



**Powers &
Sullivan, LLC**
CPAs AND ADVISORS

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2022

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

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Financial Section

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Independent Auditor's Report

To the Honorable Plymouth County Retirement Board
Plymouth County Retirement Association
Plymouth, Massachusetts

Opinion

We have audited the accompanying financial statements of the Plymouth County Retirement Association (Association) as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Association's financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Association as of December 31, 2022, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Association 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 opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements 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 financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Association's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. 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 generally accepted auditing standards will always detect a 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 judgement made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform auditing procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- 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 Association'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 financial statements.
- Conclude whether, in our judgement, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Association'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.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis; the Schedule of Changes in the Net Pension Liability and Related Ratios; the Schedule of Contributions; and the Schedule of Investment Returns be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 27, 2023 on our consideration of the Association's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report

is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Association's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Association's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of the Association, the Public Employee Retirement Administration Commission and all member units and is not intended to be and should not be used by anyone other than these specified parties.

A handwritten signature in cursive script that reads "Bowers & Sullivan LLC".

June 27, 2023

Management's Discussion and Analysis

As management of the Plymouth County Retirement Association (the "Association"), we offer readers of these financial statements this narrative overview and analysis of the financial activities for the year ended December 31, 2022. The Association complies with financial reporting requirements issued by the Governmental Accounting Standards Board (GASB).

The GASB is the authoritative standard setting body that provides guidance on how to prepare financial statements in conformity with generally accepted accounting principles (GAAP). Users of these financial statements rely on the GASB to establish consistent reporting standards for all governments in the United States. This consistent application is the only way users can assess the financial condition of a public retirement association compared to others.

Financial Highlights

- The Association's assets exceeded its liabilities at the close of the most recent year by \$1.32 billion (net position).
- The Association's net position decreased by \$122.1 million for the year ended December 31, 2022.
- Total investment loss was \$86.1 million; investment expenses were \$24.1 million; and net investment loss was \$110.2 million.
- Total contributions were \$133.9 million including \$32.6 million from members, \$92.5 million from employers and \$8.8 million from other sources.
- Retirement benefits, refunds and transfers amounted to \$143.9 million.
- Administrative expenses and depreciation expense were \$1.9 million and \$78,000, respectively.
- The total pension liability was \$1.94 billion as of December 31, 2022, while the net pension liability was \$625.8 million.
- The fiduciary net position as a percentage of the total pension liability was 68%.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Association's fiduciary financial statements. These fiduciary financial statements are comprised of four components: 1) management's discussion and analysis, 2) fiduciary financial statements, 3) notes to the financial statements and 4) required supplementary information.

Fiduciary Financial Statements

The *statement of net position* presents information on all assets less liabilities with the difference reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position is improving or deteriorating.

The *statement of changes in fiduciary net position* presents information showing how the Association's net position changed during the most recent year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, *regardless of the timing of related cash flows*. Thus, additions and deductions are reported in this statement for some items that will only result in cash flows in future periods.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the fiduciary financial statements.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Schedule of Changes in the Net Pension Liability and Related Ratios; the Schedule of Contributions; and the Schedule of Investment Returns be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context.

Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of the Association's financial position. The Association's net position exceeded liabilities by \$1.32 billion at the close of 2022.

The assets accumulated are held to provide pension benefits for qualified retirees along with active and inactive employees of the member units. At year-end the Association's net position includes investments of \$1.27 billion, cash of \$41.7 million, capital assets of \$3 million, as well as accounts receivable of \$6.4 million.

In 2022, total contributions received by the Association were \$133.9 million and net investment loss was \$110.2 million while retirement benefit payments, refunds, transfers and administration expenses were \$145.8 million, which resulted in a current decrease of \$122.1 million.

During 2022, net position decreased by \$122.1 million, which was primarily the result of the \$110.2 million net investment loss. In 2022, current contributions were not sufficient to support the current expenses with \$11.9 million of net investment income needed. The annual money weighted rate of return was -6.56% and 14.41% in 2022, and 2021, respectively. Fluctuations in the Association's annual investment returns are expected.

On September 24, 2020, the Association purchased land and a building for the purpose of relocating their office operations. During 2021, improvements were made to the building and the System moved to the new location. The System has since subdivided the property into two lots and advertised the warehouse lot and building for sale.

The following tables present summarized financial information for the year.

	2022	2021
Statement of Fiduciary Net Position		
Assets:		
Cash.....	\$ 41,690,261	\$ 37,833,063
Investments.....	1,268,945,883	1,399,558,086
Accounts receivable.....	6,438,801	8,841,653
Capital assets, net of accumulated depreciation.....	2,954,271	2,994,531
	<u>1,320,029,216</u>	<u>1,449,227,333</u>
Liabilities:		
Accounts payable.....	1,771,899	8,873,014
	<u>1,771,899</u>	<u>8,873,014</u>
Net Position Restricted for Pensions.....	\$ <u>1,318,257,317</u>	\$ <u>1,440,354,319</u>

	2022	2021
Statement of Changes in Fiduciary Net Position		
Additions:		
Contributions:		
Member contributions.....	\$ 32,587,845	\$ 30,579,452
Employer contributions.....	92,532,679	89,068,346
Other contributions.....	8,804,463	7,622,063
Total contributions.....	<u>133,924,987</u>	<u>127,269,861</u>
Net investment income:		
Total investment income (loss).....	(86,050,006)	234,370,257
Less, investment expenses.....	(24,139,658)	(30,127,791)
Net investment income (loss).....	<u>(110,189,664)</u>	<u>204,242,466</u>
Total additions.....	<u>23,735,323</u>	<u>331,512,327</u>
Deductions:		
Administration.....	1,890,139	1,821,575
Retirement benefits, refunds and transfers.....	143,864,661	128,873,828
Depreciation.....	77,525	74,436
Total deductions.....	<u>145,832,325</u>	<u>130,769,839</u>
Net increase (decrease) in fiduciary net position.....	(122,097,002)	200,742,488
Fiduciary net position at beginning of year.....	<u>1,440,354,319</u>	<u>1,239,611,831</u>
Fiduciary net position at end of year.....	<u>\$ 1,318,257,317</u>	<u>\$ 1,440,354,319</u>

Requests for Information

This financial report is designed to provide a general overview of the Association's finances for all those with an interest in the Association's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Association's Board, 60 Industrial Park Road, Plymouth, Massachusetts 02360.

Financial Statements

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2022

Assets

CURRENT:

Cash and cash equivalents..... \$ 41,690,261

Investments:

Fixed income..... 183,673,083

Domestic equities..... 269,546,027

International equities..... 136,083,373

Real estate funds..... 172,639,607

Venture capital funds..... 413,517,022

Hedge funds..... 82,947,643

Bank loan..... 10,539,128

Total investments..... 1,268,945,883

Accounts receivable:

Member contributions..... 1,576,803

Employer pension appropriation..... 241,009

3(8)c Reimbursements from other systems..... 3,950,484

Due from Commonwealth - sheriff retirees (See Note 8)..... 440,494

Other accounts receivable..... 230,011

Total accounts receivable..... 6,438,801

Total current assets..... 1,317,074,945

NONCURRENT:

Capital assets, nondepreciable..... 341,500

Capital assets, net of accumulated depreciation..... 2,612,771

Total noncurrent assets..... 2,954,271

Total Assets..... 1,320,029,216

Liabilities

Accounts payable..... 1,771,899

Net Position Restricted for Pensions..... \$ 1,318,257,317

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2022

Additions:	
Contributions:	
Employer pension assessments.....	\$ 92,532,679
Member contributions.....	32,587,845
Transfers from other systems.....	3,515,409
3(8)(c) contributions from other systems.....	3,947,904
Workers' compensation settlements.....	62,500
Federal grant reimbursements.....	52,189
State COLA reimbursements.....	317,579
Members' makeup payments and redeposits.....	755,897
Interest not refunded.....	82,176
Reimbursement of 91A overearnings.....	37,878
Other revenue.....	<u>32,931</u>
Total contributions.....	<u>133,924,987</u>
Net investment income (loss):	
Investment income (loss).....	(86,050,006)
Less: investment expense.....	<u>(24,139,658)</u>
Net investment income (loss).....	<u>(110,189,664)</u>
Total additions.....	<u>23,735,323</u>
Deductions:	
Administration.....	1,890,139
Retirement benefits and refunds.....	132,031,101
Transfers to other systems.....	3,592,720
3(8)(c) transfer to other systems.....	8,240,840
Depreciation.....	<u>77,525</u>
Total deductions.....	<u>145,832,325</u>
Net increase (decrease) in fiduciary net position.....	(122,097,002)
Fiduciary net position at beginning of year.....	<u>1,440,354,319</u>
Fiduciary net position at end of year.....	<u>\$ 1,318,257,317</u>

See notes to financial statements.

