plan investment expense, including inflation
Mortality rates:	Based on the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2020. For disabled lives, the mortality rates were based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2020.

**WORCESTER REGIONAL RETIREMENT SYSTEM
NOTES TO SCHEDULES
DECEMBER 31, 2022**

NOTE 3 NET PENSION LIABILITY

The components of the net pension liability at December 31, 2022, were as follows:

Total Pension Liability	\$ 1,984,777,803
Plan Fiduciary Net Position	<u>(956,499,867)</u>
Net Pension Liability	<u>\$ 1,028,277,936</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	48.2%

The total pension liability is calculated by the System's actuary and plan fiduciary net position is reported in the System's financial statements. The net pension liability is disclosed in accordance with the requirements of Governmental Accounting Standards Board (GASB) Statement No. 67 in the System's notes to financial statements and required supplementary information.

Discount Rate

The discount rate used to measure the total pension liability was 7.25% (same as the prior year). The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that member employer contributions will be made in accordance with Sections 22D and 22F of Chapter 32 of the Massachusetts General Laws. Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2022 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Rate of Return</u>
Global Equity	37.00%	4.74%
Core Fixed Income	15.00%	2.10%
Value-Added Fixed Income	8.00%	5.20%
Private Equity	16.00%	7.60%
Real Estate	10.00%	3.10%
Timberland	4.00%	4.40%
Portfolio Completion Strategies	10.00%	3.90%

**WORCESTER REGIONAL RETIREMENT SYSTEM
NOTES TO SCHEDULES
DECEMBER 31, 2022**

NOTE 3 NET PENSION LIABILITY (CONTINUED)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the System calculated using the discount rate of 7.25%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability	\$ 1,254,776,125	\$ 1,028,277,936	\$ 836,788,149

NOTE 4 DEFERRED INFLOWS OF RESOURCES AND DEFERRED OUTFLOWS OF RESOURCES

The following schedule reflects the amortization of the balance of deferred inflows of resources and deferred outflows of resources at December 31, 2022:

<u>Measurement Period Ending December 31,</u>	<u>Amount</u>
2023	\$ 7,993,114
2024	20,165,452
2025	24,228,135
2026	42,288,641
2027	(2,258,546)
Thereafter	-

NOTE 5 ALLOCATION METHODOLOGY

Employers' proportionate shares were calculated on the basis of actual employer contributions for the year ended December 31, 2022. Although GASB Statement No. 68 encourages the use of the employer's projected long-term contribution effort to the System, allocating on the basis of historical employer contributions is considered acceptable.

NOTE 6 ADDITIONAL FINANCIAL AND ACTUARIAL INFORMATION

Information contained in these Notes to Schedules was extracted from the audited financial statements of the System for the year ended December 31, 2022. Additional financial information supporting the preparation of the Schedules (including the unqualified audit opinion on the financial statements and required supplementary information) is located in the audited financial statements of the System for the year ended December 31, 2022. A copy may be obtained by submitting a request to the System's Chief Executive Officer at 23 Midstate Drive, Suite 106, Auburn, Massachusetts 01501.