NOTE 1 – PLAN DESCRIPTION

Established in 1937, the Plymouth County Retirement Association (Association) is a multiple-employer, cost-sharing, contributory defined benefit pension plan covering all employees of the governmental member units deemed eligible by the Plymouth County Retirement Board (the Board), with the exception of school department employees who serve in a teaching capacity. The pensions of such school employees are administered by the Commonwealth of Massachusetts' Teachers Retirement System. Membership in the Association is mandatory immediately upon the commencement of employment for all permanent employees working a minimum of 20 hours per week. The Association has 52 participating employers.

The Association is governed by a five-member Board that establishes the policies under which the Association operates. Board members also approve most of the Association's financial transactions, including the approval of retirement benefits to members. The day-to-day operations of the Association are managed by the Executive Director.

The legislative body for the Association is an Advisory Council consisting of treasurers of the member units. The Advisory Council meets semi-annually and is responsible for supervising and certifying the procedures involved in the election of members to the retirement board.

The Association is a Massachusetts Contributory Retirement System and is governed by Chapter 32 of the Massachusetts General Laws (MGL). Public Employee Retirement Administration Commission (PERAC) is the state agency responsible for oversight of the Commonwealth's public retirement systems.

Massachusetts contributory retirement system benefits are, with certain exceptions, uniform from system to system. The Plan provides for retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation for those hired prior to April 2, 2012. For persons who became members on or after April 2, 2012, average salary is the average annual rate of regular compensation received during the five consecutive years that produce the highest average, or, if greater, during the last five years (whether or not consecutive) preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

There are three classes of membership in the retirement Association Group 1, Group 2, and Group 4. Group 1 consists of general employees, which includes clerical and administrative positions. Group 2 consists of positions that have been specified as hazardous. Lastly, Group 4 consists of police officers, firefighters, and other hazardous positions.

Any individual in whose membership began before January 1, 1978, and who maintains an annuity savings fund account, is eligible to receive a superannuation retirement allowance at age 55 or later, regardless of how many years of credible service he or she has completed.

Members hired after January 1, 1978 and prior to April 2, 2012, are eligible to receive a superannuation retirement allowance upon the completion of 20 years of service or upon the completion of 10 years of service and upon reaching the age of 55.

Members hired on or after April 2, 2012, are eligible to receive a superannuation retirement allowance upon the completion of 10 years of service and upon reaching the age of 60 for Groups 1 & 2 or age 55 for Group 4.

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and the interest they generate constitute the annuity. The differential between the total retirement benefit and the annuity is the pension.

Active members contribute between 5 and 9% of their gross regular compensation. The percentage rate is keyed to the date upon which an employee's membership commences. Members hired on or after January 1, 1979, contribute an additional 2% of annual regular compensation in excess of \$30,000. Deductions are deposited in the Annuity Savings Fund and earn interest at a rate determined by the PERAC actuary. When a member's retirement becomes effective, his/her deductions and related interest are transferred to the Annuity Reserve Fund. Any cost-of-living adjustments granted between 1981 and 1997 and any increase in other benefits imposed by the Commonwealth of Massachusetts' state law during those years are borne by the Commonwealth and are deposited into the Pension Fund. Cost-of-living adjustments granted after 1997 must be approved by the Association and all related costs are borne by the Association.

The pension portion of any retirement benefit is paid from the Pension Fund of the Association. The governmental unit employing the member must annually appropriate and contribute the amount of current-year pension assessment. Chapter 32 of the MGL requires Massachusetts retirement systems to adopt funding schedules designed to reduce the unfunded actuarial liability of the system to zero by no later than June 30, 2040. The Association adopted Section 22d of Chapter 32 in April of 1989. The Association's current funding schedule is designed to reduce the unfunded actuarial liability to zero by 2029.

Administrative expenses are paid from investment income.

Members who become permanently and totally disabled for further duty may be eligible to receive a disability retirement allowance. The amount of benefits to be received in such cases is dependent on several factors, including whether the disability is work related, the member's age, years of creditable service, level of compensation, veterans' status and group classification.

Employees who resign from service are entitled to request a refund of their accumulated total deductions.

Survivor benefits are extended to eligible beneficiaries of members whose death occurs prior to or following retirement.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements of the Association have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The Governmental Accounting Standards Board (GASB) is the recognized standard-setting body for establishing governmental accounting and financial reporting principles.

The Association is a special-purpose government engaged only in fiduciary activities. Accordingly, the financial statements are reported using the flow of economic resources measurement focus and use the accrual basis of accounting. Under this method, additions are recorded when earned and deductions are recorded when the liabilities are incurred.

Cash and Investments

Cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with an original maturity of three months or less from the date of acquisition. Investments are carried at fair value. The fair values were determined by the closing price for those securities traded on national stock exchanges and at the average bid-and-asked quotation for those securities traded in the over-the-counter market. The fair value of private equities are based on management's valuation of estimates and assumptions from information and representations provided by the respective general partners, in the absence of readily ascertainable market

values. Real estate assets are reported at fair value utilizing an income approach to valuation along with independent appraisals and estimates by management.

Accounts Receivable

Accounts receivable consist of member contributions, pension fund appropriations, 3(8)c reimbursements from other systems, and other miscellaneous reimbursements. These receivables are considered 100% collectible and therefore the Association does not report an allowance for uncollectibles.

Fair Value Measurements

The Association reports required types of financial instruments in accordance with the fair value standards. These standards require an entity to maximize the use of observable inputs (such as quoted prices in active markets) and minimize the use of unobservable inputs (such as appraisals or valuation techniques) to determine fair value. Fair value standards also require the government to classify these financial instruments into a three-level hierarchy, based on the priority of inputs to the valuation technique or in accordance with net asset value practical expedient rules, which allow for either Level 2 or Level 3 depending on lock up and notice periods associated with the underlying funds.

Instruments measured and reported at fair value are classified and disclosed in one of the following categories:

Level 1 – Quoted prices are available in active markets for identical instruments as of the reporting date. Instruments, generally included in this category, encompass actively traded equity and debt securities, U.S. government obligations, and mutual funds with quoted market prices in active markets.

Level 2 – Pricing inputs are other than quoted in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies. Certain fixed income securities, primarily corporate bonds, are classified as Level 2 because fair values are estimated using pricing models, matrix pricing, or discounted cash flows.

Level 3 – Pricing inputs are unobservable for the instrument and include situations where there is little, if any, market activity for the instrument. The inputs into the determination of fair value require significant management judgment or estimation.

In some instances, the inputs used to measure fair value may fall into different levels of the fair value hierarchy and are based on the lowest level of input that is significant to the fair value measurement.

Market price is affected by a number of factors, including the type of instrument and the characteristics specific to the instrument. Instruments with readily available active quoted prices generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. It is reasonably possible that change in values of these instruments will occur in the near term and that such changes could materially affect amounts reported in these financial statements. For more information on the fair value of the Association's financial instruments, see Note 4 – Cash and Investments.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of fiduciary net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, *deferred outflows of resources*, represents a consumption of fiduciary net position that applies to a future period(s) and so will not be recognized as an outflow of resources (deduction) until then. The Association did not have any items that qualify for reporting in this category.

In addition to liabilities, the statement of fiduciary net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, *deferred inflows of resources*, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (addition) until that time. The Association did not have any items that qualify for reporting in this category.

NOTE 3 – PLAN ADMINISTRATION

The Association is administered by a five-person Board of Retirement consisting of the Plymouth County Treasurer, who shall be a member ex-officio, a second member appointed by the governing authority (the Plymouth County Commission), a third and fourth member who shall be elected by the members in or retired from the service of such Association, and a fifth member appointed by the Advisory Council consisting of representatives from the member units.

Chairman.....	Thomas J. O'Brien
Appointed Member.....	James Harrington
Elected Member.....	Joseph McDonough
Elected Member.....	John Sciara
Member.....	Mary Beth Carter

Board members are required to meet at least once a month. The Board must keep a record of all its proceedings. The Board must annually submit to the appropriate authority an estimate of the expenses of administration and cost of operation of the Association. The Board must annually file a financial statement of condition for the Association with the Executive Director of PERAC.

The investment of the Association’s funds is the responsibility of the Board. All retirement allowances must be approved by the Retirement Board. The PERAC Actuary performs verification prior to payment, unless the Association has obtained a waiver for superannuation calculations allowing them to bypass this requirement. All expenses incurred by the Association must be approved by a majority vote of the Board. Payments shall be made only upon vouchers signed by four members of the Board.

The following retirement board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts as follows:

Treasurer-Custodian.....	MACRS Blanket Policy
Ex-Officio Member.....	\$50,000,000 Fiduciary Liability
Elected Members.....	\$1,000,000 Fidelity (ERISA) Bond
Appointed Members.....	St. Paul Travelers Insurance Company
Staff Employees.....	National Union Fire Arch Insurance Company

NOTE 4 – CASH AND INVESTMENTSCustodial Credit Risk - Deposits

At December 31, 2022, the carrying amount of the Association's deposits totaled \$39.7 million and the bank balance of \$40.8 million was covered by Federal Depository Insurance.

Investments

The Association's investments were as follows:

Investment Type	Fair Value	Maturity			
		Under 1 Year	1-5 Years	6-10 Years	Over 10 Years
<u>Debt Securities:</u>					
Fixed Income.....	\$ 183,673,083	\$ <u>1,836,731</u>	\$ <u>53,265,194</u>	\$ <u>71,632,502</u>	\$ <u>56,938,656</u>
<u>Other Investments:</u>					
Money Market Mutual Funds....	1,989,271				
Domestic Equities.....	269,546,027				
International Equities.....	136,083,373				
Real Estate Funds.....	172,639,607				
Venture Capital Funds.....	413,517,022				
Hedge Funds.....	82,947,643				
Bank Loan.....	<u>10,539,128</u>				
Total Investments.....	\$ <u>1,270,935,154</u>				

The Association's annual money-weighted rate of return on pension plan investments was a loss of -6.56%. The money-weighted rate of return expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested, measured monthly.

Fair Market of Investments

The Association holds significant amounts of investments that are measured at fair value on a recurring basis. As investing is a key part of the Association's activities, the plan shows greater disaggregation in its disclosures. The Association chooses a tabular format for disclosing the levels within the fair value hierarchy.

The Association categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles.

The Association had the following recurring fair value measurements as of December 31, 2022:

Investment Type	December 31, 2022	Fair Value Measurements Using			Unfunded Commitments
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Investments Measured at Fair Value:					
Fixed Income.....	\$ 135,217,660	\$ -	\$ 135,217,660	\$ -	\$ -
Domestic Equities.....	269,546,027	269,546,027	-	-	-
International Equities.....	118,723,860	118,723,860	-	-	-
Real Estate Funds.....	143,718,206	-	-	143,718,206	19,564,941
Venture Capital Funds.....	315,598,734	-	-	315,598,734	93,909,317
Bank Loan.....	10,539,128	-	10,539,128	-	-
Money Market Mutual Funds.....	1,989,271	1,989,271	-	-	-
Total Investments by fair value level.....	995,332,886	\$ 390,259,158	\$ 145,756,788	\$ 459,316,940	113,474,258
Investments Measured at Net Asset Value:					
Fixed Income.....	48,455,423				-
International Equities.....	17,359,513				-
Real Estate Funds.....	28,921,401				8,087,937
Venture Capital Funds.....	97,918,288				30,677,467
Hedge Funds.....	82,947,643				-
Total Investments.....	\$ 1,270,935,154				\$ 152,239,662

Domestic equities, international equities and money market mutual funds classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Fixed income and bank loans classified in Level 2 of the fair value hierarchy are valued using matrix pricing techniques. Real estate funds, and venture capital funds classified in Level 3 of the fair value hierarchy require significant management judgement or estimation.

Remaining investments are valued using the net asset value (NAV) method.

NOTE 5 – CAPITAL ASSETS

Capital asset activity for the year ended December 31, 2022, was as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
<u>Capital assets not being depreciated:</u>				
Land.....	\$ 341,500	\$ -	\$ -	\$ 341,500
<u>Capital assets being depreciated:</u>				
Buildings and improvements.....	2,740,380	37,265	-	2,777,645
<u>Less accumulated depreciation for:</u>				
Buildings and improvements.....	(87,349)	(77,525)	-	(164,874)
Total capital assets being depreciated, net.....	2,653,031	(40,260)	-	2,612,771
Total capital assets, net.....	\$ 2,994,531	\$ (40,260)	\$ -	\$ 2,954,271

NOTE 6 – MEMBERSHIP

The following table represents the Association’s membership at December 31, 2022:

Retirees and beneficiaries currently receiving benefits....	4,711
Inactive members.....	2,044
Active members.....	5,957
Total.....	<u>12,712</u>

NOTE 7 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2022, were as follows:

Total pension liability.....	\$ 1,944,025,450
Less: Association's fiduciary net position.....	<u>(1,318,257,317)</u>
The net pension liability.....	<u>\$ 625,768,133</u>

The Association's fiduciary net position as a percentage of the total pension liability..... 68%

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 date of December 31, 2022:

Valuation date.....	January 1, 2022
Actuarial cost method.....	Individual Entry Age Normal Cost Method.
Asset valuation method.....	Assets held by the fund are valued at fair value as reported by the Public Employees' Retirement Administration Commission (PERAC). The actuarial value of assets is determined using a five-year smoothing of asset returns greater than or less than the assumed rate of return, with a 20% corridor.
Investment rate of return/Discount rate....	7.875% nominal rate, net of investment expense.
Projected salary increases.....	3.75% per year.
Cost of living adjustments.....	3.0% of the first \$16,000 of retirement income.
Rates of disability.....	For general employees, it was assumed that 45% of all disabilities are ordinary (55% are service connected). For police and fire employees, 10% of all disabilities are assumed to be ordinary (90% are service connected).
Mortality Rates.....	<p>It is assumed that both pre-retirement mortality and beneficiary mortality is represented by the RP-2014 Blue Collar Mortality with Scale MP-2016, fully generational.</p> <p>Mortality for retired members for Group 1 and 2 is represented by the RP-2014 Blue Collar Mortality Table set forward five years for males and three years for females, fully generational.</p> <p>Mortality for retired members for Group 4 is represented by the RP-2014 Blue Collar Mortality Table set forward three years for males, and six years for females, fully generational.</p> <p>Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years.</p> <p>Mortality for disabled members for Group 4 is represented by the RP-2000 Mortality Table set forward two years. Generational adjusting is based on Scale MP-2016.</p>

Investment policy: The Association’s policy in regard to the allocation of invested assets is established by the Board. Plan assets are managed on a total return basis with a long-term objective of achieving a fully funded status for the benefits provided through the pension plan.

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 real 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 nominal rate of return by weighting the expected future real 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 Association’s target asset allocation as of December 31, 2022, are summarized in the following table:

Asset Class	Long-Term Expected Nominal Rate of Return	Long-Term Expected Asset Allocation
Domestic equity.....	6.80%	23.00%
International developed equity.....	7.50%	3.00%
Emerging markets equity.....	4.60%	9.00%
Global equity.....	7.20%	11.00%
Core bonds.....	2.40%	10.00%
Value-added fixed income.....	4.00%	7.00%
Hedge funds.....	4.40%	7.00%
Real estate.....	7.40%	10.00%
Private equity.....	7.30%	12.00%
Real assets.....	7.70%	6.00%
Cash and Cash Equivalent.....	1.70%	2.00%
		<u>100.00%</u>

Discount rate: The discount rate used to measure the total pension liability was 7.875% as of December 31, 2022 and as of December 31, 2021. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that contributions will be made at rates equal to the actuarially determined contribution rate. Based on those assumptions, the Association’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.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the net pension liability, calculated using the discount rate of 7.875%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.875%) or 1-percentage-point higher (8.875%) than the current rate:

	1% Decrease (6.875%)	Current Discount (7.875%)	1% Increase (8.875%)
Plymouth County Retirement Association's net pension liability as of December 31, 2022.....	\$ 822,460,795	\$ 625,768,133	\$ 458,004,029

Contributions: Governmental employers are required to pay an annual appropriation as established by PERAC. The total appropriation includes the amounts to pay the pension portion of each member’s retirement allowance, an amount to amortize the actuarially determined unfunded liability to zero in accordance with the Association’s funding schedule, and additional appropriations in accordance with adopted early retirement incentive programs.

NOTE 8 – PLYMOUTH COUNTY SHERIFF’S RETIRED EMPLOYEES

Section 10 of Chapter 61 of the Acts of 2009 related to the transfer of the sheriff’s operations from County Government to the Commonwealth and required the Commonwealth to pay off the unfunded pension liability of the retired sheriff’s employees. Section 11 of Chapter 34D of the Massachusetts General Laws provides a

mechanism for allowing the County to retain additional deeds excise tax to satisfy the actuarial determined liability. The Commonwealth established a twelve-year amortization schedule for the fiscal year 2011 through fiscal year 2022 annual assessments. The Commonwealth withheld, in error, \$550,619 from each of the required amortization payments for the first four fiscal years. The Association and Commonwealth signed a settlement agreement where the Commonwealth agreed that it was in arrears \$2,202,476. The Commonwealth, County, PERAC and the Association established a ten-year straight-line payment schedule of \$220,247 in November 2014 to satisfy the liability. The required payment of \$220,247 was not received in 2022. The two remaining payments totaling \$440,494, at year-end, have been recorded as a receivable.

NOTE 9 – COMMITMENTS AND CONTINGENCIES

There are no legal actions or claims pending that would materially affect the financial position at December 31, 2022.

NOTE 10 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

There were no GASB pronouncements required to be implemented in 2022, that impacted the Association's financial statements.

None of the issued GASB statements that are required to be implemented in future years are anticipated to impact the Association's financial statements.

NOTE 11 – SUBSEQUENT EVENTS

Management has evaluated subsequent events through June 27, 2023, which is the date the financial statements were available to be issued.

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Required Supplementary Information

**SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
AND RELATED RATIOS**

	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017
Total pension liability:				
Service cost.....	\$ 30,880,169	\$ 32,038,175	\$ 33,239,607	\$ 26,807,632
Interest.....	111,727,069	115,962,263	116,054,394	119,404,812
Changes in benefit terms.....	-	-	6,700,296	-
Differences between expected and actual experience.....	-	-	21,421,023	-
Changes in assumptions.....	-	-	(23,402,726)	-
Benefit payments.....	<u>(90,825,319)</u>	<u>(98,626,669)</u>	<u>(100,786,029)</u>	<u>(110,807,537)</u>
Net change in total pension liability.....	51,781,919	49,373,769	53,226,565	35,404,907
Total pension liability - beginning.....	<u>1,365,708,192</u>	<u>1,417,490,111</u>	<u>1,466,863,880</u>	<u>1,520,090,445</u>
Total pension liability - ending (a).....	<u>\$ 1,417,490,111</u>	<u>\$ 1,466,863,880</u>	<u>\$ 1,520,090,445</u>	<u>\$ 1,555,495,352</u>
Plan fiduciary net position:				
Employer pension appropriation.....	\$ 58,130,647	\$ 62,772,260	\$ 66,393,381	\$ 69,896,514
Member contributions.....	23,025,761	30,649,234	25,501,976	26,076,090
Other contributions.....	2,910,328	2,801,874	7,357,214	4,788,362
Net investment income (loss).....	32,962,502	(1,710,419)	57,204,478	144,907,116
Administrative expenses.....	(1,521,667)	(1,553,871)	(1,723,774)	(1,737,836)
Retirement benefits and refunds.....	(91,939,449)	(94,903,555)	(100,786,030)	(110,807,537)
Depreciation expense.....	-	-	-	-
Net increase (decrease) in fiduciary net position.....	23,568,122	(1,944,477)	53,947,245	133,122,709
Fiduciary net position - beginning of year.....	<u>811,013,847</u>	<u>834,581,969</u>	<u>832,637,492</u>	<u>886,584,737</u>
Fiduciary net position - end of year (b).....	<u>\$ 834,581,969</u>	<u>\$ 832,637,492</u>	<u>\$ 886,584,737</u>	<u>\$ 1,019,707,446</u>
Net pension liability - ending (a)-(b).....	<u>\$ 582,908,142</u>	<u>\$ 634,226,388</u>	<u>\$ 633,505,708</u>	<u>\$ 535,787,906</u>
Plan fiduciary net position as a percentage of the total pension liability.....	59%	57%	58%	66%
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362
Net pension liability as a percentage of covered payroll.....	236%	248%	239%	194%

Note: this schedule is intended to present information for 10 years.

Until a 10-year trend is compiled, information is presented for those years for which information is available.

See notes to required supplementary information.

	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021	December 31, 2022
\$	27,772,477	\$ 28,883,376	\$ 30,398,893	\$ 31,462,854	\$ 32,509,384
	122,120,554	129,044,546	137,728,408	141,277,497	147,266,755
	-	15,202,584	-	-	-
	59,806,942	55,982,071	-	38,494,413	-
	19,750,049	-	-	-	-
	<u>(115,748,560)</u>	<u>(121,133,872)</u>	<u>(119,549,784)</u>	<u>(128,873,828)</u>	<u>(143,864,661)</u>
	113,701,462	107,978,705	48,577,517	82,360,936	35,911,478
	<u>1,555,495,352</u>	<u>1,669,196,814</u>	<u>1,777,175,519</u>	<u>1,825,753,036</u>	<u>1,908,113,972</u>
\$	<u>1,669,196,814</u>	<u>1,777,175,519</u>	<u>1,825,753,036</u>	<u>1,908,113,972</u>	<u>1,944,025,450</u>
\$	72,811,482	\$ 74,462,092	\$ 84,456,699	\$ 89,068,346	\$ 92,532,679
	27,326,242	29,270,635	29,471,227	30,579,452	32,587,845
	6,940,373	8,614,587	7,722,738	7,622,063	8,804,463
	(72,568,400)	168,963,372	144,410,036	204,242,466	(110,189,664)
	(1,828,777)	(1,888,516)	(1,814,276)	(1,821,575)	(1,890,139)
	(115,748,560)	(121,133,872)	(119,549,784)	(128,873,828)	(143,864,661)
	-	-	(12,913)	(74,436)	(77,525)
	(83,067,640)	158,288,298	144,683,727	200,742,488	(122,097,002)
	<u>1,019,707,446</u>	<u>936,639,806</u>	<u>1,094,928,104</u>	<u>1,239,611,831</u>	<u>1,440,354,319</u>
\$	<u>936,639,806</u>	<u>1,094,928,104</u>	<u>1,239,611,831</u>	<u>1,440,354,319</u>	<u>1,318,257,317</u>
\$	<u>732,557,008</u>	<u>682,247,415</u>	<u>586,141,205</u>	<u>467,759,653</u>	<u>625,768,133</u>
	56%	62%	68%	75%	68%
\$	281,665,696	\$ 294,614,062	\$ 293,870,741	\$ 315,856,987	\$ 327,799,516
	260%	232%	199%	148%	191%

SCHEDULE OF CONTRIBUTIONS

Year	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Covered payroll	Contributions as a percentage of covered payroll
December 31, 2022.....	\$ 92,532,679	\$ (92,532,679)	\$ -	\$ 327,799,516	28.23%
December 31, 2021.....	85,994,057	(89,068,346)	(3,074,289)	315,856,987	28.20%
December 31, 2020.....	80,090,098	(84,456,699)	(4,366,601)	293,870,741	28.74%
December 31, 2019.....	73,787,092	(74,462,092)	(675,000)	294,614,062	25.27%
December 31, 2018.....	72,127,482	(72,811,482)	(684,000)	281,665,696	25.85%
December 31, 2017.....	68,534,029	(69,896,514)	(1,362,485)	275,630,362	25.36%
December 31, 2016.....	66,255,664	(66,393,381)	(137,717)	265,029,190	25.05%
December 31, 2015.....	62,772,260	(62,772,260)	-	255,955,074	24.52%
December 31, 2014.....	58,130,647	(58,130,647)	-	246,703,686	23.56%

Note: this schedule is intended to present information for 10 years.
 Until a 10-year trend is compiled, information is presented for those years for which information is available.

See notes to required supplementary information.

SCHEDULE OF INVESTMENT RETURNS

<u>Year</u>	<u>Annual money-weighted rate of return, net of investment expense</u>
December 31, 2022.....	-6.56%
December 31, 2021.....	14.41%
December 31, 2020.....	12.91%
December 31, 2019.....	16.88%
December 31, 2018.....	-7.10%
December 31, 2017.....	16.30%
December 31, 2016.....	7.40%
December 31, 2015.....	0.25%
December 31, 2014.....	4.70%

Note: this schedule is intended to present information for 10 years. Until a 10-year trend is compiled, information is presented for those years for which information is available.

See notes to required supplementary information.

NOTE A – CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS

The Schedule of Changes in the Net Pension Liability and Related Ratios includes the detailed changes in the Association's total pension liability, changes in the Association's net position, and the ending net pension liability. It also demonstrates the plan's net position as a percentage of the total pension liability and the net pension liability as a percentage of covered payroll.

NOTE B – CONTRIBUTIONS

Governmental employers are required to pay an annual appropriation as established by PERAC. The total appropriation includes the amounts to pay the pension portion of each member's retirement allowance, an amount to amortize the actuarially determined unfunded liability to zero in accordance with the Association's funding schedule, and additional appropriations in accordance with adopted early retirement incentive programs. The total appropriations are payable on July 1 and January 1. Employers may choose to pay the entire appropriation in July at a discounted rate. Accordingly, actual employer contributions may be less than the "total appropriation". The pension fund appropriations are allocated amongst employers based on the actuarial valuation results. An employer may contribute more than the amount required which reduces their specific net pension liability.

NOTE C – MONEY-WEIGHTED RATE OF RETURN

The money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense. A money-weighted rate of return expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. Inputs to the money-weighted rate of return calculation are determined monthly.

NOTE D – CHANGES IN ASSUMPTIONS

None.

NOTE E – CHANGES IN PLAN PROVISIONS

None.

***Audit of Specific Elements,
Accounts and Items of
Financial Statements***

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Independent Auditor's Report

To the Honorable Plymouth County Retirement Board
Plymouth County Retirement Association
Plymouth, Massachusetts

Report on the Audit of the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer

Opinions

We have audited the accompanying schedule of employer allocations of the Plymouth County Retirement Association (Association) 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 net pension liability, total deferred outflows of resources, total deferred inflows of resources, total contributions and total pension expense included in the accompanying schedule pension amounts by employer of the Association as of and for the year ended December 31, 2022, and the related notes.

In our opinion, the accompanying schedule of employer allocations and schedule of pension amounts by employer present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, total contributions and total pension expense for the total of all participating entities for the Association 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 Auditor's Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of the Association 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 the 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.

Auditor's Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer as a whole are free from material

misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. 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 material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than 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 judgement made by a reasonable user based on the schedules.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the schedules, 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 schedules.
- 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 purposes of expressing an opinion on the effectiveness of the Association'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 schedules.

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 GAAS, the financial statements of the Association as of and for the year ended December 31, 2022, and our report thereon, dated June 27, 2023, expressed an unmodified opinion on those financial statements.

Restriction on Use

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



June 27, 2023

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2022

Employer	Employer Allocation Percentage	Net Pension Liability
Plymouth County.....	1.5648%	\$ 9,792,020
Town of Abington.....	3.6462%	22,816,755
Town of Bridgewater.....	5.1294%	32,098,151
Bridgewater Housing Authority.....	0.0713%	446,173
Bridgewater/Raynham Regional School.....	2.3511%	14,712,435
Town of Carver.....	2.8278%	17,695,471
Town of Duxbury.....	5.5929%	34,998,586
Duxbury Housing Authority.....	0.0282%	176,467
Town of East Bridgewater.....	3.5756%	22,374,965
East Bridgewater Housing Authority.....	0.0569%	356,062
Town of Halifax.....	1.6952%	10,608,021
Town of Hanover.....	4.8309%	30,230,233
Town of Hanson.....	2.2224%	13,907,071
Town of Kingston.....	3.4891%	21,833,676
Kingston Housing Authority.....	0.0062%	38,798
Town of Lakeville.....	1.4811%	9,268,252
Town of Marion.....	1.6246%	10,166,229
Town of Marshfield.....	8.2179%	51,424,999
Marshfield Housing Authority.....	0.0545%	341,044
Town of Mattapoisett.....	1.7497%	10,949,065
Town of Middleborough.....	9.0967%	56,924,250
Middleborough Housing Authority.....	0.1728%	1,081,327
Town of Norwell.....	3.7046%	23,182,206
Norwell Housing Authority.....	0.0480%	300,369
Old Rochester Regional School.....	0.9581%	5,995,484
Onset Fire District.....	0.3664%	2,292,814
Town of Pembroke.....	4.7092%	29,468,673
Plymouth County Mosquito Control.....	0.2179%	1,363,549
Town of Plympton.....	0.7088%	4,435,445
Town of Rochester.....	1.1269%	7,051,781
Town of Rockland.....	5.5126%	34,496,094
Town of Scituate.....	6.7073%	41,972,146
Scituate Housing Authority.....	0.1121%	701,486
Silver Lake Regional School.....	0.9956%	6,230,148
South Shore Regional School.....	0.4936%	3,088,792
Town of Wareham.....	5.5018%	34,428,511
Wareham Fire District.....	1.2426%	7,775,795
Wareham Housing Authority.....	0.0608%	380,467
Town of West Bridgewater.....	2.9959%	18,747,388
Town of Whitman.....	2.8798%	18,020,871
Whitman/Hanson Regional School.....	1.5814%	9,895,897
Whitman Housing Authority.....	0.1087%	680,210
Abington Housing Authority.....	0.0458%	286,602
Pembroke Housing Authority.....	0.1174%	734,652
Hanson Housing Authority.....	0.0356%	222,773
Rockland Housing Authority.....	0.0498%	311,633
Mattapoisett Housing Authority.....	0.0335%	209,632
Acushnet/Rochester/Marion Health District.....	0.0333%	208,381
West Bridgewater Housing Authority.....	0.0210%	131,411
South Shore Tri-Town Development.....	0.1462%	914,873
Total.....	100.0000%	\$ 625,768,133

See notes to schedule of employer allocations and schedule of pension amounts by employer.

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Plymouth County	Town of Abington	Town of Bridgewater
Net Pension Liability			
Beginning net pension liability.....	\$ 7,425,217	\$ 17,041,417	\$ 24,019,926
Ending net pension liability.....	\$ 9,792,020	\$ 22,816,755	\$ 32,098,151
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 396,465	\$ 923,817	\$ 1,299,608
Net difference between projected and actual investment earnings on pension plan investments.....	1,123,477	2,617,856	3,682,747
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	118,319	620,936
Total Deferred Outflows of Resources.....	\$ <u>1,519,942</u>	\$ <u>3,659,992</u>	\$ <u>5,603,291</u>
Deferred Inflows of Resources			
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ <u>6,328,643</u>	\$ <u>405,686</u>	\$ <u>55,369</u>
Pension Expense			
Proportionate share of plan pension expense.....	\$ 1,228,825	\$ 2,863,356	\$ 4,028,093
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	<u>(1,340,357)</u>	<u>(158,937)</u>	<u>(115,904)</u>
Total Employer Pension Expense.....	\$ <u>(111,532)</u>	\$ <u>2,704,419</u>	\$ <u>3,912,189</u>
Contributions			
Statutory required contribution.....	\$ 3,008,140	\$ 3,396,404	\$ 4,452,802
Contribution in relation to statutory required contribution.....	<u>(3,008,140)</u>	<u>(3,396,404)</u>	<u>(4,452,802)</u>
Contribution deficiency/(excess).....	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>
Contributions as a percentage of covered payroll.....	76.81%	28.02%	28.56%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2024.....	\$ (2,779,176)	\$ (20,285)	\$ 529,538
June 30, 2025.....	(2,288,091)	683,497	1,311,271
June 30, 2026.....	(434,789)	965,843	1,422,545
June 30, 2027.....	<u>693,355</u>	<u>1,625,251</u>	<u>2,284,568</u>
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ <u>(4,808,701)</u>	\$ <u>3,254,306</u>	\$ <u>5,547,922</u>
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 12,869,867	\$ 29,988,562	\$ 42,187,305
Current discount rate (7.875%).....	\$ 9,792,020	\$ 22,816,755	\$ 32,098,151
1% increase (8.875%).....	\$ 7,166,847	\$ 16,699,741	\$ 23,492,859
Covered Payroll as of the January 1, 2022, valuation.....	\$ 3,916,347	\$ 12,122,927	\$ 15,593,676
See notes to schedule of employer allocations and schedule of pension amounts by employer.			
N/A = Not Applicable			(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 333,980	\$ 10,994,223	\$ 13,230,114	\$ -
Ending net pension liability.....	\$ 446,173	\$ 14,712,435	\$ 17,695,471	\$ -
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 18,065	\$ 595,685	\$ 716,464	\$ -
Net difference between projected and actual investment earnings on pension plan investments.....	51,191	1,688,016	2,030,271	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	49,132	145,378	13,780
Total Deferred Outflows of Resources.....	\$ 69,256	\$ 2,332,833	\$ 2,892,113	\$ 13,780
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 32,927	\$ 38,677	\$ 64,721	\$ 175,324
Pension Expense				
Proportionate share of plan pension expense.....	\$ 55,991	\$ 1,846,307	\$ 2,220,655	\$ -
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(30,413)	(71,897)	(127,202)	(54,816)
Total Employer Pension Expense.....	\$ 25,578	\$ 1,774,410	\$ 2,093,453	\$ (54,816)
Contributions				
Statutory required contribution.....	\$ 68,862	\$ 2,121,538	\$ 2,596,245	\$ -
Contribution in relation to statutory required contribution.....	(68,862)	(2,121,538)	(2,596,245)	-
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	71.77%	27.06%	30.76%	N/A
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ (14,448)	\$ 151,708	\$ 168,950	\$ (75,796)
June 30, 2025.....	3,654	484,851	640,870	(67,547)
June 30, 2026.....	15,373	609,879	757,672	(18,201)
June 30, 2027.....	31,750	1,047,718	1,259,900	-
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 36,329	\$ 2,294,156	\$ 2,827,392	\$ (161,544)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 586,415	\$ 19,336,876	\$ 23,257,546	\$ -
Current discount rate (7.875%).....	\$ 446,173	\$ 14,712,435	\$ 17,695,471	\$ -
1% increase (8.875%).....	\$ 326,557	\$ 10,768,133	\$ 12,951,438	\$ -
Covered Payroll as of the January 1, 2022, valuation.....	\$ 95,942	\$ 7,840,505	\$ 8,439,390	\$ N/A
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 26,155,249	\$ 131,908	\$ 16,717,730	\$ 265,220
Ending net pension liability.....	\$ 34,998,586	\$ 176,467	\$ 22,374,965	\$ 356,062
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,417,043	\$ 7,145	\$ 905,930	\$ 14,416
Net difference between projected and actual investment earnings on pension plan investments.....	4,015,526	20,247	2,567,168	40,852
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	674,753	393	240,981	11,483
Total Deferred Outflows of Resources.....	\$ 6,107,322	\$ 27,785	\$ 3,714,079	\$ 66,751
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ -	\$ 7,334	\$ 86,643	\$ 3,130
Pension Expense				
Proportionate share of plan pension expense.....	\$ 4,392,076	\$ 22,145	\$ 2,807,898	\$ 44,685
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	349,415	(3,623)	(51,885)	(8,026)
Total Employer Pension Expense.....	\$ 4,741,491	\$ 18,522	\$ 2,756,013	\$ 36,659
Contributions				
Statutory required contribution.....	\$ 5,047,880	\$ 26,952	\$ 3,196,515	\$ 47,418
Contribution in relation to statutory required contribution.....	(5,047,880)	(26,952)	(3,196,515)	(47,418)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	26.62%	51.16%	26.02%	23.52%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 720,829	\$ (1,634)	\$ 262,260	\$ 6,239
June 30, 2025.....	1,381,794	2,944	807,053	15,980
June 30, 2026.....	1,512,401	6,574	964,637	16,014
June 30, 2027.....	2,492,298	12,567	1,593,486	25,388
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 6,107,322	\$ 20,451	\$ 3,627,436	\$ 63,621
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 45,999,410	\$ 231,934	\$ 29,407,908	\$ 467,980
Current discount rate (7.875%).....	\$ 34,998,586	\$ 176,467	\$ 22,374,965	\$ 356,062
1% increase (8.875%).....	\$ 25,615,707	\$ 129,157	\$ 16,376,392	\$ 260,604
Covered Payroll as of the January 1, 2022, valuation.....	\$ 18,965,050	\$ 52,680	\$ 12,286,425	\$ 201,577
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability.....	\$ 7,927,123	\$ 22,582,501	\$ 10,392,216	\$ 16,321,070
Ending net pension liability.....	\$ 10,608,021	\$ 30,230,233	\$ 13,907,071	\$ 21,833,676
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 429,504	\$ 1,223,979	\$ 563,077	\$ 884,014
Net difference between projected and actual investment earnings on pension plan investments.....	1,217,100	3,468,434	1,595,613	2,505,064
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	208,997	405,226	227,286	625,874
Total Deferred Outflows of Resources.....	\$ 1,855,601	\$ 5,097,639	\$ 2,385,976	\$ 4,014,952
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 9,926	\$ -	\$ -	\$ 174
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,331,231	\$ 3,793,682	\$ 1,745,241	\$ 2,739,972
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	87,268	195,727	86,110	248,227
Total Employer Pension Expense.....	\$ 1,418,499	\$ 3,989,409	\$ 1,831,351	\$ 2,988,199
Contributions				
Statutory required contribution.....	\$ 1,579,441	\$ 4,378,322	\$ 2,037,978	\$ 3,113,044
Contribution in relation to statutory required contribution.....	(1,579,441)	(4,378,322)	(2,037,978)	(3,113,044)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	29.06%	24.72%	31.47%	28.59%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 187,853	\$ 516,087	\$ 239,661	\$ 561,424
June 30, 2025.....	431,681	1,133,143	547,113	937,514
June 30, 2026.....	470,715	1,295,334	608,831	961,194
June 30, 2027.....	755,426	2,153,075	990,371	1,554,646
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 1,845,675	\$ 5,097,639	\$ 2,385,976	\$ 4,014,778
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 13,942,355	\$ 39,732,259	\$ 18,278,369	\$ 28,696,480
Current discount rate (7.875%).....	\$ 10,608,021	\$ 30,230,233	\$ 13,907,071	\$ 21,833,676
1% increase (8.875%).....	\$ 7,764,084	\$ 22,125,717	\$ 10,178,682	\$ 15,980,219
Covered Payroll as of the January 1, 2022, valuation.....	\$ 5,434,876	\$ 17,710,627	\$ 6,475,013	\$ 10,888,390
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability.....	\$ 29,469	\$ 6,920,036	\$ 7,749,374	\$ 38,424,117
Ending net pension liability.....	\$ 38,798	\$ 9,268,252	\$ 10,166,229	\$ 51,424,999
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,571	\$ 375,258	\$ 411,616	\$ 2,082,125
Net difference between projected and actual investment earnings on pension plan investments.....	4,451	1,063,383	1,166,412	5,900,193
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	7,429	139,566	406,206	279,344
Total Deferred Outflows of Resources.....	\$ 13,451	\$ 1,578,207	\$ 1,984,234	\$ 8,261,662
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 420	\$ -	\$ 55,686	\$ -
Pension Expense				
Proportionate share of plan pension expense.....	\$ 4,869	\$ 1,163,104	\$ 1,275,792	\$ 6,453,473
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(2,372)	86,220	(19,751)	82,482
Total Employer Pension Expense.....	\$ 2,497	\$ 1,249,324	\$ 1,256,041	\$ 6,535,955
Contributions				
Statutory required contribution.....	\$ 2,124	\$ 1,387,192	\$ 1,392,356	\$ 7,506,720
Contribution in relation to statutory required contribution.....	(2,124)	(1,387,192)	(1,392,356)	(7,506,720)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	27.63%	25.79%	29.21%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 3,350	\$ 158,787	\$ 284,761	\$ 633,623
June 30, 2025.....	4,328	356,911	474,073	1,788,807
June 30, 2026.....	2,610	402,272	451,347	2,176,932
June 30, 2027.....	2,743	660,237	718,367	3,662,300
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 13,031	\$ 1,578,207	\$ 1,928,548	\$ 8,261,662
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 50,993	\$ 12,181,467	\$ 13,361,698	\$ 67,589,005
Current discount rate (7.875%).....	\$ 38,798	\$ 9,268,252	\$ 10,166,229	\$ 51,424,999
1% increase (8.875%).....	\$ 28,397	\$ 6,783,498	\$ 7,440,733	\$ 37,638,313
Covered Payroll as of the January 1, 2022, valuation.....	\$ N/A	\$ 5,021,021	\$ 5,398,381	\$ 25,695,810
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Marshfield Housing Authority	Town of Mattapoisett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 254,461	\$ 8,188,133	\$ 42,530,111	\$ 806,885
Ending net pension liability.....	\$ 341,044	\$ 10,949,065	\$ 56,924,250	\$ 1,081,327
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 13,808	\$ 443,312	\$ 2,304,781	\$ 43,781
Net difference between projected and actual investment earnings on pension plan investments.....	39,129	1,256,229	6,531,144	124,065
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	17,158	319,426	238,811	34,146
Total Deferred Outflows of Resources.....	\$ 70,095	\$ 2,018,967	\$ 9,074,736	\$ 201,992
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 3,412	\$ 1,388	\$ 98,652	\$ 156
Pension Expense				
Proportionate share of plan pension expense.....	\$ 42,798	\$ 1,374,029	\$ 7,143,594	\$ 135,699
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	11,984	151,575	65,158	21,949
Total Employer Pension Expense.....	\$ 54,782	\$ 1,525,604	\$ 7,208,752	\$ 157,648
Contributions				
Statutory required contribution.....	\$ 53,239	\$ 1,615,172	\$ 8,370,279	\$ 163,122
Contribution in relation to statutory required contribution.....	(53,239)	(1,615,172)	(8,370,279)	(163,122)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	71.26%	27.24%	30.67%	31.72%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 14,381	\$ 272,796	\$ 597,788	\$ 30,227
June 30, 2025.....	14,220	477,853	1,923,462	47,116
June 30, 2026.....	13,780	487,441	2,400,791	47,445
June 30, 2027.....	24,302	779,489	4,054,043	77,048
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 66,683	\$ 2,017,579	\$ 8,976,084	\$ 201,836
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 448,242	\$ 14,390,596	\$ 74,816,791	\$ 1,421,212
Current discount rate (7.875%).....	\$ 341,044	\$ 10,949,065	\$ 56,924,250	\$ 1,081,327
1% increase (8.875%).....	\$ 249,612	\$ 8,013,696	\$ 41,663,253	\$ 791,431
Covered Payroll as of the January 1, 2022, valuation.....	\$ 74,712	\$ 5,930,398	\$ 27,293,703	\$ 514,270
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability.....	\$ 17,320,672	\$ 224,525	\$ 4,481,605	\$ 1,714,807
Ending net pension liability.....	\$ 23,182,206	\$ 300,369	\$ 5,995,484	\$ 2,292,814
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 938,614	\$ 12,162	\$ 242,749	\$ 92,833
Net difference between projected and actual investment earnings on pension plan investments.....	2,659,786	34,463	687,886	263,064
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	396,283	5,962	20,585	86,374
Total Deferred Outflows of Resources.....	\$ 3,994,683	\$ 52,587	\$ 951,220	\$ 442,271
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 13,481	\$ 614	\$ -	\$ 4,732
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,909,203	\$ 37,693	\$ 752,390	\$ 287,730
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	86,024	(2,800)	15,303	(5,567)
Total Employer Pension Expense.....	\$ 2,995,227	\$ 34,893	\$ 767,693	\$ 282,163
Contributions				
Statutory required contribution.....	\$ 3,334,635	\$ 36,942	\$ 864,670	\$ 312,778
Contribution in relation to statutory required contribution.....	(3,334,635)	(36,942)	(864,670)	(312,778)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	27.82%	20.13%	29.14%	38.83%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 389,900	\$ 5,132	\$ 73,277	\$ 64,364
June 30, 2025.....	919,903	12,129	201,085	106,858
June 30, 2026.....	1,020,421	13,324	249,948	103,093
June 30, 2027.....	1,650,978	21,388	426,910	163,224
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 3,981,202	\$ 51,973	\$ 951,220	\$ 437,539
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 30,468,882	\$ 394,782	\$ 7,879,996	\$ 3,013,496
Current discount rate (7.875%).....	\$ 23,182,206	\$ 300,369	\$ 5,995,484	\$ 2,292,814
1% increase (8.875%).....	\$ 16,967,217	\$ 219,842	\$ 4,388,136	\$ 1,678,126
Covered Payroll as of the January 1, 2022, valuation.....	\$ 11,984,822	\$ 183,526	\$ 2,966,805	\$ 805,441

See notes to schedule of employer allocations and schedule of pension amounts by employer.

N/A = Not Applicable

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability.....	\$ 22,006,221	\$ 1,022,990	\$ 3,306,593	\$ 5,266,974
Ending net pension liability.....	\$ 29,468,673	\$ 1,363,549	\$ 4,435,445	\$ 7,051,781
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,193,144	\$ 55,208	\$ 179,585	\$ 285,517
Net difference between projected and actual investment earnings on pension plan investments.....	3,381,057	156,445	508,896	809,079
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	289,574	-	122,464	185,905
Total Deferred Outflows of Resources.....	\$ 4,863,775	\$ 211,653	\$ 810,945	\$ 1,280,501
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ -	\$ 92,369	\$ 7,595	\$ 11,076
Pension Expense				
Proportionate share of plan pension expense.....	\$ 3,698,111	\$ 171,119	\$ 556,616	\$ 884,948
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	129,792	(64,695)	(20,537)	46,784
Total Employer Pension Expense.....	\$ 3,827,903	\$ 106,424	\$ 536,079	\$ 931,732
Contributions				
Statutory required contribution.....	\$ 4,298,632	\$ 215,980	\$ 611,897	\$ 1,013,747
Contribution in relation to statutory required contribution.....	(4,298,632)	(215,980)	(611,897)	(1,013,747)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	31.04%	26.79%	25.15%	32.49%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 439,607	\$ (46,691)	\$ 91,142	\$ 149,647
June 30, 2025.....	1,067,393	17,343	195,336	303,471
June 30, 2026.....	1,257,667	51,678	200,721	314,032
June 30, 2027.....	2,099,108	96,954	316,151	502,275
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 4,863,775	\$ 119,284	\$ 803,350	\$ 1,269,425
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 38,731,324	\$ 1,792,142	\$ 5,829,603	\$ 9,268,311
Current discount rate (7.875%).....	\$ 29,468,673	\$ 1,363,549	\$ 4,435,445	\$ 7,051,781
1% increase (8.875%).....	\$ 21,568,326	\$ 997,991	\$ 3,246,333	\$ 5,161,247
Covered Payroll as of the January 1, 2022, valuation.....	\$ 13,847,318	\$ 806,057	\$ 2,433,350	\$ 3,119,925
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability.....	\$ 25,788,057	\$ 31,338,961	\$ 522,020	\$ 4,683,210
Ending net pension liability.....	\$ 34,496,094	\$ 41,972,146	\$ 701,486	\$ 6,230,148
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,396,697	\$ 1,699,392	\$ 28,402	\$ 252,250
Net difference between projected and actual investment earnings on pension plan investments.....	3,957,873	4,815,630	80,484	714,809
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	422,470	411,288	867	73,408
Total Deferred Outflows of Resources.....	\$ 5,777,040	\$ 6,926,310	\$ 109,753	\$ 1,040,467
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 155,649	\$ 102,330	\$ 35,130	\$ 101,684
Pension Expense				
Proportionate share of plan pension expense.....	\$ 4,329,019	\$ 5,267,207	\$ 88,032	\$ 781,838
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(42,430)	151,432	(27,118)	42,867
Total Employer Pension Expense.....	\$ 4,286,589	\$ 5,418,639	\$ 60,914	\$ 824,705
Contributions				
Statutory required contribution.....	\$ 4,971,554	\$ 6,213,897	\$ 108,661	\$ 973,288
Contribution in relation to statutory required contribution.....	(4,971,554)	(6,213,897)	(108,661)	(973,288)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	28.70%	30.05%	42.99%	24.84%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 411,894	\$ 516,818	\$ (16,178)	\$ 69,610
June 30, 2025.....	1,260,052	1,512,039	13,664	182,489
June 30, 2026.....	1,493,236	1,805,208	27,104	244,029
June 30, 2027.....	2,456,209	2,989,915	50,033	442,655
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 5,621,391	\$ 6,823,980	\$ 74,623	\$ 938,783
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 45,338,974	\$ 55,164,913	\$ 921,978	\$ 8,188,420
Current discount rate (7.875%).....	\$ 34,496,094	\$ 41,972,146	\$ 701,486	\$ 6,230,148
1% increase (8.875%).....	\$ 25,247,930	\$ 30,719,704	\$ 513,422	\$ 4,559,888
Covered Payroll as of the January 1, 2022, valuation.....	\$ 17,324,738	\$ 20,676,989	\$ 252,732	\$ 3,917,994
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 2,304,184	\$ 25,732,394	\$ 5,815,656	\$ 284,866
Ending net pension liability.....	\$ 3,088,792	\$ 34,428,511	\$ 7,775,795	\$ 380,467
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 125,061	\$ 1,393,961	\$ 314,831	\$ 15,405
Net difference between projected and actual investment earnings on pension plan investments.....	354,389	3,950,119	892,148	43,652
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	33,271	560,187	319,359	32,916
Total Deferred Outflows of Resources.....	\$ 512,721	\$ 5,904,267	\$ 1,526,338	\$ 91,973
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 80,933	\$ 201,353	\$ 3,956	\$ 12,115
Pension Expense				
Proportionate share of plan pension expense.....	\$ 387,622	\$ 4,320,537	\$ 975,806	\$ 47,744
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	9,481	(178,662)	165,923	23,590
Total Employer Pension Expense.....	\$ 397,103	\$ 4,141,875	\$ 1,141,729	\$ 71,334
Contributions				
Statutory required contribution.....	\$ 468,351	\$ 4,935,270	\$ 1,156,961	\$ 59,215
Contribution in relation to statutory required contribution.....	(468,351)	(4,935,270)	(1,156,961)	(59,215)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	24.44%	27.75%	32.12%	71.36%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 18,947	\$ 404,684	\$ 238,206	\$ 22,707
June 30, 2025.....	74,957	1,332,459	375,627	15,966
June 30, 2026.....	117,774	1,514,186	354,992	14,112
June 30, 2027.....	220,110	2,451,585	553,557	27,073
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 431,788	\$ 5,702,914	\$ 1,522,382	\$ 79,858
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 4,059,667	\$ 45,250,148	\$ 10,219,898	\$ 500,056
Current discount rate (7.875%).....	\$ 3,088,792	\$ 34,428,511	\$ 7,775,795	\$ 380,467
1% increase (8.875%).....	\$ 2,260,708	\$ 25,198,466	\$ 5,691,158	\$ 278,466
Covered Payroll as of the January 1, 2022, valuation.....	\$ 1,916,553	\$ 17,782,841	\$ 3,601,801	\$ 82,977
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 14,015,015	\$ 13,480,365	\$ 7,393,877	\$ 510,794
Ending net pension liability.....	\$ 18,747,388	\$ 18,020,871	\$ 9,895,897	\$ 680,210
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 759,055	\$ 729,639	\$ 400,671	\$ 27,541
Net difference between projected and actual investment earnings on pension plan investments.....	2,150,962	2,067,606	1,135,395	78,043
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	302,255	327,857	22,717	75,066
Total Deferred Outflows of Resources.....	\$ 3,212,272	\$ 3,125,102	\$ 1,558,783	\$ 180,650
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 521	\$ 3,643	\$ 78,431	\$ 24,861
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,352,666	\$ 2,261,491	\$ 1,241,864	\$ 85,360
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	168,935	93,415	(5,239)	(16,988)
Total Employer Pension Expense.....	\$ 2,521,601	\$ 2,354,906	\$ 1,236,625	\$ 68,372
Contributions				
Statutory required contribution.....	\$ 2,716,633	\$ 2,602,185	\$ 1,491,409	\$ 95,564
Contribution in relation to statutory required contribution.....	(2,716,633)	(2,602,185)	(1,491,409)	(95,564)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	28.36%	33.12%	27.96%	24.18%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ 362,429	\$ 339,459	\$ 50,624	\$ 33,660
June 30, 2025.....	713,851	714,106	310,246	43,951
June 30, 2026.....	800,618	785,078	414,726	29,827
June 30, 2027.....	1,334,853	1,282,816	704,756	48,351
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 3,211,751	\$ 3,121,459	\$ 1,480,352	\$ 155,789
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 24,640,104	\$ 23,685,226	\$ 13,006,395	\$ 894,015
Current discount rate (7.875%).....	\$ 18,747,388	\$ 18,020,871	\$ 9,895,897	\$ 680,210
1% increase (8.875%).....	\$ 13,721,343	\$ 13,189,600	\$ 7,242,876	\$ 497,850
Covered Payroll as of the January 1, 2022, valuation.....	\$ 9,578,626	\$ 7,856,112	\$ 5,334,495	\$ 395,262
See notes to schedule of employer allocations and schedule of pension amounts by employer.				
N/A = Not Applicable				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 214,702	\$ 550,553	\$ 166,055	\$ 233,412
Ending net pension liability.....	\$ 286,602	\$ 734,652	\$ 222,773	\$ 311,633
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 11,604	\$ 29,745	\$ 9,020	\$ 12,618
Net difference between projected and actual investment earnings on pension plan investments.....	32,883	84,290	25,560	35,755
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,727	549	212	-
Total Deferred Outflows of Resources.....	\$ 47,214	\$ 114,584	\$ 34,792	\$ 48,373
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 21,212	\$ 24,912	\$ 8,404	\$ 45,352
Pension Expense				
Proportionate share of plan pension expense.....	\$ 35,966	\$ 92,194	\$ 27,955	\$ 39,106
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(2,193)	7,172	(2,331)	(18,989)
Total Employer Pension Expense.....	\$ 33,773	\$ 99,366	\$ 25,624	\$ 20,117
Contributions				
Statutory required contribution.....	\$ 46,060	\$ 121,266	\$ 35,039	\$ 53,814
Contribution in relation to statutory required contribution.....	(46,060)	(121,266)	(35,039)	(53,814)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	41.13%	25.37%	53.46%	35.73%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ (4,270)	\$ (4,902)	\$ (1,992)	\$ (27,405)
June 30, 2025.....	969	14,461	4,076	(3,336)
June 30, 2026.....	8,913	27,855	8,423	11,590
June 30, 2027.....	20,390	52,258	15,881	22,172
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 26,002	\$ 89,672	\$ 26,388	\$ 3,021
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 376,687	\$ 965,569	\$ 292,795	\$ 409,586
Current discount rate (7.875%).....	\$ 286,602	\$ 734,652	\$ 222,773	\$ 311,633
1% increase (8.875%).....	\$ 209,766	\$ 537,697	\$ 163,049	\$ 228,086
Covered Payroll as of the January 1, 2022, valuation.....	\$ 111,994	\$ 478,015	\$ 65,548	\$ 150,628

See notes to schedule of employer allocations and schedule of pension amounts by employer.

N/A = Not Applicable

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	Halifax Housing Authority	Mattapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ -	\$ 157,167	\$ -	\$ 98,230
Ending net pension liability.....	\$ -	\$ 209,632	\$ 208,381	\$ 131,411
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ 8,488	\$ 8,437	\$ 5,321
Net difference between projected and actual investment earnings on pension plan investments.....	-	24,052	23,908	15,077
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	51,745	60,044	7,093
Total Deferred Outflows of Resources.....	\$ -	\$ 84,285	\$ 92,389	\$ 27,491
Deferred Inflows of Resources				
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 51,321	\$ 24,807	\$ 42,836	\$ 1,226
Pension Expense				
Proportionate share of plan pension expense.....	\$ -	\$ 26,308	\$ 26,150	\$ 16,491
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(60,595)	3,886	97,919	3,516
Total Employer Pension Expense.....	\$ (60,595)	\$ 30,194	\$ 124,069	\$ 20,007
Contributions				
Statutory required contribution.....	\$ -	\$ 31,655	\$ 21,676	\$ 19,792
Contribution in relation to statutory required contribution.....	-	(31,655)	(21,676)	(19,792)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	54.26%	N/A	32.22%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2024.....	\$ (40,677)	\$ 6,045	\$ 2,678	\$ 3,443
June 30, 2025.....	(9,837)	22,512	6,349	6,996
June 30, 2026.....	(807)	16,013	19,966	6,469
June 30, 2027.....	-	14,908	20,560	9,357
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (51,321)	\$ 59,478	\$ 49,553	\$ 26,265
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ -	\$ 275,524	\$ 273,880	\$ 172,716
Current discount rate (7.875%).....	\$ -	\$ 209,632	\$ 208,381	\$ 131,411
1% increase (8.875%).....	\$ -	\$ 153,431	\$ 152,515	\$ 96,181
Covered Payroll as of the January 1, 2022, valuation.....	\$ N/A	\$ 58,344	\$ N/A	\$ 61,437

See notes to schedule of employer allocations and schedule of pension amounts by employer.

N/A = Not Applicable

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2022

	South Shore Tri-Town Development	Carver Housing Authority	Totals
Net Pension Liability			
Beginning net pension liability.....	\$ 685,268	\$ -	\$ 467,759,653
Ending net pension liability.....	\$ 914,873	\$ -	\$ 625,768,133
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 37,042	\$ -	\$ 25,336,456
Net difference between projected and actual investment earnings on pension plan investments.....	104,967	-	71,796,846
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	15,564	156	8,611,522
Total Deferred Outflows of Resources.....	\$ 157,573	\$ 156	\$ 105,744,824
Deferred Inflows of Resources			
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	\$ 58,520	\$ 34,191	\$ 8,611,522
Pension Expense			
Proportionate share of plan pension expense.....	\$ 114,810	\$ -	\$ 78,529,491
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	25,546	(24,373)	-
Total Employer Pension Expense.....	\$ 140,356	\$ (24,373)	\$ 78,529,491
Contributions			
Statutory required contribution.....	\$ 159,363	\$ -	\$ 92,532,679
Contribution in relation to statutory required contribution.....	(159,363)	-	(92,532,679)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	143.65%	N/A	29.30%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2024.....	\$ (4,616)	\$ (24,985)	\$ 5,971,480
June 30, 2025.....	8,822	(9,050)	20,527,384
June 30, 2026.....	29,754	-	26,076,590
June 30, 2027.....	65,093	-	44,557,848
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 99,053	\$ (34,035)	\$ 97,133,302
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 1,202,438	\$ -	\$ 822,460,795
Current discount rate (7.875%).....	\$ 914,873	\$ -	\$ 625,768,133
1% increase (8.875%).....	\$ 669,602	\$ -	\$ 458,004,029
Covered Payroll as of the January 1, 2022, valuation.....	\$ 110,937	N/A	\$ 315,856,987
See notes to schedule of employer allocations and schedule of pension amounts by employer.			
N/A = Not Applicable			(concluded)

NOTE A – Schedule of Employer Allocations

Governmental Accounting Standards Board (GASB) Statement #68 requires employers participating in a cost-sharing pension plan to recognize pension liabilities as employees provide services to the government and earn their pension benefits. Employers participating in cost-sharing plans are required to recognize their proportionate share of the plan's collective pension amounts for all benefits provided through the plan including the net pension liability, deferred outflows of resources, deferred inflows of resources, pension expense, and contributions.

GASB Statement #68 requires the allocation of the collective pension amounts be consistent with the manner in which contributions to the plan are determined. As permissible under GASB Statement #68, The Schedule of Employer Allocations is used to demonstrate the allocation of the Association's collective pension amounts.

Massachusetts General Law (MGL) Chapter 32 Section 22 Paragraph 7c dictates that Massachusetts cost sharing defined benefit pension plans allocate the annual required pension fund appropriation to employer units based on their proportionate share of the aggregate of the annual rates of regular compensation of all members in service of the Association. The Public Employee Retirement Administration Commission (PERAC) approves each Association's proportionate share of the annual required contribution. PERAC can accept alternative allocation methodologies and as such, the Association has elected to use an actuarial based allocation methodology. Accordingly, each member unit's proportionate share of the total pension liability is calculated based on each member unit's actual current employees, retirees and inactive participants. The liability of the Association is allocated to each member unit. Each member's share of the Association's net position at year-end is calculated by first segregating the historical excess contributions of each individual member unit. Investment income is applied to each excess contribution utilizing the PERAC's annual report rate of return for each year since the excess contribution was received. The Association's net position, less the excess contributions net of investment income, is then allocated to the member units based on their proportionate share of the total pension liability. The excess contributions net of investment income is then assigned to the appropriate member unit. The difference between the total pension liability and the net position is reported as the net pension liability.

When a member unit accepts an Early Retirement Incentive Program (E.R.I. or ERIP), PERAC completes an analysis of the costs and liabilities attributable to the additional benefits payable in accordance with the ERIP. The accrued liability for the members who accept the ERIP as retirees including the ERIP less the accrued liability for the members as active employees excluding the ERIP represents the increase in accrued liability due to the ERIP. The net increase is amortized for each member unit accepting the ERIP and is separately identified in the Association's funding schedule. All Early Retirement Incentive Programs are being amortized using a straight-line basis.

NOTE B – Schedule of Pension Amounts by Employer

The Schedule of Pension Amounts by Employer presents the net pension liability, the various categories of deferred outflows of resources and deferred inflows of resources, contributions and pension expense for all participating employers including differences between expected and actual economic experience; differences between projected and actual investment earnings, net; and changes of assumptions.